



AGENDA

STATE BOARD OF EDUCATION

October 14, 2016

Arkansas Department of Education

ADE Auditorium

9:00 AM

I. Call to Order

II. Recognition

1. Recognition of 2016 Presidential Scholar - Jordan Lee

Presidential Scholars have demonstrated leadership, scholarship, contribution to school and community, and outstanding accomplishments in the arts, sciences, humanities, and other fields of interest.

Presenter: Dr. Mary Kathryn Stein

2. Recognition of 2016 Prudential Spirit of Community Awards Recipient - Shelby Dunphy-Day

Prudential Spirit of Community Awards recipients made meaningful contributions to their communities through volunteer service within the past 12 months.

Presenter: Dr. Mary Kathryn Stein

III. Reports

1. Chair's Report

Presenter: Mireya Reith

2. State Board Standing Committees, Special Committees, Liaisons, and Appointments Report

Presenter: State Board Members

a. Vision for Excellence in Education and Arkansas Accountability System Steering Committee Report

The Steering Committee met on September 28, 2016.

Presenter: Tina Smith and Ouida Newton

b. Standing Committee on Academic Distress Report 9

The Standing Committee on Academic Distress met on September 16, 2016 to hear progress reports from Dermott High School, Dermott School District; Marvell-Elaine High School, Marvell-Elaine School District; and Strong High School, Strong School District.

Presenter: Diane Zook, Chair

3. Commissioner's Report

Presenter: Johnny Key

4. Leading Attendance in Arkansas: How Principals Can Help Students Succeed by Reducing Chronic Absence

Presenter: Angela Duran, Director for the Arkansas Campaign for Grade-Level Reading

5. Make Every Day Count: Reducing Chronic Absence in Arkansas Schools 12

Presenter: Ginny Blankenship, Education Policy Director at Arkansas Advocates for Children and Families

6. 2016 Arkansas Teacher of the Year Report 20

The 2016 Arkansas Teacher of the Year will report on current topics of opportunities for educators.

Presenter: Meghan Ables

IV. Adjournment

V. Work Session 24

Senator Joyce Elliott will discuss the report, No Time to Lose.

Presenter: Mireya Reith, Chair

State Board Standing Committees, Special Committees, Liaisons, and Appointments

Science Grant Manager and Appointment

Topic	Protocol
History of Committee	On April 10, 2014 State Board Chair Brenda Gullett appointed Dr. Jay Barth to apply for a NASBE grant and to work with the ADE Science team.
Committee Membership from State Board	Dr. Jay Barth
Timeline of Work	April 10, 2014 – grant funds are expended and science courses are adopted/approved
Reference Statute(s) or URL for additional information	http://www.arkansased.gov/divisions/learning-services/curriculum-and-instruction/arkansas-k-12-science-standards
Standard Operating Procedure	<p>Dr. Jay Barth applied for the NASBE Science grant and ADE was awarded \$4000.</p> <p>On November 13, 2014, the State Board conducted a work session with Dr. Francis Eberle.</p> <p>On December 10, 2014, the State Board conducted a work session with Dr. James Gates, Jr.</p> <p>On June 11, 2015, Dr. Jay Bath moved, seconded by Ms. Alice Mahony, to adopt the Arkansas K-12 Science Standards for Grades K-4 and 5-8. The motion carried unanimously.</p> <p>The grant sponsored additional science presentations and booths at organization meetings.</p> <p>Dr. Jay Barth provides grant reports to NASBE.</p>
Process for Reporting to the State Board	<p>ADE Science Specialist Ms. Michele Snyder provides reports that are included in the Learning Services Report to the State Board.</p> <p>Dr. Barth will include information during the Friday Reports.</p>
Tenure	End of grant funding, final report to NASBE, and adoption/approval of science courses.

ForwARd Arkansas Liaison

Topic	Protocol
History of Committee	<p>On December 11, 2014 State Board Chair Sam Ledbetter appointed Mr. Kim Davis to serve as the State Board liaison to the Arkansas Forward Initiative.</p> <p>On September 10, 2015, State Board Chair Toyce Newton appointed Dr. Jay Barth to serve as the State Board representative to the ForwARd Arkansas Steering Committee.</p>

State Board Standing Committees, Special Committees, Liaisons, and Appointments

Committee Membership from State Board	Dr. Jay Barth
Timeline of Work	September 10, 2015 - ongoing
Reference Statute(s) or URL for additional information	http://forwardarkansas.org
Standard Operating Procedure	Dr. Jay Barth will participate in monthly steering committee meetings. Dr. Jay Barth will update the State Board of ongoing progress.
Process for Reporting to the State Board	Dr. Jay Barth will collaborate with Ms. Susan Harriman, Executive Director of Forward Arkansas, to provide quarterly reports to the State Board. Dr. Barth will include information during the Friday Reports.
Tenure	The State Board Chair will appoint a new liaison prior to last six months of the tenure of the State Board Member

Deeper Learning Grant Manager and Appointment

Topic	Protocol
History of Committee	On July 15, 2016, Chair Mireya Reith appointed Ms. Susan Chambers to serve with her on the NASBE Grant Committee for Deeper Learning.
Committee Membership from State Board	Ms. Mireya Reith and Ms. Susan Chambers
Timeline of Work	July 15, 2016 – grant funds are expended
Reference Statute(s) or URL for additional information	N/A
Standard Operating Procedure	Chair Mireya Reith applied for and the ADE received a grant of \$9000. On September 8, 2016, the State Board will host a work session with Dr. Francis Eberle. Ms. Reith will provide an interim report by October 15 of each grant year and a yearly final report by March 15 of each grant year to NASBE.
Process for Reporting to the State Board	Materials for the September 8 work session will be posted to Board Book. Ms. Reith will include information during the Friday Reports.
Tenure	End of grant funding – December 31, 2017

ESSA Steering Committee Liaison

Topic	Protocol
History of Committee	On July 15, 2016, Commissioner Key requested and State Board Chair Mireya Reith approved the appointment of Ms. Ouida Newton to the ESSA Steering Committee.
Committee Membership from State Board	Ms. Ouida Newton
Timeline of Work	August 31, 2016 - ongoing

State Board Standing Committees, Special Committees, Liaisons, and Appointments

Reference Statute(s) or URL for additional information	http://www.arkansased.gov/divisions/public-school-accountability/every-student-succeeds-act-essa
Standard Operating Procedure	<p>The ESSA Steering Committee will meet on the last Wednesday of each month from 9:30-11:30 am in the ADE Auditorium. The meeting is open to the public.</p> <p>The State Board will conduct work sessions on ESSA.</p>
Process for Reporting to the State Board	<p>ADE Special Projects Director Ms. Tina Smith will provide a monthly ESSA report to the State Board.</p> <p>The State Board will host a work session in October 2016.</p>
Tenure	Rotation protocols of the ESSA Steering Committee or the last six months of the tenure of the State Board Member

State Board Standing Committees, Special Committees, Liaisons, and Appointments

Standing Committee on Academic Distress

Topic	Protocol
History of Committee	<p>On March 28, 2014, State Board Chair Brenda Gullett formed the Special Committee on Academic Distress to study chronically underperforming school districts. She appointed Ms. Vicki Saviers, Ms. Toyce Newton, and Mr. Sam Ledbetter to serve on the special committee, with Ms. Vicki Saviers serving as chair of the committee. Commissioner Tom Kimbrell requested the committee initially focus on the academic distress districts.</p> <p>On May 13, 2016, State Board Chair Toyce Newton appointed Ms. Diane Zook, Mr. Brett Williamson, Ms. Charisse Dean and the 2016 ATOY, Ms. Meghan Ables, to the Special Committee on Academic Distress. Ms. Toyce Newton asked Ms. Ouida Newton to remain on the committee. Ms. Toyce Newton asked Ms. Diane Zook to serve as chair. Dr. Richard Wilde requested to schedule a year in advance for the special committee review of schools. The Board supported the recommendation.</p> <p>State Board Chair Mireya Reith joined the committee on July 15, 2016.</p> <p>On September 8, the Board added Mr. Joe Black to the committee. The Board also clarified the committee is a standing committee, as per the State Board Operating Procedure.</p>
Committee Membership	Ms. Diane Zook, Chair; Ms. Ouida Newton; Mr. Brett Williamson; Ms. Charisse Dean; Ms. Meghan Ables; Mr. Joe Black; and Ms. Mireya Reith
Timeline of Work	3/28/14 -- ongoing
Reference Statute(s) or URL for additional information	A.C.A. § 6-15-428 to 6-15-431
Standard Operating Procedure	<p>The Special Committee on Academic Distress will schedule meetings at least one month prior to the meeting date so that all appropriate schools, districts and board members may participate. A yearly schedule was approved but will be adjusted as needed.</p> <p>The ADE School Improvement Unit will submit appropriate notifications to the schools and district. All presenters will submit appropriate documents in a timely manner for inclusion in the agenda packet.</p> <p>The ADE School Improvement Unit will provide a presentation/report documenting the progress in meeting the school and district recommendations. When applicable, a fiscal and supplemental funding report will be provided to indicate how funds are being utilized in support of student achievement. Also when applicable, the Office of Intensive Support will provide a report of coordinated efforts and progress.</p> <p>Appropriate schools/districts staff will provide a presentation/report to the Special Committee documenting the progress in meeting the school and district recommendations from the ADE School Improvement Unit. If the committee has concerns and an additional meeting is scheduled to address the concerns, the school board will also be encouraged to attend and present information regarding the board's efforts to ensure student achievement. If concerns persist,</p>

State Board Standing Committees, Special Committees, Liaisons, and Appointments

	the committee will request the State Board conduct a community work session. After the community work session the State Board will determine if the Board should conduct a hearing regarding which statutory action to take regarding the school district at a future date or should ask the Special Committee to continue to monitor the progress. The ADE Public School Accountability Office will submit appropriate notifications to the district.
Process for Reporting to the State Board	After each committee meeting, the Chair will submit a written report at the next regularly scheduled State Board meeting to update the full Board on the progress of each school and district to meet the recommendations from the ADE School Improvement Unit.
Tenure	The Chair of the Standing Committee is revisited annually. Membership shall be four members of the State Board with the State Board Chair and Arkansas Teacher of the Year serving as ex-officio members.

Vision for Excellence in Education and Arkansas Accountability System Steering Committee Meeting Wednesday, August 31, 2016

Ambassador Led Community Listening Forums

- As of October 3, 2016 65 Ambassadors have signed up to serve.
- Two forums have already been held. Steering Committee Member Anthony Bennett hosted a student forum and a community forum.
- Other forums are in the planning stages.

How do we Develop and Support a Student-Focused Learning System

- Information was given on Standards, Assessments, Reporting and Accountability System, Federal Funding Supports, Subgroups, N-size, and Personalized Learning.
- All of the above areas will be important components in the development of the Vision for Excellence Accountability System.

Community Listening Forums and Public Feedback

- Four Community Listening Forums have been held. Alma, Magnolia, Melbourne, and Forrest City. http://www.arkansased.gov/public/userfiles/ESEA/Listening_Forum_Dates_Locations_Hosts_rv.pdf
- Other sources of data: LEA Academy, Committee of Practitioners, Innovation Summit, Arkansas Exemplary Educators Network, Coordinated School Health Quarterly Meeting, Academic Standards and Assessment Survey.
- All raw data from the Forums can be accessed on the ESSA webpage.
<http://www.arkansased.gov/divisions/public-school-accountability/every-student-succeeds-act-essa>
- The survey data can be accessed on the ESSA Stay Informed Archive page.
<http://www.arkansased.gov/divisions/public-school-accountability/every-student-succeeds-act-essa/stay-informed-archive>
- The survey for the month of October is Teacher and Leader Effectiveness.
- Most common feedback:
 - **What are the most important characteristics of your school?**
 - Effective teachers and leaders
 - Student Focused Learning
 - College, Career and Community Ready upon graduation
 - Parent/Community Engagement
 - **What are the best measures of success/quality of your school?**
 - Student Proficiency
 - Student Growth
 - Graduation Rate
 - Number of AP courses
 - **How do we make sure every student in Arkansas has an opportunity for success?**
 - Recruiting and retaining effective teachers
 - Effective leaders
 - Student Focused system
 - Personalized Learning
 - PLCs

Public Comments

- Dr. Ann Robinson, professor at UALR, thanked the committee for their service and encouraged the committee to consider the progress for advanced learners and gifted and talented students.
- Ms. Dallas Green, advocate for the Arkansas Dyslexia Support Group, encouraged the committee to consider the progress of students identified with dyslexia.

Minutes
State Board of Education Standing Committee on Academic Distress
Friday, September 9, 2016

The State Board of Education Standing Committee on Academic Distress met Friday, September 9, 2016, in the Auditorium of the Arch Ford building. Chair Diane Zook called the meeting to order at 11:00 a.m.

Present: Diane Zook, Chair; Brett Williamson; Joe Black; Ouida Newton; Charisse Dean; Dr. Fitz Hill; Mireya Reith; and Meghan Ables.

Absent: None

Chair's Report

Chair Zook asked each member to provide a brief introduction.

Public School Program Manager Dr. Richard Wilde offered a revised process for review of schools classified in academic distress. The committee acknowledged support for the revised process.

School in Academic Distress – Dermott High School

Public School Program Manager Dr. Richard Wilde said the Dermott School District was making progress but the district faced similar challenges as other districts in the Delta. He said the school board was engaged and was supportive of the administration.

Dermott School District Superintendent Ms. Kristi Ridgell said the district was providing support to schools. She said district administration was meeting with individual educators to provide support and resources.

Dermott High School Principal and School Improvement Specialist Ms. Heather Hardin said the Department support has been helpful. She said data are indicating 12+ percent gain in mathematics and literacy during the last year. She said students are engaged in the conversations around the data and expectations. She said the school culture was improving as a result of this work. She said a new climate could be felt in the school due to the support, compassion, and high expectations for students and teachers. She said data days are protected to analyze data and develop strategic plans for moving forward. She said teachers worked to develop curriculum during the summer. She said the school has several new teachers and support was being provided to these educators. She said by narrowing the focus the work has been accomplished with

fidelity and the school was seeing progress.

Ms. Hardin said the reading goals were set for the first interim progress check and would be revised after that checkpoint. She said the school did not have a documented literacy plan but it was being considered. She said a check and balance system has been put into place to ensure student transcripts are accurate and students are on track to graduate. She said the school based health clinic has helped to lower absenteeism. She said parents and community have been very engaged in the clothes closet and the food bank. A community member provided backpacks and supplies for all students. She said parents are assisting in day-to-day operations that help the principal and teachers. She said the Teacher Cadet program is new this year. She said the Jewels mentoring program has been active for two (2) years.

Ms. Hardin said at one time the school was receiving too much help, but the current support from the Department has contributed to narrowing the focus. She said the support has been well received and helpful.

Dermott School District Curriculum Coordinator Ms. Arnese Gardner said the Department has been very targeted in their support to the district.

The district and school will report to the Standing Committee on Academic Distress on June 9, 2017.

School in Academic Distress – Marvell-Elaine High School

Public School Program Manager Dr. Richard Wilde said the Marvell-Elaine High School was recently added to the academic distress list. He said the district has bordered on fiscal distress. He said the district has made appropriate decisions based on the limited budget. He said there was teacher turnover and a need for school culture improvement.

Marvell-Elaine School District Superintendent Ms. Joyce Cottoms said the district has made administrative changes. She said the district has contracted with Mr. Norman Hill for financial assistance. She said the district has declining enrollment, difficulty recruiting quality educators, limited housing, and a declining balance since 2012. She said the instructional facilitators had to be moved into classrooms to fill vacancies.

Marvell-Elaine High School Principal Mr. Antony Hobbs said the teachers were working on bell-to-bell learning. He said the school culture was the priority item for his first year.

Ms. Cottoms said the ADE has been very helpful. She said the district was very receptive to the assistance.

The district and school will report to the Standing Committee on Academic Distress on January 13, 2017.

School in Academic Distress – Strong High School

Public School Program Manager Dr. Richard Wilde said Strong High School has been on the academic distress list for three (3) years.

Strong-Huttig School District Superintendent Mr. Jeff Alphin said the district was working on three (3) focus areas – changing the culture, improving the curriculum, and retaining effective teachers.

Strong High School Principal Dr. Wendell Colen outlined nine (9) steps to changing the culture.

Strong School District School Improvement Specialist Ms. Shirley Kyle outlined nineteen (19) steps to improving the curriculum. She said the ADE School Improvement Unit has provided support in analyzing data and designing next steps.

Mr. Alphin said the district was fully staffed. He outlined nine (9) steps for retaining effective teachers. He said the district was working with the South Central Education Service Cooperative to develop the educator pipeline. He said the district had a declining enrollment.

Mr. Alphin said the Department support has been collaborative.

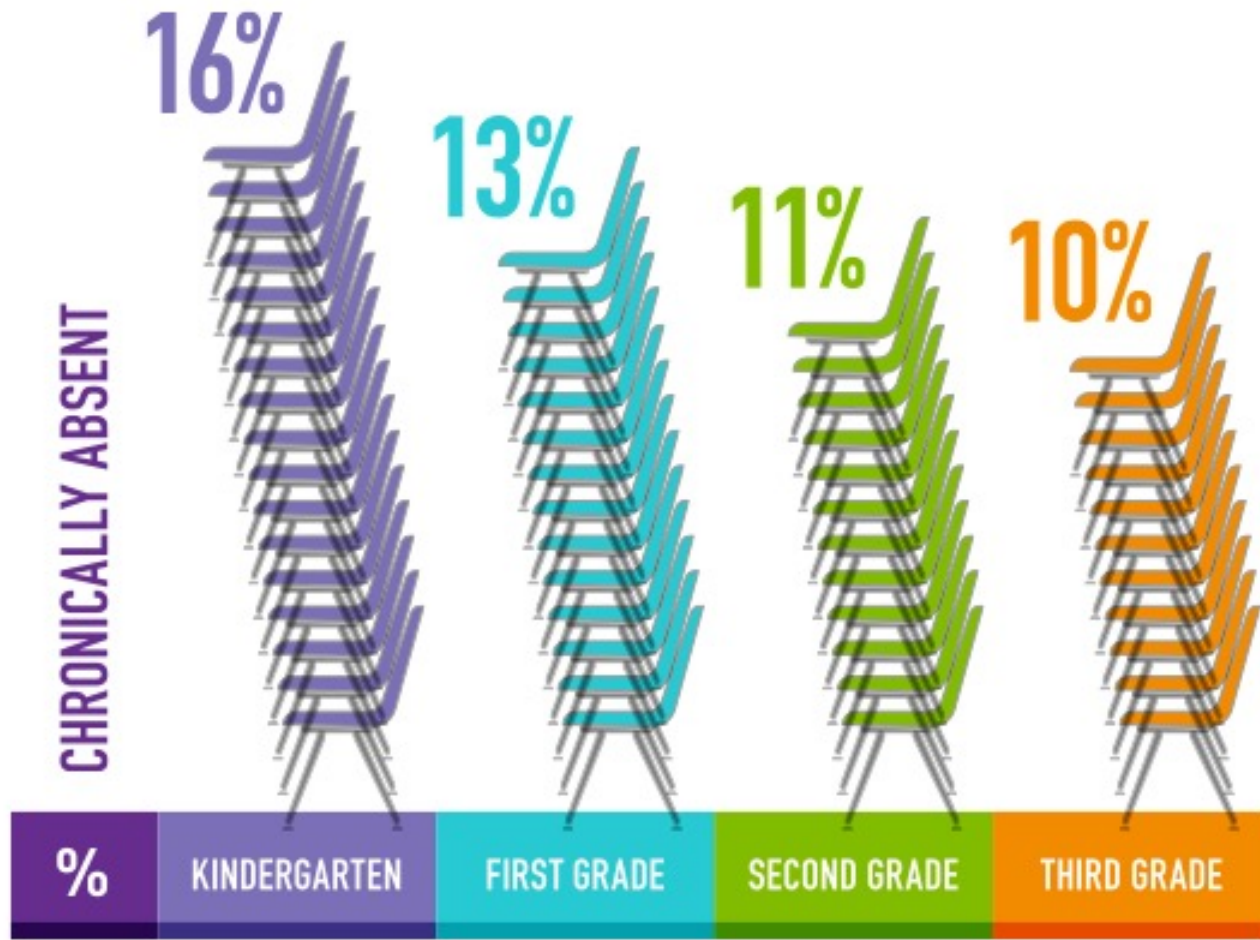
No follow-up date for reporting has been determined.

Adjournment

The meeting adjourned at 1:39 p.m.

Minutes recorded by Deborah Coffman.

Chronic Absence Starts Early



This chart uses data for 2014-2015.

Nearly All Elementary Schools in Arkansas Had Some Chronically Absent K-3 Students, but...

¹³
25%

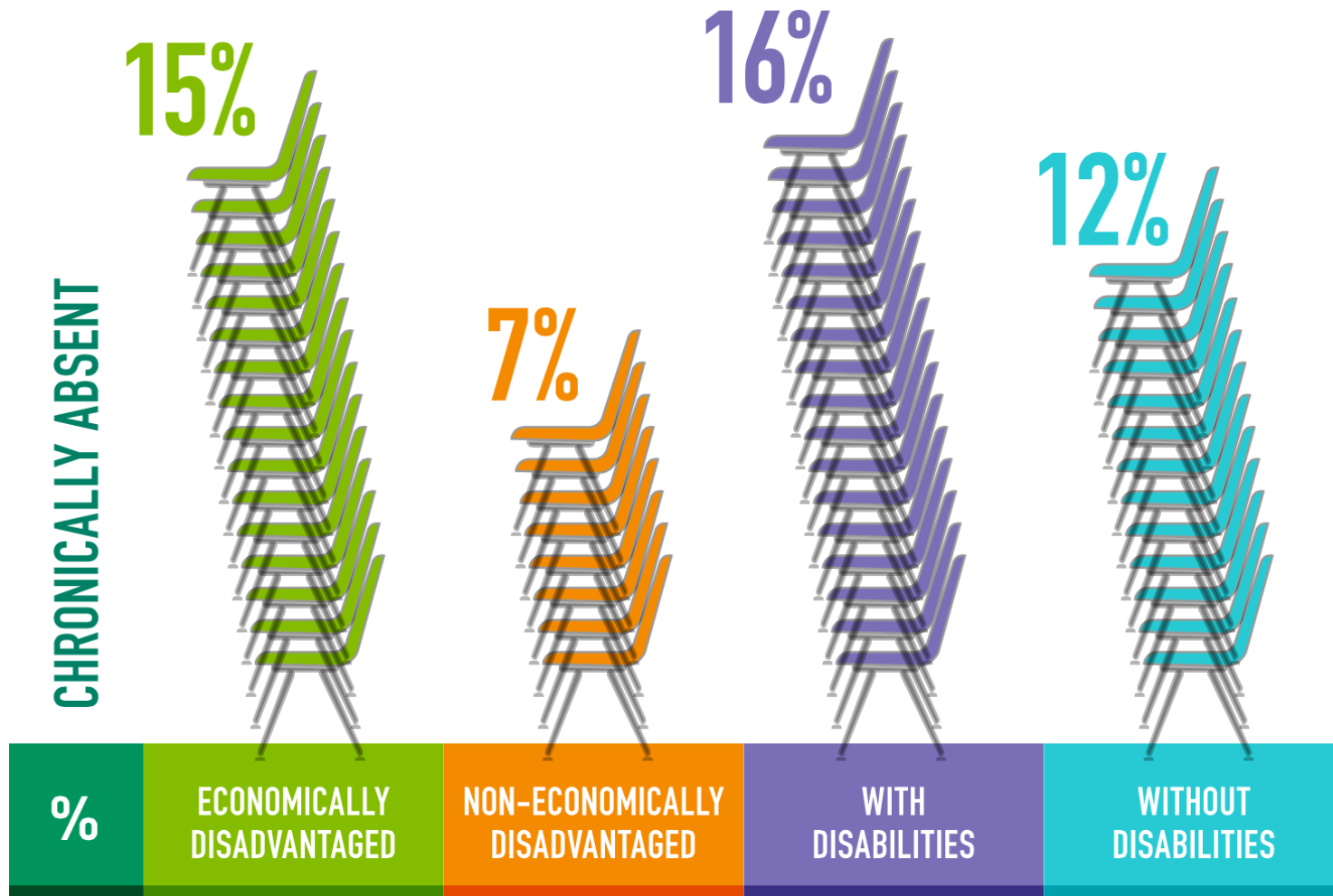
OF CHRONICALLY ABSENT
STUDENTS IN GRADES K-3
WERE CONCENTRATED IN

{ **52 / 522** }

ELEMENTARY
SCHOOLS
IN 2014-15

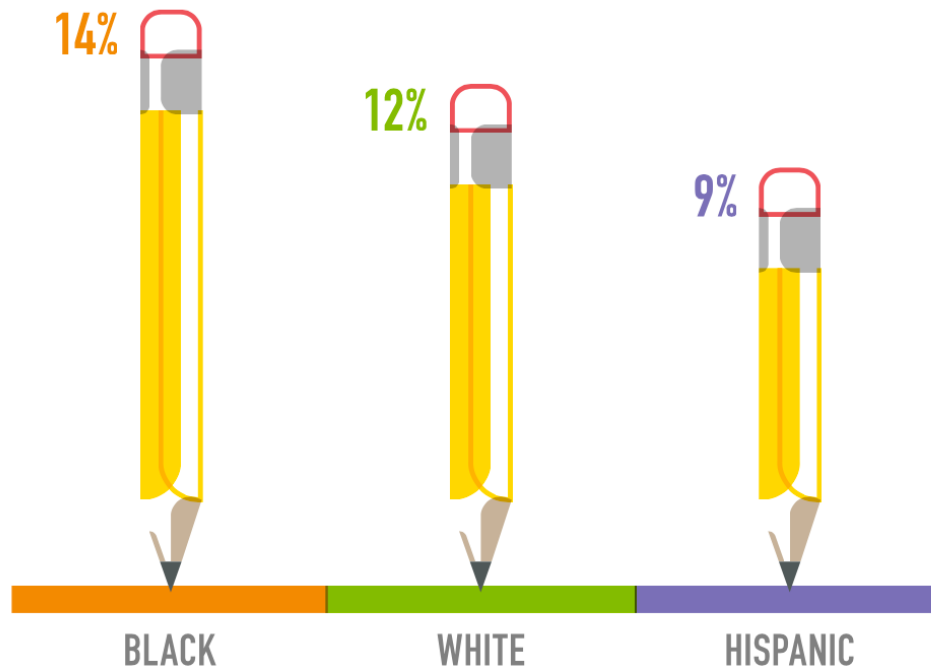


3rd Graders Who Are Economically Disadvantaged and Those With Disabilities Are More Likely to Be Chronically Absent



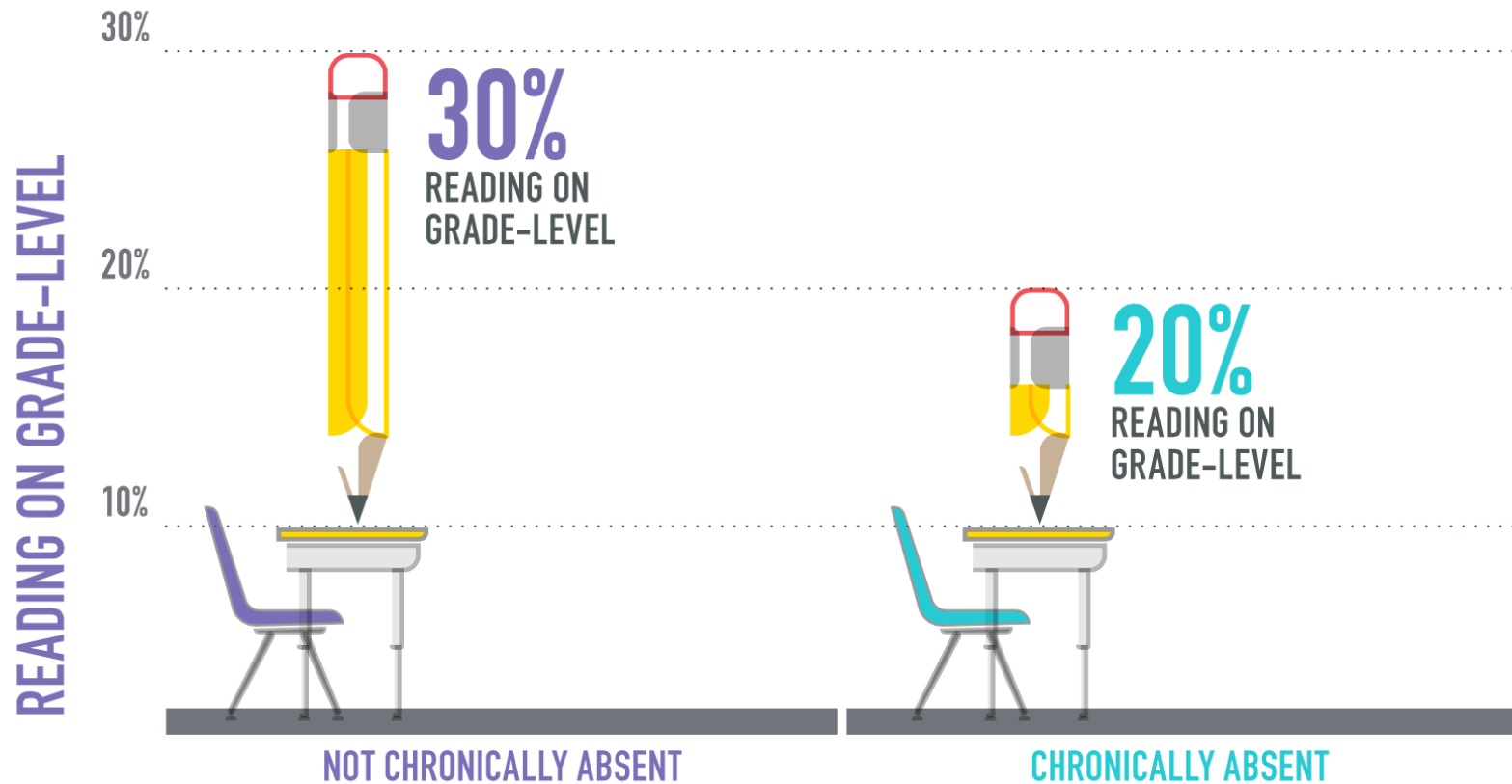
This chart uses data for third-graders in 2014-2015.

Hispanic Students Are the Least Likely to Be Chronically Absent



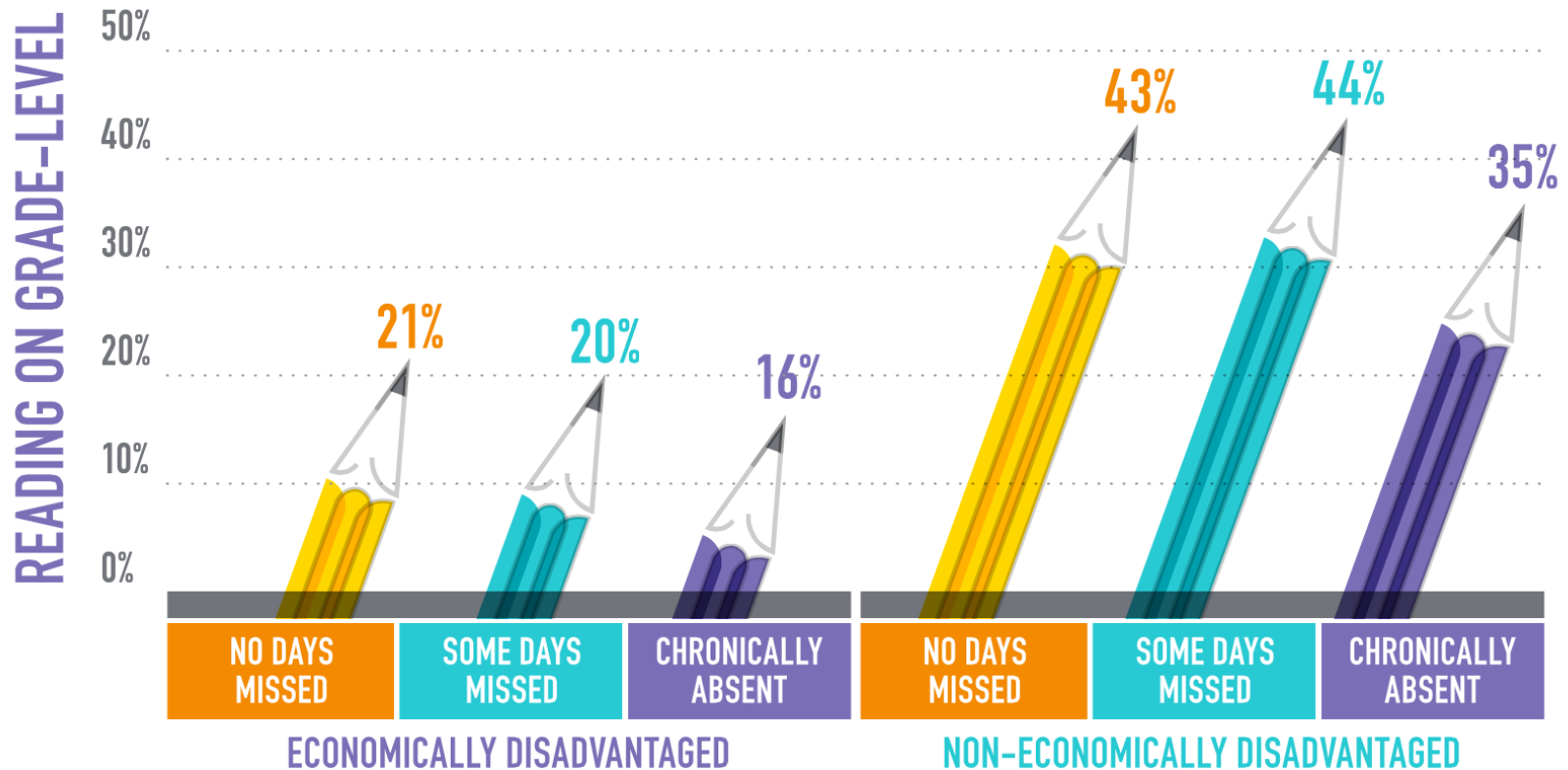
This chart uses data for third-graders in 2014-2015.

Chronically Absent 3rd Graders are Less Likely to Read on Grade Level



This chart uses data for third-graders in 2014-2015.

Even Higher-income Students Are More Likely to Have Lower Reading Scores When They're Chronically Absent



This chart uses data for third-graders in 2014-2015.



LEADING
ATTENDANCE
IN ARKANSAS

ARKANSAS
CAMPAIGN FOR
GRADE-LEVEL
READING

CULTIVATE

ANALYZE

COLLABORATE

ADVOCATE

LEVERAGE

AR-GLR

Leading Attendance in Arkansas

How principals can help students succeed by reducing

Principal's Toolkit - <http://www.leadingattendance.orglr.net/#intro>

Everyone Needs to Brainstorm: Together, Let's Use ESSA to Transform Education in Arkansas

By Meghan Ables, 2016 Arkansas Teacher of the Year



During my recent travels around this great state and nation, I have learned a lot about current trends in education. I had the opportunity and privilege to hear Secretary of Education John King discuss how and why the Every Student Succeeds Act was developed at the national level. The U.S. Department of Education realized that this one-size-fits-all approach is not working for students, teachers or schools. As a result of ESSA, states have the opportunity to develop their own accountability system that best measures educational progress in their state. States are collaborating with stakeholders to determine how they will use this new opportunity to create a more student-focused education system that includes accountability measures that measure the strengths and needs of students and schools. Arkansas teachers have an opportunity to impact change like never before. It is time to brainstorm and truly begin the transformation of education in Arkansas.

Vision for Educational Excellence

“The Arkansas Department of Education is transforming Arkansas to lead the nation in student-focused education.” This vision for education in Arkansas perfectly aligns with the intent of ESSA. The changes coming with ESSA allow all of us to take the focus off of testing and focus on the education of the whole child. All stakeholders have the opportunity to shape this important aspect of education into one that leads to the betterment of our school system. This rebuilding of the accountability system will impact everything from lesson plans to teacher retention. Doing it right is of the utmost importance and will require brainstorming on every level and from every stakeholder.

No Child Left Behind vs Every Student Succeeds Act

The Every Student Succeeds Act replaced No Child Left Behind, where every child across the country was expected to perform academically on the same level at the same time. NCLB was a federally-mandated accountability system that focused, for the most part, on an annual test. ESSA, on the other hand, allows states to create an accountability system created and supported by the states with approval from the U.S. Department of Education. While in theory NCLB was a great goal, it took the focus off of the whole child and turned it into a list of skills that determined student success. While NCLB focused on annual test scores, ESSA allows states to add other measures alongside a measurable test and graduation rate to determine student and school success.

Check out the following links for more information about NCLB and ESSA.

<https://www.understood.org/en/school-learning/your-childs-rights/basics-about-childs-rights/the-difference-between-the-every-student-succeeds-act-and-no-child-left-behind>

<http://www.education.pa.gov/Documents/About%20PDE/ESSA/ESSA%20v%20NCLB%20Crosswalk%20final%205.16.2016.pdf>

Teachers Find Hope in ESSA

Everywhere I go, I hear the same comments from teachers. Some teachers feel that the freedom to teach creativity alongside content is stifled by the focus of student performance on standardized tests. Some elementary teachers mark playtime off of their lesson plans because it does not contribute to student growth on a test, or recess time has been cut in half. In some cases, field trips have been cancelled. Some of the experiences that once created a connection to learning have been set aside, and a check list of skills were put in their place. Teachers, however, have the opportunity to encourage change if they will speak up and share their ideas as the new accountability system is developed. (Learn more below.)

Putting the focus back on the whole child can bring some of these key elements back into the picture. The whole child means more than just teaching to the “head” with content knowledge as the focus. The whole child involves teaching to the heart by giving students opportunities for service and character development. This means teaching to their hands and feet by providing more opportunities for project-based learning, real-world application and self-discovery. This means finding the passion within every child and helping him find a future focus that fits that passion. Schools will no longer be factories that produce children who have the same skills, but schools instead will develop students who are the best versions of themselves with a drive in their heart to make the world a better place.

How ADE is Opening Doors for Feedback

The Arkansas Department of Education has created a webpage that is fully devoted to maintaining transparency through the development of the Arkansas Accountability System under ESSA:

<http://www.arkansased.gov/divisions/public-school-accountability/every-student-succeeds-act-essa>. It is critical that teachers, administrators, legislators, parents, students and the public get involved!

- Community Listening Forums are scheduled across the state to obtain feedback.
http://www.arkansased.gov/public/userfiles/ESEA/Listening_Forum_Dates_Locations_Hosts_rv.pdf
- Sign up on the Stay Informed page to receive e-mail updates.
<http://www.arkansased.gov/divisions/communications/stay-informed>
- Submit a public comment at ade.essacomment@arkansas.gov.
- Sign up to be an ambassador and gather feedback from your colleagues and community members.
<https://goo.gl/forms/xComahq4J2wEhWlF3>.

- Watch the monthly Steering Committee meetings in person or via live stream.
<http://video1.aetn.org/adeplayer6.html?source=smil:adelive.smil&type=mbr&server=video3.aetn.org/live/>
- Get to know the members of the steering committee!
http://www.arkansased.gov/public/userfiles/ESEA/ESSA_Steering_Committee_Members1.pdf
- Read the agendas, minutes and survey results online.
<http://www.arkansased.gov/divisions/public-school-accountability/every-student-succeeds-act-essa/stay-informed-archive>.
- Download Spanish translations of “Family Engagement Provisions in ESSA” and “ESSA: What does this new law mean for my child?”
[Participación de la Familia en el Cada estudiante tenga éxito Ley \(ESSA\)](#)
[¿Qué implica para mi hijo la nueva Ley Todos los Alumnos Triunfan](#)

Prepare to Share Your Ideas

1. What qualities do great schools possess?
2. How can a positive school culture be measured?
3. What should be the areas of focus in the classroom aside to learning content?
4. In what ways can schools monitor individual student growth?
5. In what ways can teachers prove students have made gains?
6. How can schools ensure education is about the whole child?
7. How much focus should be put on test scores?
8. What qualities do successful students possess?
9. In what ways should the community be a partner with the school?
10. How do we make school more about learning versus test performance?

Once you have brainstormed, submit a public comment: ade.essacomments@arkansas.gov.

Prepare to share via a Twitter Chat! (Info. coming soon.) Follow me @ables_meghan.

Additional ESSA Resources

Read the entire ESSA law <https://www.gpo.gov/fdsys/pkg/BILLS-114s1177enr/pdf/BILLS-114s1177enr.pdf>.

The [Alliance for Excellent Education](#) website offers one-page fact sheets, five-minute videos and a side-by-side chart comparing NCLB and ESSA.

The [U.S. Department of Education](#) website provides the full ESSA law, resources and opportunities to sign up for federal updates.

The USDOE updated the [Transitioning to the Every Student Succeeds Act \(ESSA\) Frequently Asked Questions](#) on June 29, 2016.

The National PTA website offers ESSA resources for families at pta.org/ESSA.



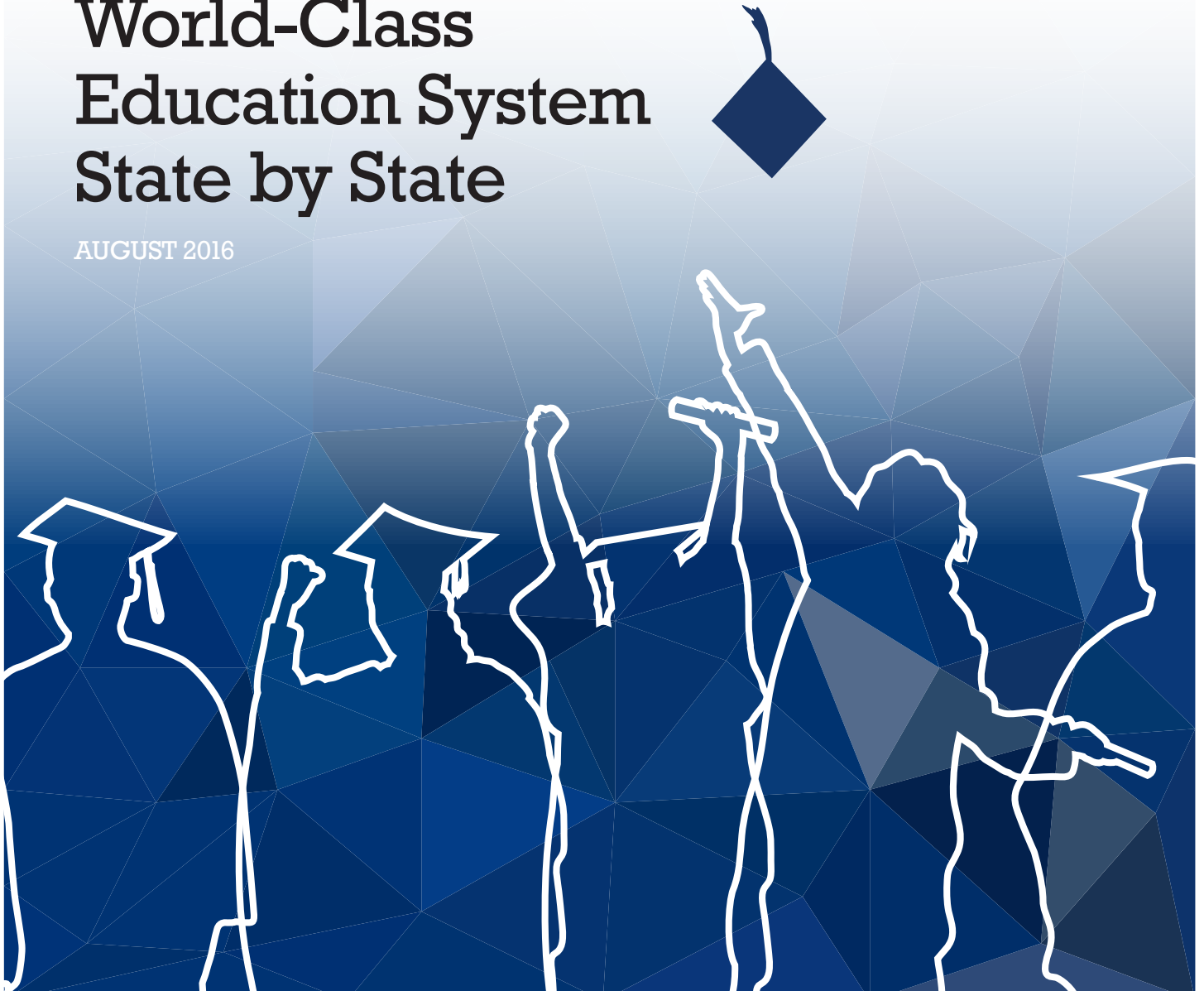
NCSL

NATIONAL CONFERENCE *of* STATE LEGISLATURES

No Time to Lose

How to Build a
World-Class
Education System
State by State

AUGUST 2016



NCSL's Study Group on International Comparisons in Education

The National Conference of State Legislatures hosted a plenary session during its 2013 Fall Forum to discuss the results of the Organisation for Economic Co-operation and Development's (OECD) most recent survey of what 15-year-olds in industrialized countries could demonstrate about their knowledge of reading, mathematics and science. This survey is known as the Programme for International Student Assessment (PISA). Upon hearing of the disappointing performance of students in the U.S., officers of NCSL's Standing Committee on Education requested that NCSL launch a legislative study into international comparisons of high-performing education systems. They wanted to study other high-performing countries to learn which policies and practices were in place and what lessons the U.S. and individual states might learn from their success. They also wanted to learn about the consequences for our economy and quality of life if we failed to improve our standing.

A bipartisan group of 28 veteran legislators and legislative staff, along with several partners from the private sector, began an 18-month study in 2014. They focused on the highest performing countries on PISA to discover commonalities across their policies and practices. They met with education leaders from these countries, along with national and international experts who study their systems. They also visited several countries to see the differences firsthand.

This first report explains why there's no time to lose in rebuilding state education systems. However NCSL's study group still has questions—and surely the reader does too—about how to design and implement these systemic changes in the states. Where should legislators begin—teacher recruitment or preparation, standards, assessments, early learning? How should states realign their resources? Do some of these policies fit together better into an actionable package? There is still much to learn and discover.

The study group members will continue to meet through 2017 to find the answers to these and other questions by continuing to study and learn from other successful countries, as well as districts and states here in the U.S. Upon completion of our study, the study group will produce a policy roadmap that states can use to guide their reforms, as well as provide support to states ready to embark on these efforts.

EXECUTIVE SUMMARY

The bad news is most state education systems are falling dangerously behind the world in a number of international comparisons and on our own National Assessment of Educational Progress, leaving the United States overwhelmingly underprepared to succeed in the 21st century economy. The U.S. workforce, widely acknowledged to be the best educated in the world half a century ago, is now among the least well-educated in the world, according to recent studies. At this pace, we will struggle to compete economically against even developing nations, and our children will struggle to find jobs in the global economy.

States have found little success. Recent reforms have underperformed because of silver bullet strategies and piecemeal approaches. Meanwhile, high-performing countries implement policies and practices and build comprehensive systems that look drastically different from ours, leading them to the success that has eluded states. Pockets of improvement in a few districts or states is not enough to retain our country's global competitiveness.

The good news is, by studying these other high-performing systems, we are discovering what seems to work. Common elements are present in nearly every world-class education system, including a strong early education system, a reimagined and professionalized teacher workforce, robust career and technical education programs, and a comprehensive, aligned system of education. These elements are not found in the U.S. in a consistent, well-designed manner as they are found in high performers.

We have the ability to turn things around. Much higher-performing, yet less-developed countries—such as Poland and Singapore—have made significant progress developing their education systems in just a decade or two because they felt a strong sense of urgency. State policymakers, too, can get started right away to turn around our education system by taking immediate steps to:

- Build an Inclusive Team and Set Priorities.
- Study and Learn from Top Performers.
- Create a Shared Statewide Vision.

We are discovering what seems to work. Common elements are present in nearly every world-class education system, including a strong early education system, a reimagined and professionalized teacher workforce, robust career and technical education programs, and a comprehensive, aligned system of education.

- Benchmark Policies.
- Get Started on One Piece.
- Work Through “Messiness.”
- Invest the Time.

We must directly face these challenges and begin immediately to reimagine and re-engineer our own education system. We must implement meaningful and comprehensive changes that will produce real results for our students.

State legislators must lead this work. Education is first and foremost a state responsibility. Each state can develop its own strategies for building a modern education system that is globally competitive, similar to the approach taken by other high-performing countries.

But we must begin now. There's no time to lose.

We cannot ignore the reality that most state education systems are falling dangerously behind the world, leaving the United States overwhelmingly underprepared to succeed in the 21st century economy.

The U.S. workforce, widely acknowledged to be the best educated in the world half a century ago, is now among the least well-educated, according to recent studies. At this pace, we will struggle to compete economically even against developing nations, and our children will struggle to find jobs in the global economy.

Despite their efforts, states have found little success because recent reforms have underperformed. Meanwhile, high-performing countries implement policies and practices and build comprehensive systems that look drastically different from ours, leading them to the success that has eluded states. Pockets of improvement in a few districts or states are not enough to retain our country's global competitiveness.

The good news is that we have the ability to turn things around. Much higher-performing, yet less-developed countries—such as Poland and Singapore—have made significant progress developing their education systems in just a decade or two, and most of their innovations came from right here in the U.S.

But we must begin now. There's no time to lose. We must directly face these challenges and begin immediately to reimagine and re-engineer our own education system. We must implement meaningful and comprehensive changes that will produce real results for our students.

Each state can develop its own strategies for building a modern education system that is globally competitive, similar to the approach taken by other high-performing countries. These countries did not copy each other; instead they borrowed and adapted ideas, many from the U.S., and customized their approach for their own unique context.

State legislators must be at the center of this discussion. Education is first and foremost a state responsibility. State legislators represent and can bring together the diverse viewpoints at the state and local levels that must be included in setting a vision and priorities for reforms. States must work together with local entities to design efforts that are practical and appropriate for each individual state. We will not be successful by allowing the federal government to set agendas and priorities.

The recent reauthorization of the Elementary and Secondary Education Act as the Every Student Succeeds Act (ESSA) moves federal education policy away from the top-down, punitive approach that has been in place since 2002. States now have more flexibility to reimagine their accountability systems, design interventions to improve instruction, and use federal resources to support students and schools in more flexible ways. At the same time, states will continue to have the data needed to monitor the performance of student subgroups, ensuring a focus on a high-quality education for all children.

ESSA provides an opportunity for states to ensure that all students have the knowledge, skills, abilities and behaviors to succeed in college and the workplace so that jobs stay in our states rather than going overseas. These changes represent both an opportunity and a challenge for states, and lessons from high-performing countries offer timely guidelines for states at this opportune time.

HERE ARE STEPS THAT STATES CAN TAKE IMMEDIATELY.

Build an Inclusive Team and Set Priorities. State legislators cannot do this work alone. They must assemble a broad and diverse group that brings state and local policymakers, teachers, principals, superintendents, unions, business, parents and students into an inclusive process to set a vision for reform and identify priorities. State legislators know that it is very difficult to achieve agreement on reimagining and building a 21st century education system. But every person or group cannot get everything they want, so we recommend a different approach to achieving a collective and realistic vision: To build consensus, every stakeholder in the discussion is expected to put on the table a proposition giving them something they never thought they could get, in exchange for giving up something they never thought they

Building Consensus

It is unrealistic to expect that every person, group or interest will be 100 percent in favor of every idea or strategy. So, it might be wise to establish a threshold for support to move forward. For example, the group might adopt a “70 percent rule”: An idea or decision is approved if 70 percent of the group is in favor.

would give up. In addition, it is unrealistic to expect that every person, group or interest will be 100 percent in favor of every idea or strategy. So, it might be wise to establish a threshold for support to move forward. For example, the group might adopt a “70 percent rule”: An idea or decision is approved if 70 percent of the group is in favor.

Study and Learn From Top Performers. Every state should embark on a journey similar to that of the NCSL study group—a journey to discover the policies and practices of other high-performing countries. Reconsider much of what you think you know; abandon many ideas to which you have long been committed; and embrace new ideas, many which come from other countries but also those already implemented in many of our states. Study innovations in the states. Look hard at statewide data and be unafraid to compare your own state to other states and countries.

To build consensus, every stakeholder in the discussion is expected to put on the table a proposition giving them something they never thought they could get, in exchange for giving up something they never thought they would give up.



■ FROM THE STUDY GROUP

"Many states have implemented individual education reforms but have not accomplished the results hoped for. One of the

most important lessons I have learned during this study is the value of having a well thought out and widely accepted vision that includes the coordination of multiple reforms to produce a world-class education system."

— State Senator John Ford, R-Okla.

Create a Shared Statewide Vision. Developing a shared long-term vision and setting goals to guide the work will be critical to the success of the effort. The vision becomes a guide for policymaking that transcends the shifts in politics or personalities. The vision becomes the North Star that continually guides the work. The journey will not be a short one, but a good roadmap—knowing where to go and developing the way there—means that policymakers will ultimately arrive at the desired destination.

Benchmark Policies. After establishing a shared vision, the state should consider benchmarking its education policies, practices and outcomes against those of high-performing countries and high-performing states. This helps to identify specific policies and implementation strategies for necessary shifts in policy and practice. An ongoing benchmarking process also allows the state to continually monitor its results.

Get Started on One Piece. After creating a comprehensive strategic plan, states should get started right away on a priority area of reform. Building a cohesive system does not mean states should wait to implement all pieces together, but rather understand and emphasize the connectedness of policy pieces. We urge states to move forward now to design and implement priority reform strategies, such as early literacy, teacher preparation, or college and career pathways. Identify an important early success that supports the state vision and the strategic plan, and use the success as momentum for continuous improvement.

Work Through "Messiness." In both high-performing countries and in successful reform efforts here in the U.S., the process of design-

ing system-wide reform is always difficult and messy. There is no one recipe for success. The top performers took at least one step backward for every two steps forward, but continued to keep their eye on the goal to stay the course.

Invest the Time. States embarking on this process will find that they cannot tackle everything at once and will need to prioritize their work. We urge states to define these priorities as part of an inclusive process that first identifies a statewide vision and ensures that individual strategies are all needed parts for achieving statewide goals. States will begin this process at different places and will design different pathways. Achieving system-wide change will take time and will begin and end in different places in different states.

State policymakers can take these first action steps to quickly begin to move their states from mediocrity to excellence.

But first policymakers must face and understand the facts—the unfortunate state of our current education system. Then policymakers must understand the common elements found in world-class education systems.

Facing Facts: U.S. Students and Workers Struggle

POOR SCORES ON PISA

In 2000, the Organisation for Economic Co-operation and Development (OECD) embarked on its first international comparative study of what a sample of 15-year-olds can demonstrate about their knowledge in key areas including math, reading and science.¹ This assessment is known as the Programme

After all of the national, state and district reform efforts during the decade following No Child Left Behind, the U.S. was outperformed not only by a majority of the advanced industrial nations, but by a growing number of less-developed nations as well.

U.S. RANKING ON PISA

The Programme for International Student Assessment (PISA) is a comparative study of 15-year-old students' knowledge in key areas including math, reading and science.

YEAR (COUNTRIES TESTED)	U.S. RANKING		
	READING	MATH	SCIENCE
2000 (32)	15th	19th	14th
2003 (41)	18th	28th	22nd
2006 (57)	NR	34th	28th
2009 (65)	17th	30th	22nd
2012 (65)	24th	36th	28th

SOURCE: NATIONAL CENTER ON EDUCATION AND THE ECONOMY, CENTER ON INTERNATIONAL EDUCATION BENCHMARKING, 2013



■ FROM THE STUDY GROUP

"It's easy to say that the U.S. isn't Singapore or Finland so there's not much to learn from them.

Well, 30 years ago, even Finland wasn't Finland. And some of the things they did such as improving teacher preparation is clearly something we can do irrespective of culture, homogeneity, diversity and so on."

— *State Representative Roy Takumi, D-Hawaii*

for International Student Assessment (PISA). Research has proven that a strong education system contributes directly to a strong economy. Understanding how strong education systems in industrialized countries are designed can help us uncover how they contribute to economic success and improve their citizens' quality of life.

In the first study, 32 highly-industrialized member countries participated. The U.S. ranked a disappointing 15th in reading, 19th in mathematics and 14th in science—right

about in the middle of the countries surveyed. The initial results emboldened some U.S. policymakers to call for reforms, such as more testing and accountability and minimum qualifications for teachers. At the same time, the federal No Child Left Behind (NCLB) Act was enacted.

When the fifth survey was administered in 2012, the number of countries in the survey had grown to 65, and included less-developed countries. The news was worse for the U.S., which placed 24th in reading, 36th in mathematics and 28th in science. Again, our standing was in the middle of the countries surveyed. After all of the national, state and district reform efforts during the decade following NCLB, the U.S. was outperformed not only by a majority of the advanced industrial nations, but by a growing number of less-developed nations as well. ²

POOR SCORES ON PIAAC

The OECD also administers another survey called the Survey of Adult Skills, which is part of its Programme for the International Assessment of Adult Competencies (PIAAC). It surveys adults ages 16 to 65 in numeracy, literacy and problem-solving. The results from the most recent survey, conducted in 33 nations, were released in 2013.

The Educational Testing Service (ETS) did a special analysis of the 2013 PIAAC data on millennials—those in the workforce ranging in age from teens to early 30s. They argued that this generation "will largely determine the shape of the American economic and social landscape of the future." ETS found that only the millennials in Spain and Italy scored lower on the PIAAC survey in reading than millennials in the U.S. In numeracy, U.S. millennials tied for last with Italy and Spain. In problem-solving, U.S. millennials again came in last among the 33 nations.

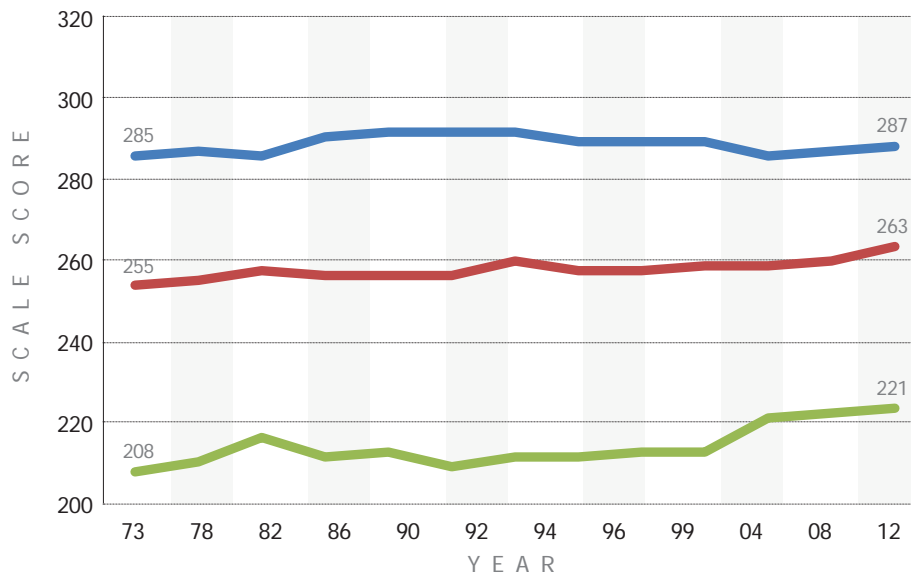
POOR PERFORMANCE ON OUR "NATION'S REPORT CARD"

Not only are U.S. students struggling to compete globally, they also struggle to meet the relatively low expectations set for students through our own "Nation's Report Card," or the National Assessment of Educational Progress (NAEP). For the four decades this assessment has been administered to students

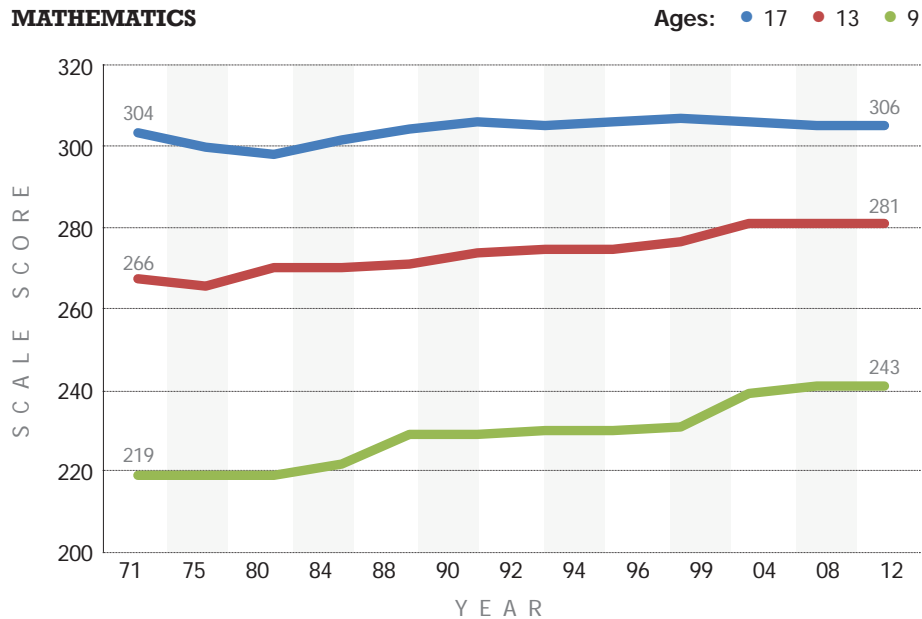
LONG-TERM NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP) SCORES

Over the past four decades, high school students in the U.S. have made little progress according to the “Nation’s Report Card,” administered by the NAEP.

READING



MATHEMATICS



Source: National Center for Education Statistics (2012). Trends in Academic Progress

across the country, high school students have made little improvement.

INTERNATIONAL COMPARISONS ARE VALID

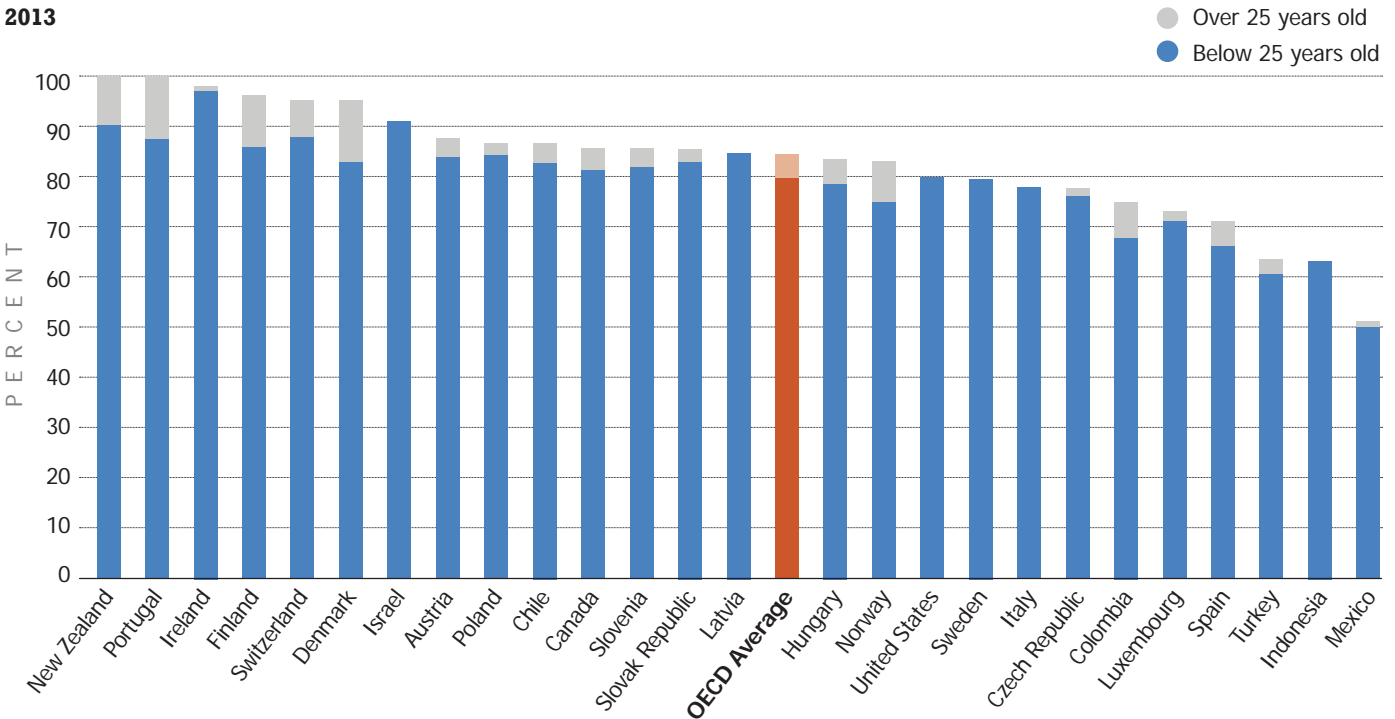
When these survey results were first released in the 2000s, many countries enacted sweeping changes to improve their education sys-

tems and drive economic development. They realized that they needed to turn their education systems around to compete in a global economy. Some in the U.S., however, explained away the results by criticizing the PISA and PIAAC methodology, denied that education results in other countries could be compared to those in this country, or argued that

UPPER SECONDARY GRADUATION RATES, 2013

The OECD reports that the U.S. graduation rate is 80 percent, lower than most other high-performing countries. This dispels the assertion that other high-performing countries educate only their elite.

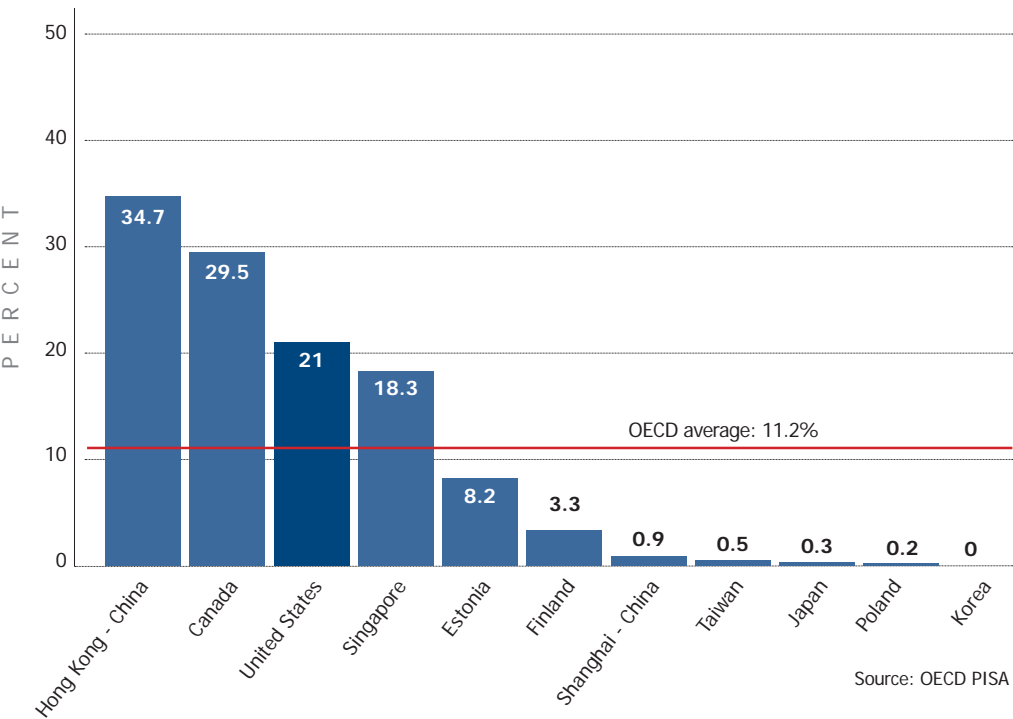
2013



Source: OECD (2015), Education at a Glance 2015: OECD Indicators, OECD Publishing. <http://dx.doi.org/10.1787/eag-2015-en>, p. 48

PERCENT OF STUDENTS WHO ARE IMMIGRANTS

Europe and Asia have experienced an upsurge in immigration over the past several decades, and Asian countries have significant cultural, linguistic, ethnic and religious diversity.



Source: OECD PISA 2012

ELEMENTS OF A WORLD-CLASS EDUCATION SYSTEM

Children come to school ready to learn, and extra support is given to struggling students so that all have the opportunity to achieve high standards.

- Necessary resources ensure that all children enter the first grade with the cognitive and non-cognitive skills needed to master a first-grade curriculum set to high standards.
- Once students are in school, resources are distributed so that students who may find it harder to meet high standards will be given the extra resources—especially highly effective teachers—they need to succeed.

A world-class teaching profession supports a world-class instructional system, where every student has access to highly effective teachers and is expected to succeed.

- The highly professional teaching force is well-prepared, well-compensated and well-supported throughout their careers.
- Teachers support a well-designed instruction system that includes high standards for learning, a core curriculum created by world-class teachers, and high-quality assessments designed to measure complex skills demanded by the standards and curriculum.
- All students are expected to be ready for college and career, and all educators are expected to get them there.

A highly effective, intellectually rigorous system of career and technical education is available to those preferring an applied education.

- A powerful, hands-on applied curriculum is built, requiring strong academic skills.
- The system has no “dead ends,” and pathways to university are clear and always available.
- Schools partner with employers to ensure that high standards are set for the students and provide on-the-job training and learning opportunities to enable them to reach those standards.

Individual reforms are connected and aligned as parts of a clearly planned and carefully designed comprehensive system.

- All policies and practices are developed to support the larger education system.
- The coherent system of education is designed to ensure that every student meets the same goal of college and career readiness.

international comparisons are irrelevant. This criticism continues even today as the United States falls further and further behind.

The NCSL study group's conclusions were very different. They found that U.S. students' poor performance cannot easily be explained away. For example, critics assert that the U.S. educates all students while the other high-performing countries educate only their elite. But graduation rates dispel this assertion. The OECD reports that the U.S. graduation rate is 80 percent, lower than most other high-performing countries.

Critics also assert that the U.S. is more diverse than other countries and, as a result, faces challenges that others do not. This may have been true in the past, but it is not the case today. Both Europe and Asia have experienced an upsurge in immigration over the past several decades. The same is true of Canada. A greater proportion of Canadian students was born outside Canada than the proportion of U.S. students born outside the U.S. Furthermore, Asian countries have significantly more cultural, linguistic, ethnic and religious diversity than many Americans often suppose. For example, Singapore has three main ethnic groups (Chinese, Malay and Indian), four national languages (Mandarin, Malay, Tamil and English) and a host of major religions, including Buddhism, Islam, Christianity, Hinduism, Sikhism, Taoism and Confucianism.

Facing Facts: U.S. Policymakers Struggle to Find Silver Bullet

Over the past several decades, policymakers in the U.S. have worried about flat test scores and fledgling international competitiveness. In an effort to boost achievement for all students, policymakers have tried a number of approaches and passed a number of state and federal laws. These have included increasing funding, reducing class size, enhancing school choice, improving school technology and teacher quality, more testing and tougher test-based accountability. While some policies have had marginal success in some states or districts, success has not been as widespread as policymakers had hoped.



■ FROM THE STUDY GROUP

“Every championship team, no matter what sport, knows the fundamentals of the game and practices those relentlessly. I

believe we have identified the fundamentals of education that are necessary to succeed in preparing our children to be internationally competitive in today's changing economy. It is imperative that we acknowledge and adopt those fundamentals if we are to be champions in education again.”

— State Senator Luther Olsen, R-Wisc.

The only policy approach developed by both U.S. states and top-performing countries is high academic standards. But all of the top-performing countries have coupled developing such standards with a curriculum framework, specific curriculum and well-aligned, high-quality, essay-based assessments in seamless instructional systems. Most states have yet to move in this direction, and implementation of rigorous standards has been haphazard at best.

In retrospect, the NCSL study group concludes that states have tried to find individual “silver bullets” without setting decisive goals and creating a thoughtful, systemic approach to building a coherent system with an appropriate timeline for implementation, as did the other high-performing countries. Examples of states’ piecemeal approaches include:

- Increasing teacher pay without demanding better preparation
- Improving early education without continuing supports for struggling students in K-12
- Increasing funding without first shifting

funds from unproven strategies

- Decreasing class size without first restructuring staffing and time
- Using test scores in teacher evaluations without ensuring that all teachers are receiving job-embedded, high-quality, ongoing learning

This “silver bullet” approach is not what the study group found in high-performing countries. They do not look to single policy shifts to improve student outcomes. Instead, they have created a coherent system of education within which all policies and practices are designed to lead to high performance.

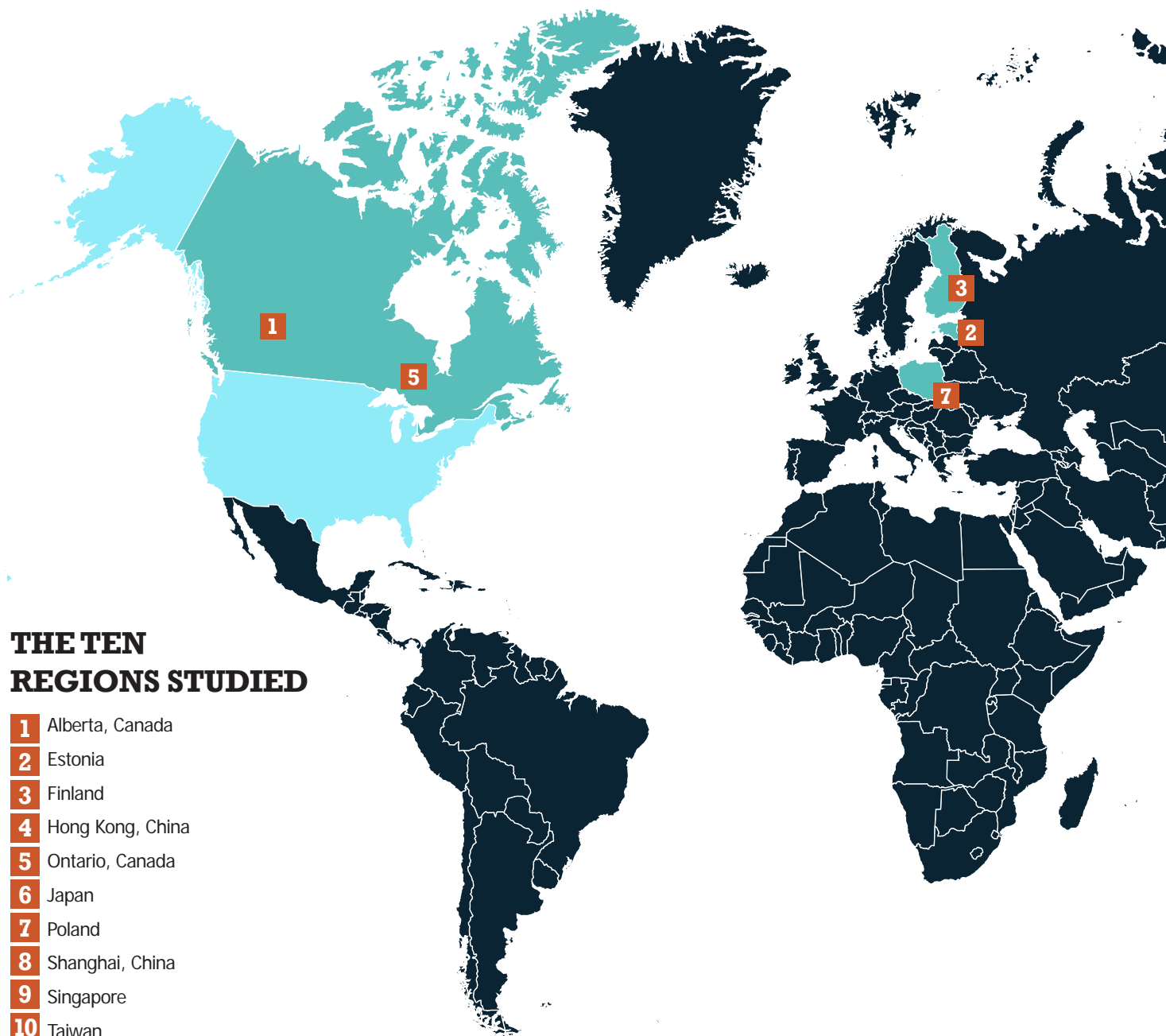
TOP PERFORMERS: HOW THEY BECAME THE BEST IN THE WORLD

As NCSL’s study group talked with experts from around the world and visited several top-performing countries, they confirmed what others had found—there are common elements that make up the design of world-class education systems. These elements are widely credited for their rapid rise in student achievement.

Element #1: Children come to school ready to learn, and extra support is given to struggling students so that all have the opportunity to achieve high standards.

The top-performing countries ensure that children arrive at school ready to learn. The responsibility for this varies among the countries. For example, in high-performing countries with a large proportion of women in the workforce, the government typically provides support to families with young children. In other countries, however, the responsibility falls on families—often extended families—and the community.

Once students in top-performing countries are in school, those who struggle receive extra help ... More teachers are typically allocated to such schools, with the best teachers serving in the most challenged ones. Inversely, American students from the wealthiest communities are most likely to get the best teachers and the finest facilities.



In both situations, society places a high priority on making sure that children are in good health and prepared to learn. In most cases, if the families cannot or will not provide these supports to children, then society steps in. These supports often continue after children begin school.

In the United States, children in poverty now account for about a quarter of all children in public schools. Large numbers of American children enter first grade with disadvantages

that may overwhelm the school's capacity to provide an adequate education. Because high-performing countries provide supports to ensure that children are ready for school, their schools typically do not face similar challenges.⁵

Once students in top-performing countries are in school, those who struggle receive extra help to reach the same high standards other students will reach more easily. Providing additional resources to schools serving dis-



advantaged, struggling students is a priority. More teachers are typically allocated to such schools, with the best teachers serving in the most challenged ones. Resources are also re-allocated within schools to reach those most in need of extra support. These countries demonstrate that, with added support, struggling students can meet high expectations. Inversely, American students from the wealthiest communities are most likely to get the best teachers and the finest facilities because of the way we structure our finance systems.

Once teachers exit a preparation program in top-performing countries, they are expected to be the best in the world and experts in their craft. American programs typically have lower standards for entrance and exit, overproduce elementary education teachers, and struggle to produce teachers in high-demand fields, such as special education and science, technology, engineering and math.

Element #2: A world-class teaching profession supports a world-class instructional system, where every student has access to highly effective teachers and is expected to succeed.

When the top performers committed to bringing all students to achievement levels formerly reached only by their elites, they also committed to providing all students with access to high-quality teachers. They raised the rigor, expectations, structure and status of the teaching profession and compensated those who were willing to meet the challenge of this reimagined career path.

These goals led the top-performing countries to adopt a different set of tightly linked policies and practices than those enacted in the U.S. While some of these approaches have been tried here, no comprehensive set of policies and practices that raise the teaching profession to the heights seen in high-performing countries has been adopted across any state.

■ **Selective Recruitment.** The top-performing countries have a rigorous set of criteria for determining a candidate's eligibility for teacher preparation, including an entrance exam that few pass. Often teacher candidates are recruited from the top quarter of high school graduates. This is not a typical practice in the U.S.

In high-performing countries, teachers are compensated more generously than American teachers, typically earning pay similar to that of senior civil servants and professionals such as engineers and accountants. They are expected to be the best in the world and are compensated accordingly.

■ **Rigorous Preparation and Licensure.**

Most teacher preparation programs in top-performing countries are based in prestigious research universities that are more selective and rigorous than U.S. programs. Teaching programs know and produce the number and types of teachers needed to fill vacancies each year, so admission is quite competitive. Programs require mastery of subjects to be taught and often include clinical practice that can take significantly longer to complete than teacher induction programs in the U.S. There are no approved alternative routes to licensure like those in the states, which enable professionals to become teachers with only a few weeks or months of training.

Once teachers exit a preparation program in top-performing countries, they are expected to be the best in the world and experts in their craft. American programs typically have lower standards for entrance and exit, overproduce elementary education teachers, and struggle to produce teachers in high-demand fields, such as special education and science, technology, engineering and math (STEM).

■ **Thorough Induction.**

Either during preparation or upon entering the teaching workforce, new teachers in high-performing countries are expected to serve apprenticeships with officially designated, well-trained master teachers. During the first year of this induction, beginning teachers typically have a greatly reduced workload. Teachers must complete the induction before they receive what we would call “tenure.” While induction and mentoring policies have been enacted in many states, these programs often lack quality, rigor and authenticity in implementation.



■ **FROM THE STUDY GROUP**

“In several of the countries studied, teaching is regarded as an honorable and respected profession, comparable to

medicine and law, and not a burden on the local property tax.”

— *State Representative Mary Stuart Gile, D-N.H.*

■ **Career Ladders or Lattices.** High-performing countries create a variety of roles for teachers in the schools so they can use their expertise to improve teaching and learning and, at the same time, offer an exciting career in education. These may include leadership roles that offer experienced teachers incentives to remain in the profession, hone and receive rewards for their unique skills, and better support students and colleagues.

■ **Professional Work Environment.** High-performing countries have redesigned their schools and the overall work environment to maximize the success of teachers and students. For example, teachers are given a lighter teaching load and more time for their own—and their colleagues’—development. In some of these countries, 30 percent to 35 percent of a teacher’s time is spent teaching students, while the rest is spent on activities such as working in teams with other teachers to develop and improve lessons, observing and critiquing classes, and working with struggling students.⁶ Teacher evaluation, promotion and pay takes into consideration teachers’ performance in teams and their progress as they become experts in their craft.

Schools and classrooms are organized differently so that several teachers, perhaps even a group, have responsibility for a classroom. When not working directly with students, teachers are rewriting curriculum and assessments to meet the needs of their students and to meet high student performance expectations. Teachers also counsel and train each other, constantly observing, evaluating and improving their practices. Because they are trained to be experts at their craft, teachers push themselves, their colleagues and their students to be the best in the world. This highly professional work environment is uncommon in the U.S.

NCSL study group members watch students work together during a math lesson in a Shanghai elementary school.



■ **High-Quality Professional School Leaders.** In high-performing countries, the school leader is highly trained and carefully selected. In Singapore, for example, only teachers who have been trained in its highly rigorous system and have already served in a variety of school settings can become principals. Principals receive training in curriculum, instruction and school administration. School leaders interact regularly and in great depth with their teachers. In the U.S., although it is understood that great schools require great leaders, recruitment, selection and training systems that foster such leadership have not been uniformly developed.

■ **Higher Compensation.** In high-performing countries, teachers are compensated more generously than American teachers, typically earning pay similar to that of senior civil servants and professionals such as engineers and accountants. They are expected to be the best in the world and are compensated accordingly. Many nations view their teachers as “nation builders,” preparing the country’s next generation. Some countries have variable pay scales tied to career ladders or lattices that acknowledge the various teaching roles, leadership responsibilities and subject mastery. These



■ **FROM THE STUDY GROUP**

“High-performing countries have consciously decided to prioritize education over testing.”

— State Senator Joyce Elliott, D-Ark.

countries have managed to increase pay by reallocating resources from policies and practices they found to be less effective.

■ **World-Class Instructional Systems.** To guide and support effective teaching and learning, all of the top-performing countries have developed internationally benchmarked standards that specify what students should know and be able to do in language arts, mathematics, science and all required subjects in the curriculum. Increasingly, these include both high-level complex cognitive skills and non-cognitive skills, such as ethical behavior, framing and completing tasks, teamwork and leadership. Top performers develop curriculum frameworks based on these high standards and specify the order in which concepts should be taught, either by grade or grade span, thereby creating a clear path to student mastery. Corresponding course syl-

labi specify learning objectives, topics to be covered, materials to be used, appropriate assessments, and papers and projects to be completed. They do not include lesson plans because teachers are expected to develop them guided by the syllabi and curriculum framework. Policymakers in these countries assume that if the teachers know the desired outcomes, they are skilled enough to prepare lessons that will enable their students to master that material.

The top performers also prepare assessments that are designed to find out whether students have mastered material in the syllabi. Because

Career and technical education (CTE) is not perceived as a route for students lacking strong academic skills, but as another approach to education, skills development and good jobs. CTE is well-funded, academically challenging and aligned with real workforce needs.

the syllabi specify high-level complex skills, the assessments typically contain few multiple-choice, computer-scored prompts, since that type of assessment does not effectively measure high-level skills. These assessments are typically essay-based and scored by humans, so the high-performing countries spend more than states on assessments. They are not administered annually, however, but instead at key transition points in a student's academic career. Similar to teacher pay, these countries prioritize this investment as a small fraction of the total cost of their education system, knowing that cheaper, less effective, less rigorous assessments will not lead to world-class teaching or high student achievement.

Element #3: A highly effective, intellectually rigorous system of career and technical education is available to those preferring an applied education.

Interest in career and technical education (CTE) is emerging in many top-performing

countries as a strategy to boost the national economy and offer a high standard of living and attractive careers to a broader constituency. Singapore and Switzerland, in particular, have built strong systems of CTE with close ties to industry. Singapore uses a school-based model and Switzerland uses an employer-based model.⁷ In these countries, CTE is not perceived as a route for students lacking strong academic skills, but as another approach to education, skills development and good jobs. CTE is well funded, academically challenging and aligned with real workforce needs. It is hands-on, attractive to students and parents, and can lead to university for students who may seek professional and managerial positions later. For other students, CTE is a pathway to good jobs, by building technical skills that can be achieved much earlier than the traditional academic experience.

On the other hand, the U.S. has experienced a steady decline in CTE over the last few decades. This has become a challenge for American employers struggling to find skilled workers and for students desiring an applied education or a streamlined entrance into the workforce. Although a number of states have impressive CTE schools or particular programs, very few have an entire CTE system that provides the kind and quality of opportunities available to students in top-performing systems. Community colleges are particularly well positioned in the states to link workforce needs to credentials and certificates.

Element #4: Individual reforms are connected and aligned as parts of a clearly planned and carefully designed comprehensive system.

Top performing countries have adopted a comprehensive, systemic approach to building world-class education systems. They understand that success is not achieved by adopting only one or two "silver bullet" policies; instead, these countries have reimaged and re-engineered their entire systems. Typically, this vision is established at the national level with the ministry of education, while states or provinces are charged with implementation. This is not dissimilar to how states can enact reform: with a clear vision at the state level, while local entities are responsible for implementation.

For example, the top-performing countries

Success is not achieved by adopting only one or two “silver bullet” policies ... Top-performing countries understand that schools will struggle without high-quality early childhood education and that high-quality early childhood education will not be a wise investment unless followed by high-quality instruction in the schools. They also understand that increasing teacher pay without rethinking the pool of teaching applicants may be unwise unless preparation programs are more rigorous. Likewise, they realize that a more rigorous program is pointless without creating a more attractive teaching profession.

understand that schools will struggle without high-quality early childhood education and that high-quality early childhood education will not be a wise investment unless followed by high-quality instruction in the schools. They also understand that increasing teacher pay without rethinking the pool of teaching applicants may be unwise unless preparation programs are more rigorous. Likewise, they realize that a more rigorous program is pointless without creating a more attractive teaching profession.

Unlike top-performing countries, states commonly take a piecemeal approach, where policymakers fail to set overarching goals for the education system and instead experiment with individual strategies that can sometimes change from year to year. States have designed and implemented many different education reform policies that are not always connected and consequently do not have the desired impact.

Clearly, a decentralized system of education governance exists and is traditionally preferred in the U.S., where state and local boards, agencies, governors and legislatures all control and often set differing priorities for their own systems. Parents, teachers and students are frustrated with reform efforts that come and go, leaving them with a system built on an ever-shifting foundation.

States are well-positioned to instead create the kind of clear vision and systemic reform that high-performing countries do. State systems more closely resemble education governance in the high-performing countries. With input from stakeholders, state legislatures, state boards of education, governors and state education agencies can agree to a clear vision for the state and allow local entities to implement specific strategies.

An Urgent Call to Action: It's Up To States

As state legislators, it is our responsibility to provide our citizens with a world-class education. We cannot let another generation settle for anything less. Our future workforce, national defense, economic vitality and democratic foundation depend on our ability and willingness to get this done.

If we assemble the best minds in policy and practice, implement what we know works, and commit ourselves to the time, effort and resources needed to make monumental changes, we can once again be among the best education systems in the world. If they can do it, so can we. But there's no time to lose.

Profiles: A Closer Look at Three High-Performing Education Systems

FINLAND

People everywhere have heard about Finland—this Scandinavian country of 5.3 million is a world leader in education. It is easy to suggest that any small country can achieve outstanding results, but the Finland story and experience are much more than that. Finland's strong system was built from the ground up in the 1970s as leaders viewed outstanding education as the ticket to a strong economy and international competitiveness.

Visitors to Finland often talk about the beautiful school buildings. Inside the classroom, you rarely find teachers lecturing to students in rows of desks. Rather, Finland prides itself on self-directed students. Students take charge of their learning activities—by consulting with teachers and developing a specific lesson plan that may involve individual work and group work. Finland's schools are devoted to being full service, meaning they offer student and family health services, counseling, transportation and meals.

The three-tiered system features early education (ages 1-7), comprehensive schools (ages 7-16) and senior secondary schools (ages 16-19). At that point students move either to the university or to vocational schools and apprenticeship training.

Schools are small with small classes (about 20 students per class). There is a national core curriculum that lays out what students are expected to learn and be able to do and the topics that should be taught at each grade level, but teachers have wide flexibility to design lessons and assessments.

The hallmark of Finland's system is its exceptional teachers. Many scholars look to the investment in teacher education as the MOST important factor in Finland's success. Only 10 percent of those who apply are admitted into teacher education. The preparation program is a five-year, combined bachelor's and master's degree program and is free with a stipend for living expenses. Students learn both teaching and research skills. There is

an emphasis on using research-based, state-of-the-art practices and including clinical experiences in a school associated with a university over the five year program. All teachers hold a master's degrees in education with a minor in two content areas in which they will teach. Schools provide time for regular collaboration among teachers—at least one afternoon each week—and opportunities for ongoing professional development.

There is a national core curriculum in Finland, but no national test or other method for monitoring school performance. There is a national matriculation exam at the end of upper secondary school, but the function is to assess what the student knows, not the quality of the school. Teachers have much autonomy in their everyday work. Finnish scholar Pasi Sahlberg refers to this as “balanced centralization and decentralization.” The Finns suggest that this system provides for maximum innovation and creativity at the school level and allows for teachers to be accountable for overall school performance. There is no mechanism for using student tests to measure individual school performance; however, Finland does have a schools’ “inspectorate” who regularly visits schools and provides feedback to help them improve.

Over the years, Finland has become a more diverse country as immigration has increased. More than 99 percent of students successfully complete compulsory basic education and about 90 percent complete upper secondary school.

Finland prides itself on providing equity of opportunity to learn and inclusion. Resources are directed to the most high-need students and schools. Students with special needs are often mainstreamed in regular classrooms but receive significant additional support. Ninety-eight percent of the cost of education is covered by government.



ONTARIO

Canada has been a strong performer in the world education arena since 2000, and Ontario in particular is known for its educational gains. Ontario is Canada's second largest province—larger than France and Spain combined—with a very large system, educating about 40 percent of the country's 5 million students. Ontario has nearly 5,000 schools, with an average size of about 415 students. Average class size is 22. Ontario has a very diverse student population as Canada's immigration rate is among the highest in the world. About one-fourth of Ontario students were born outside Canada. As a result, Ontario's hallmark is its strong appreciation of the diversity of its students and devotion to and value of immigrant children. Students learn about diverse histories, cultures and perspectives in order to build tolerance.

In addition, a centerpiece of Ontario's strategy has been capacity. Regional teams of education leaders with significant experience in teaching, leadership and coaching work in partnership with schools and districts to support improvement within diverse contexts. Under-performing schools and students are constantly targeted for additional supports. There is a strategy for identifying potential dropouts early and providing them with additional support to succeed. Teams of teachers and counselors work together to provide initial support and track progress. Special attention devoted to at-risk students and specialized teachers helped raise the high school graduation rate from 68 percent to 82 percent.

Ontario also promotes parent engagement by actively seeking parents to help and advise schools. Ontario promotes healthy schools



with a standard 20 minutes of moderate to vigorous physical activity each day. It also promotes safe schools. A continuum of interventions, support and consequences work to reinforce positive behavior for students to make good choices.

Ontario provides full-day kindergarten for 4-year-olds and 5-year-olds to establish a strong foundation and a smooth transition to the first grade. Students begin in grade seven to think about career development and pathways.

There is no federal education ministry. Each of the provinces (and three territorial governments) is responsible for developing curriculum and determining major education policies and initiatives. Teacher certification is governed by the Ontario College of Teachers. Teachers must have completed at least a three-year postsecondary degree in a content area and then apply to and complete one year of a teacher education program to be certified to teach. There is a culture at the school level of teachers as innovators. Ontario values teachers being risk takers to identify new and promising practices and foster creativity and responsibility. Teachers also use evidence at all levels to inform strategies and actions and participate in collaborative learning teams.

SINGAPORE

Singapore is a very young country and had the advantage of designing an education system from scratch 50 years ago. Singapore split from the United Kingdom in 1963 and became part of Malaysia, and two years later became its own sovereign city-state. Singapore's founding leaders saw people as its most important resource and understood that education was the answer to political and economic survival. Visitors to Singapore remark about its cleanliness and the beautiful gardens—all strategically planned to make people happy. Although it is a city-state with a population of 5.4 million, it is comparable in size to several of our own states.

The center of Singapore's education success is its high-quality educators. Teachers are valued at a level on par with doctors and lawyers. There is only one teacher preparation institute—the National Institute of Education (NIE)—which is housed at a research university. The NIE works closely with the Ministry of Education so that state policy and practice are tightly linked. Prospective teachers are recruited from the top 30 percent of the secondary school graduating class by panels that include current principals. The NIE receives an average of eight applications for every opening. Students accepted receive free tuition and a monthly allowance. New teachers are observed and coached and given ongoing professional development as part of a required and heavily structured induction program.

Once teachers begin their career, they are allotted 100 hours of professional development (largely school-based) per year so they can constantly improve their practice. Every school has a fund to support teacher growth that may include opportunities to study abroad to learn about various aspects of education in other countries. Peer-to-peer learning also is pro-



moted through teacher networks and professional learning communities.

Teacher performance is appraised annually against 16 competencies, which include contribution to students' academic and character development, collaboration with parents and community groups, and contribution to colleagues and the school as a whole. After three years of teaching, they are assessed annually to see which of three career paths—master teacher, curriculum or research specialist, or school leader—would best suit them.

Schools are large, but teachers are regularly engaged with each other through classroom observations, collaborative professional development, and group lesson planning. The principal, who is always a former teacher, is actively engaged in both school management and teaching.

In addition to a Primary School Leaving Exam that must be passed before a student moves into lower secondary school, students take a high-stakes test at the end of secondary school. Students and parents are well aware of the importance of the test, which tracks students into the career/technical pathway or the university pathway. Career/technical students in Singapore are not viewed as second-class citizens; rather, the schools are highly modern and advanced with a devoted faculty and work closely with industry in designing specific high-quality programs.

FINLAND:

The hallmark of Finland's system is its exceptional teachers. Many scholars look to the investment in teacher education as the MOST important factor in Finland's success. Only 10 percent of those who apply are admitted into teacher education.

ONTARIO:

Ontario has a very diverse student population as Canada's immigration rate is among the highest in the world. As a result, Ontario's hallmark is its strong appreciation of the diversity of its students ... Students learn about diverse histories, cultures and perspectives in order to build tolerance.

SINGAPORE:

Career/technical students in Singapore are not viewed as second-class citizens; rather, the schools are highly modern and advanced with a devoted faculty and work closely with industry in designing specific high-quality programs.

Profile Sources

- National Center on Education and the Economy: Center on International Education Benchmarking (2016). Finland. <http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/finland-overview/>
- National Center on Education and the Economy: Center on International Education Benchmarking (2016). Canada. <http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/canada-overview/>
- National Center on Education and the Economy: Center on International Education Benchmarking (2016). Singapore. <http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/singapore-overview/>
- Center on International Education Benchmarking (2014). Background Reading for the 3rd Meeting of the NCSL International Education Study Group Education, Washington, D.C., December 12-13, 2014.
- Darling-Hammond, L., et al. International Comparative Study of Teaching Quality Systems in High-Performing Countries. Forthcoming 2016

NCSL International Education Study Group Members

State Legislators

Representative Robert Behning, IN
Representative Harry Brooks, TN
Representative Tom Dickson, GA
Representative Ken Dunkin, IL
Senator Joyce Elliott, AR
Senator John Ford, OK
Representative Eric Fresen, FL
Representative Lynn Gattis, AK
Representative Mary Stuart Gile, NH
Representative Wendy Horman, ID
Representative Betty Komp, OR
Senator Peggy Lehner, OH
Senator Rich Madaleno, MD
Senator Luther Olsen, WI
Representative Alice Peisch, MA
Senator Robert Plymale, WV
Representative Sharon Tomiko Santos, WA
Representative Jacqueline Sly, SD
Senator David Sokola, DE
Senator Howard Stephenson, UT
Representative Roy Takumi, HI
Senator Joyce Woodhouse, NV

State Legislative Staff

Ben Boggs, Legislative Analyst, KY Legislature
Todd Butterworth, Senior Research Analyst, NV Legislature
Rachel Hise, Lead Principal Analyst, MD Legislature
Julie Pelegrin, Assistant Director of the Office of Legislative Legal Services, CO Legislature
Phil McCarthy, Senior Analyst, ME Legislature
Anita Thomas, Legal Counsel, ND Legislature

NCSL Education Staff

Julie Davis Bell, Group Director
Michelle Exstrom, Program Director
Lee Posey, Federal Affairs Counsel
Madeleine Webster, Policy Associate
Barbara Houlik, Staff Coordinator

Project Partners

Daayah Bilal-Threats, National Education Association
Dane Linn, Business Roundtable
Scott S. Montgomery, ACT
Chris Runge, American Federation of Teachers
Adrian Wilson, Microsoft Corporation

National Center on Education and the Economy
and Center on International Education Benchmarking Staff:
Marc Tucker, President
Betsy Brown Ruzzi, Vice President and Director of CIEB
Nathan Driskell, Policy Analyst

Study Group Meetings

Overview of International Education Comparisons

September 3-6, 2014 | Boston, MA

Introduction to PISA and Researching International Education Systems

October 2, 2014 | Webinar

Preliminary Findings and Reflections From Members' Own Benchmarking Research

December 12-13, 2014 | Washington, DC

Accountability Systems of High Performing Countries

February 23, 2015 | Webinar

Getting the Right Incentives: Designing a Coherent, Highly Functioning Education System

April 17-19, 2015 | Chicago, IL

Evaluating State Policies on the 9 Building Blocks of a World-Class State Education System

May 29, 2015 | Webinar

Implementing and Communicating System-Wide Reform in Top Performing Jurisdictions

July 8-9, 2015 | Park City, UT

Current State Examples of System-Wide Reform: Kentucky and Delaware

August 2-3, 2015 | Seattle, WA

A Teacher's View on International Comparisons and Communications Strategies for Study Group Recommendation

December 11-12, 2015 | Washington, D.C.

Experts Consulted

Cathy Boehme, Teacher, Florida

Barnett Barry, CEO and Founder, Center for Teaching Quality, North Carolina

Yuri Belfali, Head of Division, Directorate for Education and Skills, Organisation for Economic Co-operation and Development (OECD), Paris

Andy Coons, Senior Director, Center for Great Public Schools, National Education Association (NEA)

Linda Darling-Hammond, Charles E. Ducommun professor of Education, Stanford University and President, Learning Policy Institute

Michael Davidson, Head of Division, Early Education and Schools, Organisation for Economic Co-operation and Development (OECD), Paris

David Driscoll, Former Commissioner of Education, Massachusetts

Nathan Driskell, Policy Analyst, National Center on Education and the Economy (NCEE)

Charles Glenn, Professor of Educational Leadership and Development and Former Dean of the School of Education, Boston University

Representative Derrick Graham, Kentucky

Ben Jensen, CEO, Learning First, Australia

Helen Ladd, Distinguished Professor of Public Policy and Professor of Economics, Sanford School of Public Policy, Duke University

Sing Kong Lee, Managing Director, National Institute of Education International and Vice President, Nanyang Technological University, Singapore

Anthony Mackay, CEO, Center for Strategic Education, Melbourne, Australia

Donna Quan, Superintendent, Toronto District Schools

Mary Cathryn Riker, Executive Vice President, American Federation of Teachers (AFT)

Betsy Brown Ruzzi, Vice President, National Center on Education and the Economy and Director, Center on International Education Benchmarks

Pasi Sahlberg, Finnish Education Expert, Finland

Andreas Schleicher, Director for Education and Skills, Organisation for Economic Co-operation and Development (OECD), Paris

William Schmidt, University Distinguished Professor, Center for the Study of Curriculum, Michigan State University

Vivien Stewart, Vice President, Asia Society

Marc Tucker, President and CEO, National Center on Education and the Economy (NCEE)

John White, Superintendent, Louisiana Department of Education

Ali Wright, Mathematics High School Teacher, Kentucky

Minxuan Zhang, Professor and Director of Research, Institute of Comparative Education, Shanghai Normal University

Readings and Data Sources

OVERVIEW OF INTERNATIONAL COMPARISONS

- OECD (2011). *Lessons from PISA for the United States: Strong Performers and Successful Reformers in Education*. OECD Publishing, <http://www.oecd.org/pisa/46623978.pdf>. Combining a description of the practices and policies of the top performing countries with a quantitative analysis of PISA data, this report presents lessons for U.S. policy makers.
- Tucker, ed. (2011). *Surpassing Shanghai: An Agenda for American Education Built on the World's Leading Education Systems*. Harvard Education Press. This book explores five high-performing education systems, including Shanghai, Japan, Singapore, Canada and Hong Kong, and presents recommendations for U.S. policymakers.

CANADA

- Alberta Ministry of Education (2014). *Guide to Education – ECS-Grade 12 (2014-2015)*. The first part of a guide released annually by the Alberta Ministry of Education, this document provides an overview of the Ministry's mission, guiding principles, key indicators that measure success, as

well as a guide to key legislation, regulation and policies governing Alberta schools. This includes teacher policy, resource allocation policies, school leader policy and qualification requirements.

- *Mandate Letter from the Premier of Alberta to Minister of Education Gordon Dirks* (2014). This short mandate letter outlines the current priorities of the Albertan government for the Ministry of Education, including funding stability, curriculum reform and higher standards for student performance.
- OECD (2014). *Education at a Glance 2014– Canada Country Note*. The OECD released this brief on Canada's performance on a range of education indicators, including attainment, mobility and proficiency.
- Ontario Ministry of Education (2010). *New Teacher Induction Program: Induction Elements Manual*. This manual provides an in-depth look at policy for teacher induction, including the funding mechanisms for the teacher induction program.
- Ontario Ministry of Education (2014). *Equity and Inclusive Education in Ontario Schools: Guidelines for Policy Development and Implementation*. This policy manual lays out guiding principles for policy development and implementation and accountability systems for special education. It also includes sample policy memoranda and classroom tools.
- Ontario Ministry of Education (2014). *Achieving Excellence: A Renewed Vision for Education in Ontario*. This strategic plan presents the Ministry's proposed action steps for fostering excellence, equity, public confidence and student well-being in the education system.
- Riveros (2013). *From Teachers to Teacher Leaders – A Case Study*. This case study looks at teacher leadership development in Alberta from 1997-2007. Alberta's teacher leadership programs have been cited as among the strongest in the world.
- Task Force for Teaching Excellence (2014). *Report to the Minister of Education, Government of Alberta* (2014). This report presents the findings of a 16-member task force convened in 2013 to define Albertan expectations for teaching excellence, enable teachers to grow professionally, define the role of teacher leaders and, ultimately, ensure an excellent teacher for every child.

ESTONIA

- Archimedes (2006). *Factsheet, Vocational Education and Training, Estonia* – This factsheet briefly summarizes the vocational education and training system, and the qualifications and diplomas awarded students, in Estonia.
- Basic Schools and Upper Secondary Schools Act of 2010 – This legislation defines school governance, compulsory education, public right to education, national curriculum, accountability and evaluation, and teachers' rights and required qualifications.

- Center on International Education Benchmarking (2016). *Estonia Overview*. <http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/estonia-overview/>. This case study explores the development of the Estonian education and provides resources for policymakers interested in learning more.
- The Economist (2013). *How did Estonia become a world leader in technology?* – This article traces Estonia's booming tech industry, including its early investments in school tech.
- Ministry of Education and Research (2014). *The Estonian Lifelong Learning Strategy 2020*. This five-year strategic plan, a major current initiative of the Ministry, lays out the goals and strategies for expanding access and equity in life-long learning. It provides a glimpse into where the Ministry's priorities currently stand.
- OECD (2014). *Education at a Glance Country Note: Estonia* – This OECD brief summarizes relevant trends in demographic, attainment, and performance indicators, using PISA 2012 data.
- OECD (2013). *TALIS Country Profile: Estonia* – This brief summarizes the results of the 2013 TALIS survey of teacher attitudes, beliefs, behaviors, and qualifications.
- Statistics Estonia (2014). *The Statistical Yearbook of Estonia: Education* – This chapter provides relevant statistics on demographics, skills, and attainment of Estonia's students, for those who want to understand the scope and outputs of the system.
- UNESCO (2011). *World Data on Education: Estonia* – This UNESCO brief provides an overview of the education system in Estonia, major pathways, governance, early childhood education, funding, teacher and assessment policy, and relevant legislation.

FINLAND

- Abrams (2011). "The Children Must Play": *The New Republic*. In this *New Republic* piece, researcher Sam Abrams compares Finnish demographics and approach to instruction to the United States, and concludes that teacher professionalization and enriching curriculum are key to Finland's success.
- Finnish National Board of Education (2011). *International Comparisons of Some Features of Finnish Education and Training* – This brief analyzes data on the system structure, attainment, employment, finance and instruction for an international audience.
- Ministry of Education (2012). *Education and Research: a Development Plan 2011-2016* – This five-year strategic plan provides an overview of the system to date, as well as a look at planned reforms. Its strategies include teacher preparation, fostering more equitable access, and reforms to vocational education.

- OECD (2007). *School Leadership for Systemic Improvement in Finland* – This OECD case study explores how Finland conceives of the role of the principal, and how other players, including teachers and students, exercise leadership within a school setting.
- OECD (2014). *Education at a Glance 2014: Country Note: Finland* – This OECD brief summarizes relevant trends in demographic, attainment, and performance indicators, using PISA 2012 data.
- Sahlberg (2014). *Finnish Lessons 2.0*. This book by Pasi Sahlberg focuses on how Finland recruits, prepares and retains its teachers and builds a system that above all values teacher professionalism.
- UNESCO (2013). *World TVET Database – Finland*. This entry summarizes the structure of Finland's vocational education and training system.

HONG KONG

- Hong Kong Department of Information Services (2014). *Education Fact Sheet*. This short government publication provides information on funding allocations, system structure, teacher qualification policy and vocational education, among other things.
- *Education Commission Working Group (2011). Report on the Development of Education Services in Hong Kong*. This study group report, the result of a year of focus groups, discussion forums, and research, presents 17 recommendations to the Education Bureau. These range from undertaking international education benchmarking, to rebranding the education system for an international audience, to attracting more non-local students.
- Lai (2010). *Qualifications of the Teaching Force in Hong Kong Special Administrative Region, China*: This chapter from the 2007 report *A Comparative Study of Teacher Preparation and Qualifications Programs in Six Nations* looks at what institutions offer teacher training, what courses and practical experiences are required, and how teachers receive ongoing professional development in Hong Kong.
- Quong (2011). *An Analysis of Educational Reform at the School Level in Hong Kong*. This paper examines how 2009-2010 curriculum reforms in Hong Kong translated into corresponding changes to teacher practice.

JAPAN

- Arani, Keisuke, and Lassegard (2010). *Lesson Study as Professional Culture in Japanese Schools* – Combining historical research with a modern case study approach, this study looks at how Japanese teachers have long used collaborative research as a form of professional development.
- Fujita, Hidenori (2007). *The Qualifications of the Teaching Force in Japan*. This chapter from the 2007 report *A Comparative Study of Teacher Preparation and Qualifications Programs in Six Nations* looks at what institutions offer teacher training,

what courses and practical experiences are required, and how teachers receive ongoing professional development in Japan.

- MEXT (2011). *The Revisions of the Course of Study for Elementary and Secondary Schools*. This short Ministry presentation outlines the major elements of curriculum reform that took place from 2008-2013.
- MEXT (2012). *White Paper: Toward Implementation of Education Rebuilding*. This white paper presents the Ministry's most recent strategic plan for education reform.
- National Institute for Education Research (2011). *Education in Japan: Past and Present* – This brief from a research program of the Ministry of Education, Culture, Science, Sports, and Technology (MEXT) succinctly traces the history of education in Japan from the 1600s to 2010.
- National Institute for Education Research (2011). *Distinctive Features of the Japanese Education System* – This NIER brief explains the most unique elements of the education system for an international audience.
- OECD (2014). *Education at a Glance 2014 – Country Note: Japan*. This short OECD brief pulls out Japanese data on a range of indicators using 2012 PISA data.
- OECD (2010). *Japan: A Story of Sustained Excellence*. This OECD report explores several causes of Japan's success on the PISA league tables: the teaching force, families supports, a well-structured academic program and systemic incentives that drive students to challenge themselves.

POLAND

- Center on International Education Benchmarking (2016). *Poland Overview*. <http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/poland-overview/>. This case study explores the development of the Polish education and provides resources for policymakers interested in learning more.
- European Centre for the Development of Vocational Training (2011). *Vocational Education and Training in Poland – Short Description*. This report focuses on the policy and legislative frameworks, teacher policies and funding formulas for a major 2010 overhaul of Poland's VET system.
- Eurydice (2012). *The System of Education in Poland*. This comprehensive report includes a wealth of information on funding, curriculum, assessment, teacher policy, and special education and equity.
- OECD (2014). *Education at a Glance 2014 – Country Note: Poland*. This short OECD brief pulls out Poland's data on a range of indicators using 2012 PISA data.
- OECD (2013). *Results from TALIS 2013 – Country Note: Poland*. This OECD brief looks at Poland's data from the 2013 Teaching and Learning International Survey, including the background, qualifications, attitudes, morale and behaviors of the nation's teachers.

- The World Bank (2010). *Knowledge Brief: Successful Education Reform: Lessons from Poland*. This World Bank brief looks at 1999 reforms to Poland's secondary school structure and curriculum, in order to explain the country's improvements on PISA league tables.

SHANGHAI, CHINA

- Gang & Meilu (2010). *Qualifications of the Teaching Force in China*. This chapter from the 2007 report *A Comparative Study of Teacher Preparation and Qualifications Programs in Six Nations* looks at what institutions offer teacher training, what courses and practical experiences are required, and how teachers receive ongoing professional development in China.
- OECD (2010). *Shanghai and Hong Kong: Two Distinct Examples of Education Reform in China*. This chapter from the OECD's 2010 publication *Strong Performers and Successful Reformers in Education* compares the education reform strategies of both Shanghai and Hong Kong. Particularly useful for its historical lens; it also deals with equity and access, teacher policy, and classroom instruction.
- *Outline of China's National Plan for Medium and Long-term Education Reform and Development (2010-2014)*. This ten-year education strategic plan lays out goals and strategies for early childhood education, compulsory education reform, equity, special education, teacher and administrator preparation and professional development, and management across China.
- The World Bank (2013). *China 2030: Building a Modern, Harmonious, and Creative Society* – Part One of this World Bank report lays out a history of the Chinese economic system and technology industry, and recommends strategies for future equitable economic growth.
- Stewart (2015). *Made in China: Challenge and Innovation in China's Vocational Education and Training System*. National Center on Education and the Economy. <http://www.ncee.org/wp-content/uploads/2015/03/CHINAVETFINAL1.pdf>. This report explores the progress the Chinese have made in revamping vocational education and documents their efforts to address the challenges that remain.
- Tucker, ed. (2014). *Chinese Lessons: Shanghai's Rise to the Top of the PISA League Tables*. National Center on Education and the Economy. <http://www.ncee.org/wp-content/uploads/2013/10/ChineseLessonsWeb.pdf>. This series of interviews with experts on Shanghai's education system explores what accounts for their high performance on international comparative assessments.
- Zhang & Jinjie (2011). *Toward China's Modern TVET System: Take Shanghai as Special Experience*. This article goes in-depth into the structure and scale of Shanghai's vocational education system, and looks at how the recent ten-year education reform plan promises to further improve this system.

SINGAPORE

- Low and Joseph (2011). *Paving the Fourth Way: The Singapore Story* – This report covers a roundtable discussion including many distinguished scholars of Singapore's education system. Professors look at the history of education policy in Singapore, current reforms and strategic planning initiatives, and especially, hone in on issues of teacher preparation.
- Ministry of Education (2014). *Education in Singapore*. This Ministry brochure provides a useful overview, including a look at curriculum requirements.
- Ministry of Education (2014). *Annual Report: The Education Endowment and Savings Scheme*. This financial report provides an overview of how Singapore provides public funding for student incentives and scholarships.
- Ministry of Education (2014). *Better Choices, Deeper Skills, Multiple Paths: Government Accepts ASPIRE Committee's Recommendations* [press release, August 25, 2014]. This recent press release announces substantial upcoming reforms to Singapore's vocational and technical education funding, policy, and structure.
- Ministry of Education (2014). *Growing our Teachers, Building our Nation* [press release, September 23, 2014] – This recent press release summarizes upcoming reforms to Singapore teacher mentoring and preparation programs, as well as to the structure of teacher career ladders.
- OECD (2011). *Singapore: Rapid Improvement Followed by Strong Performance* – This chapter from the OECD publication *Strong Performers and Successful Reformers in Education* presents a history of Singapore, a look at the structure of the education system, and several arguments for the country's success on PISA, including focus on mathematics and technical education, commitment to equity, and strong human resources and continuous improvement systems.
- Tan & Wong (2010). *Qualifications of the Teaching Force: Data from Singapore* - This chapter from the 2007 report *A Comparative Study of Teacher Preparation and Qualifications Programs in Six Nations* looks at what institutions offer teacher training, what courses and practicum are required, and how teachers receive ongoing professional development.
- *The Phoenix: Vocational Education and Training in Singapore*. National Center on Education and the Economy, 2012. <http://www.ncee.org/wp-content/uploads/2014/01/The-Phoenix1-7.pdf>. In this report, a team of researchers traces the evolution of Singapore's vocational education system and analyzes what accounts for its success.

TAIWAN

- Ministry of Education (2013). *Education in Taiwan 2013-2014*. This brochure from the Ministry provides an overview of the system structure, governance, upcoming reforms, teacher education, and vocational education and training.
- Ministry of Education (2011). *Technical and Vocational Education in Taiwan, ROC*. This brief dives into the structure, gov-

ernance, curriculum, and enrollment of Taiwan's vocational education system.

- Ministry of Education (2008). *Administrative Plan – Intelligent Taiwan Manpower Cultivation Project*. This administrative plan outlines implementation of a substantial five-year allocation to education and employment initiatives, including a multimillion-dollar investment in new reading programs.
- Ministry of Education (2013). *Matters including teacher evaluation, teacher qualifications, certification exams, teacher in-service education and normal education university engineering*. This policy overview lays out recent initiatives to improve teacher preparation, recruitment, and training, including efforts to substantially increase the expectations of teacher preparation programs.
- Pan & Chen (2011). *Teacher Evaluation as a Catalyst for Organizational Learning*. This article shows how Taiwan uses teacher evaluation as a tool for continuous improvement and the basis for regular professional learning community meetings among school staff.

Notes

- 1 For more information about the OECD PISA exam, including who participates and how the test is administered and scored, visit www.oecd.org/pisa/aboutpisa/.
- 2 For OECD's summary of findings and implications for the U.S., see <http://www.oecd.org/unitedstates/PISA-2012-results-US.pdf>.
- 3 ETS Center for Research on Human Capital in Education (2015). *America's Skills Challenge: Millennials and the Future*. Retrieved from, p. 11.
- 4 Retrieved from nces.ed.gov/nationsreportcard/subject/publications/main2012/pdf/2013456.pdf, p. 1.
- 5 OECD (2011), *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care*, OECD Publishing, Paris. Retrieved from [dx.doi.org/10.1787/9789264123564-en](https://doi.org/10.1787/9789264123564-en).
- 6 Jensen, B., Sonnemann, J., Roberts-Hull, K., & Hunter, A. (2016). "Beyond PD: Teacher Professional Learning in High-Performing Systems." Washington, DC: National Center on Education and the Economy, p. 28. Retrieved from www.ncee.org/wp-content/uploads/2015/08/BeyondPDWeb.pdf; and Darling-Hammond, L., Chung Wei, R., Andree, A. (2010). "How High-Achieving Countries Develop Great Teachers." Stanford: Stanford Center for Opportunity Policy in Education, p. 3. Retrieved from edpolicy.stanford.edu/sites/default/files/publications/how-high-achieving-countries-develop-great-teachers.pdf
- 7 Gold Standard: The Swiss Vocational Education and Training System, March 2015, National Center on Education and the Economy
The Phoenix: Vocational Education and Training in Singapore, October 2012, National Center on Education and the Economy

What People are Saying

"We invested in this working group because we believe having a world view on education systems can give policy makers a clearer perspective on the central role education can and should play in civil society. This work has also proved to us something we've believed for a long time, when teaching is treated as a revered profession, great things are possible."



Daaiyah Bilal-Threats,
National Education Association

"This diverse and bipartisan Study Group of state legislators discovered that top-performing countries have built their successful education system around a strong teaching profession. This includes recruitment of top students, rigorous preparation, meaningful professional development and empowerment of teachers to guide their own profession. This is THE cornerstone of their reforms and their success, and this should be a huge lesson for the states."



Linda Darling Hammond, Charles E. Ducommun Professor of Education; Stanford Graduate School of Education and President and CEO, Learning Policy Institute

"The NCSL report makes a compelling case for state legislators to act now on improving the outcomes their education system is producing today. The ability of U.S. students to compete on a global stage requires state legislators to use data as the backbone of their agenda for improving outcomes. The NCSL report provides a roadmap for addressing the key elements of a state policy agenda that are essential to ensuring every student is college and career ready."



John Engler,
President, Business Roundtable

"The National Conference of State Legislatures' *No Time to Lose* presents timely and valuable analyses and recommendations for transforming American education and training. The report stresses the importance of world-class learning systems for maintaining and improving economic, social, and political welfare in a much more competitive and knowledge-intensive world. Several features make *No Time to Lose* a valuable and timely report:



- It is not only based on solid academic research but, following the example of almost all successful American institutions, benchmarks international best practice.
- The report is addressed primarily to states, currently the most important level of government for transforming schools and other learning systems, though all public and private institutions have important roles to play in this important enterprise."

Ray Marshall, Professor Emeritus of the Audre and Bernard Rapoport Centennial Chair in Economics and Public Affairs at the University of Texas at Austin and former U.S. Secretary of Labor

"Our students deserve the best and we must pursue the best educational practices whether they are found in the United States or around the world. This report is chock full of the best lessons of what works from other countries. We should use this research to inform our work. In that way we can provide our students with the greatest possible chance at success."



Christianne Y. Runge, Director, Public Employees Division, American Federation of Teachers

"This hard-hitting, refreshingly honest report is a bipartisan clarion call for a very different definition of 'education reform' than the one that has dominated the American political landscape for years. The country will ignore it at its peril."



Marc Tucker,
President and CEO, National Center on Education and the Economy

Acknowledgments

NCSL is grateful to the state legislators and legislative staff of the International Education Study Group, whose hard work and abundant energy helped create a fascinating journey that opened all of our eyes to new possibilities. We thank our partners for helping to support this work and for the perspectives they brought to our conversations. We are grateful to Marc Tucker and the staff of the National Center on Education and the Economy and its Center on International Education Benchmarking. Marc, Betsy Brown Ruzzi and Nathan Driskell helped us understand what high-performing countries have done and how those lessons can be translated to the states. They understood the importance of state legislators to the conversation and the urgency of this work. We are especially grateful to all of the national and international experts who took the time from their busy schedules to attend our meetings. They were an integral source of our learning about how and why top-performing countries organized and implemented their reforms.

NCSL staff involved in this work include Julie Davis Bell, Michelle Exstrom, Lee Posey and Madeleine Webster.

NCSL Contacts

Julie Davis Bell
Group Director
303-856-1351
julie.bell@ncsl.org

Michelle Exstrom
Program Director
303-856-1564
michelle.exstrom@ncsl.org

Lee Posey
Federal Affairs Counsel
202-624-8196
lee.posey@ncsl.org

Madeleine Webster
Policy Associate
303-856-1465
madeleine.webster@ncsl.org



NATIONAL CONFERENCE of STATE LEGISLATURES

William T. Pound, Executive Director

7700 East First Place, Denver, Colorado 80230, 303-364-7700 | 444 North Capitol Street, N.W., Suite 515, Washington, D.C. 20001, 202-624-5400

www.ncsl.org

© 2016 by the National Conference of State Legislatures. All rights reserved. ISBN 978-1-58024-854-9

State Board Work Sessions

Goal: Improve the image of the State Board from role of enforcement of code and rules to include partnership and ambassadors with districts and schools.

Chair Recommendation: Move ADE divisions and units reports to the Thursday agenda and allow for one to one and a half (1 – 1 ½) hour of work session on Friday morning following State Board reports (chair, committee, commissioner, special guests, recognitions). The Standing Committee on Academic Distress would continue to follow the Friday reports and work session at approximately 11:00am. This agenda adjustment would permit the Thursday night dinner and work session to be more social with invited guests (related to the Friday work session topic).

Expectations: State Board Members would have background reading and materials prior to the work session so that the work session is a discussion of the topic. All work sessions will focus on equity and deeper learning with the lens of how the State Board of Education can lift up the education profession.

Structure for Work Sessions: Each work session would include (1) pre-reading materials and data regarding the topic, (2) discussion of best practices, and (3) development of recommendation(s) for the State Board of Education.

Plan of Action: During the October State Board Work Session the State Board Members will add to the topics for consideration and prioritize the topics:

Potential Topics	Notes
Education as a profession	How can the SBE elevate the profile of the educator
Educator pipeline	How can the SBE increase the number of educators in the education pipeline to ensure equitable access to quality educators for all students
Professional Development	How can the SBE ensure PD is effective in developing quality educators
Parent and Community Engagement	How can the SBE assist with the development of contacts, methods, and strategies to increase parent and community engagement in schools.
Recommendations from the Little Rock Area Public Education Stakeholder Group	How can the SBE consider the recommendations
Innovations and Waivers (Act 1240, Schools of Innovation, Charter Schools)	How can the SBE consider the application process, alignment between the proposal and the outcomes, best practice dissemination

Discipline	How can the SBE ensure accurate data and dissemination of best practices of proactive methods
Career Education	How can the SBE define career and college readiness
Counseling	How can the SBE support the role of counselors and services to students
Wrap around services for students	How can the SBE support the whole child
Dyslexia	How can the SBE support services to students with dyslexia
Pre-K	How can the SBE support more Pre-K services to students
Special Education	How can the SBE support SPED students
Rural Education	How can the SBE support rural schools

Notes from the SBE Work session Sept 8th

I. Organizations attending.

ADE – 7
Coordinating Council – 2
University Level – 2
CTE – 3
SBE – 7
Teachers – 1 or 2
Family Advocate – 1
Office of the Governor - 1
ForwARd – 4
Ford – 1
NW regional group AR – 1
2 others – missed their organization.

II. Who is Missing?

The Commission on the Achievement Gap
State PTA
Department of Human Services
Legislature's Education Committee (Chair or representative)
Chamber of Commerce
Teacher Leaders
Teacher & Administrator Organizations
Higher Education Director(s)
Rural Alliance (?)

III. Additional Ideas for the recommendations from the audit:

Rec #1 – Common language:

- Develop a dictionary – make is “common” so all will utilize. It will help others know and understand what we are talking about.
- Connect with the work that is being done at the Workforce Innovation Act group(?)
- Could it start with pK level and go up.

Rec #2 – Inventory Policies

- ForwARd is doing this now.
- Connect to Adequacy Study (?). Forward said they were intentionally not doing this.
- Also include the changes in funding that follows the policy

Rec #3 – Coordinating Group

- The Coordinating Council would like to do something. (Can they within their charge?) They want to do something.
- Share the report of the Coordinating Council with others in this group.
- Maybe an opportunity to work closer with Coordinating Council and ForwARd through this group.
- Connect the Opportunity to Learn efforts.

- The Commission on the Achievement Gap should be included in this group.

Rec #4 – Leverage the existing excellent and innovative schools

- Communication about what is going on.
- More research/ data about what is working and then how do we transfer those innovations to other schools?

Rec #5 – Communication network

- Include Parents. Add PTA to the group.

IV. Here is the list of ideas from the last wrap up session. I categorized them by commonality and made some notes.

- Get to the Teachers fast – School Transformation – focus on the whole child.
- How do we untie the hands of teachers? *(These two are huge. One approach is a smaller change in the Graduation requires to allow for more flexible pathways. It won't reach all Teachers. This fits with ESSA.)*
- Build a communication network – including students. *(Rec #6)*
- Research based strategies for what works with low performing students to inform the plan going forward.
- Documenting the innovation or great schools that are working. *(These two are in Rec #4)*
- What is the relationship with the plan and the accountability system?
- What does the accountability system look like? – “what gets measured gets done.” *(These two are good candidates for one of the buckets of work – Accountability under ESSA)*
- Include strategies or resources for rural schools, disadvantage and the small schools. **(?)**
- Include early learning. **(?)**
- Figure out “how to implement: what we already know that works
- How do we scale what is working across the state? *(These two may be a charge from the SBE to ADE)*
- What in our vision as a state? What are the goals so we can focus on that outcome and match our work to that vision or goals. *(The ADE and SBE have a vision which I think is good. That may be enough and you just need to promote it more broadly. Or maybe ForwARd could take this on but much time could be spent on this or think about defining college and career readiness.)*
- Funding for higher ed. may be dramatically changing and how will that effect underperforming students.
- UA system can add a disruptive component with its online courses
- Changes are needed in college courses. *(These are all Higher Ed Concerns)*

- Equity is explicitly missing from this list.

V. Posters With Responses From the Participants.

- A picture of the poster is at the end
- These are the write ins at the bottom of the poster in response to the question – *Who or what organization(s) might be a good candidate to be the lead? Other suggestions?*

Rec #1 – ADE (2), Strong Leader/Facilitator (2)

Rec #2 – ADE (3), Advocates for Children and Families, Steering Committee, Commission for the Coordination

Rec #3 – ForwARd, IWG, Commission for the Coordination

Rec #4 – OIE, ADE (2), SBE, Commission for the Coordination, ForwARd

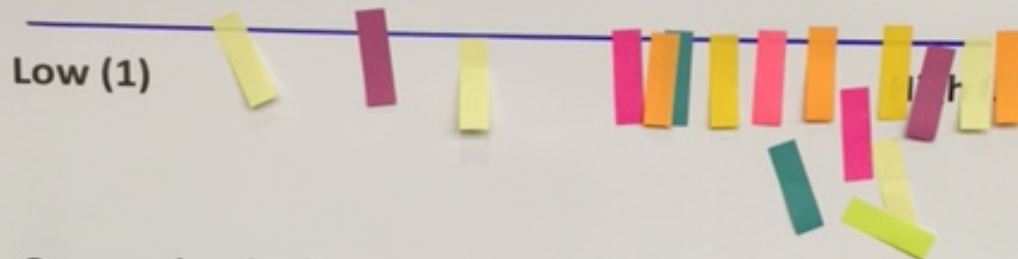
Rec #5 – OIE (2), Career Education (4), Schools of Innovation, ADE, Arkansas Legislature

Rec #6 - ADE (2), PTAs, Just Do it!

VI. Pictures of Posters

Audit Recommendation: 1. Develop a common language

On a scale of 1 (low) to 5 (high) *What is the need for additional work to accomplish this recommendation?*



On a scale of 1 (low) to 5 (high) *What is the level of difficulty to address this recommendation:*



For this recommendation who or organization that might be a good candidate to be the lead? Any other suggestions?

ACE ✓

Strongly
Leader/Participant
✓ agree

Adult Recognition

On a scale of 1 (low) to 5 (high) What is the need for additional work to accomplish this recommendation?

Low (1)

On a scale of 1 (low) to 5 (high) What is the level of difficulty to address this recommendation:

Low (1)

Fig. 5

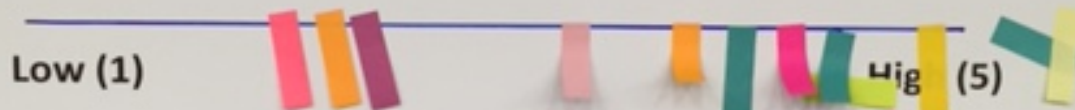
For this recommendation who or organization might be a good candidate to be the lead? Any other suggestions?

Kansas State Board of Education Partner Meeting

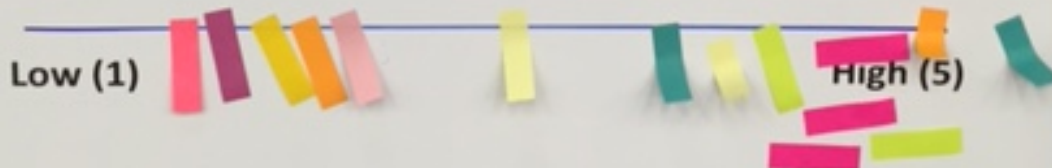
9/8/2016

Audit Recommendation: 3. Coordinating and/or collaborating with the existing Coordinating Commission or other such state groups? (Establish a task force or advisory group)

On a scale of 1 (low) to 5 (high) What is the need for additional work to accomplish this recommendation?



On a scale of 1 (low) to 5 (high) What is the level of difficulty to address this recommendation:

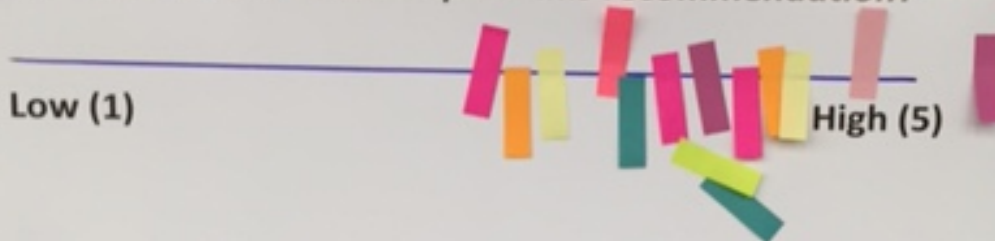


For this recommendation who or organization might be a good candidate to be the lead? Any other suggestions?

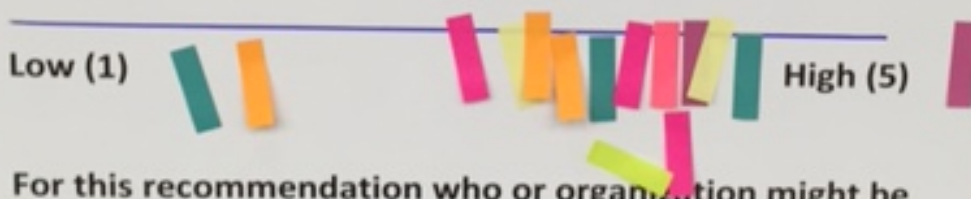
Forward IWC
Commission for the Coordination of Educational Efforts in the P-16

Audit Recommendation: 4. Enhance the success and collaborate with the existing innovations in AR
(Research the viability of innovation zones or pilots).

On a scale of 1 (low) to 5 (high) *What is the need for additional work to accomplish this recommendation?*



On a scale of 1 (low) to 5 (high) *What is the level of difficulty to address this recommendation:*



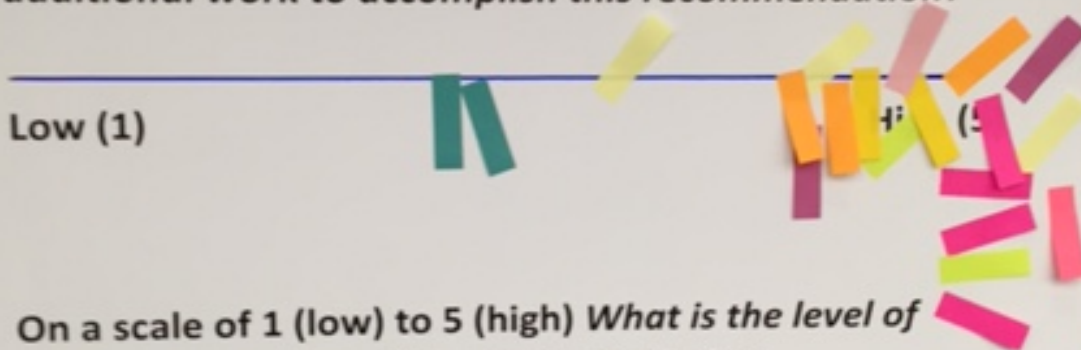
For this recommendation who or organization might be a good candidate to be the lead? Any other suggestions?

Handwritten notes: "NDE" and "DIE" with small sticky notes attached.

Audit Recommendation: 5. Examine implementing multiple and flexible pathways for high school students.

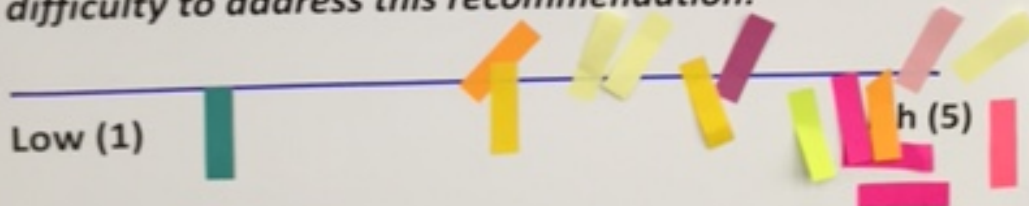
On a scale of 1 (low) to 5 (high) What is the need for additional work to accomplish this recommendation?

Low (1)



On a scale of 1 (low) to 5 (high) What is the level of difficulty to address this recommendation:

Low (1)



For this recommendation who or organization might be a good candidate to be the lead? Any other suggestions?

Audit Recommendation: 6. Develop a communications system for outreach to stakeholders.

On a scale of 1 (low) to 5 (high) *What is the need for additional work to accomplish this recommendation?*



On a scale of 1 (low) to 5 (high) *What is the level of difficulty to address this recommendation:*



For this recommendation who or organization might be a good candidate to be the lead? Any other suggestions?

Just do it

*APE!
DEF
PTA*