Commission on Innovation and Excellence in Education William E. Kirwan, Chair

Agenda

April 26, 2017 10:00 a.m.-5:00 p.m. 120 House Office Building, Annapolis, Maryland

Session 1 | Session 2

10:00am Chair's Opening Remarks

- 10:15am <u>Discussion of 2017 Work Plan and Summary of Relevant Education</u> Legislation Passed During the 2017 Legislative Session
 - Rachel Hise, Lead Principal Analyst, Department of Legislative Services (DLS)
- 10:45am Overview of National Center on Education and the Economy (NCEE) Gap Analyses
 - Marc Tucker, President, NCEE
 - Betsy Brown Ruzzi, Vice President, NCEE

11:00am <u>How Maryland Compares to Top Performing Systems – Element #2,</u> <u>Building Blocks 5 & 6 - Highly Qualified Teachers and Professional</u> <u>Work Environments</u>

• Marc Tucker and Betsy Brown Ruzzi, NCEE

Commission Discussion of Building Blocks 5 & 6 Gap Analysis and Q&A

12:15pm Break – Lunch Provided for Commissioners and Staff in Room 170/180

- 12:45pm <u>Breakout Group Discussions about Building Blocks 5 & 6</u> (see separate handouts for group assignments and discussion questions)
- **1:45pm** Breakout Group Report Out (10 minutes each)
- 2:15pm Maryland Examples of Building Blocks 5 & 6
 - Dr. Sonja Santelises, Chief Executive Officer, Baltimore City Public Schools
 - Dr. Nancy Shapiro, Associate Vice Chancellor for Education and Outreach & Special Assistant to the Chancellor for P-20 Education, University System of Maryland

3:00pm How Maryland Compares to Top Performing Systems – Element #2, Building Block 8 – Leadership Development

- Marc Tucker and Betsy Brown Ruzzi, NCEE
- Tony McKay, CEO, Centre for Strategic Education, Melbourne, Australia and Deputy Chancellor of Swinburn University (via Skype)
- **3:45pm** Breakout Group Discussions about Building Block 8
- **4:30pm** Breakout Group Report Out (10 minutes each)
- 5:00pm Chair's Closing Remarks and Adjournment

Next Meeting: Thursday, June 1, 2017, 9:30 a.m. - 5:00 p.m., Room 120 HOB

Maryland Commission on Innovation and Excellence in Education 2017 Schedule and Work Plan Draft 4/25/17 Subject to Change

All meetings will be held from 9:30 a.m. -5 p.m. in Room 120 House Office Building, Annapolis unless noted. Meeting topics will include policy discussions and related funding/finance policies. Time will be reserved at the beginning of each meeting (30 minutes) starting June 1 for public comment limited to 5 minutes per person/group.

Meeting Topics:	Meeting Date:
High Quality Teachers	January 9, 2017
High Quality Teachers (Cont.) and School Leadership	April 26, 2017
Early Childhood Education and Career and Technical Education (CTE)	June 1, 2017
World Class Student Learning Systems with No Dead Ends	June 28, 2017
Equitable, Effective and Efficient School Finance Systems	July 26, 2017
Governance/Accountability/Innovative Strategies/Pulling it All Together Draft Recommendations –Making Maryland a Top Performing System in the World	August 30, 2017
Guiding Questions for Fall Work Sessions: How much more funding is needed to in recommendations? How should funds be distributed? Incentive funding for prioritie funding? How should new funds be spent? How can existing funds be spent different Should money follow students to schools? What do we do with failing schools?	nplement priorities/draft s? Competitive ly? Accountability?
Funding Work Session Base and Weights, Enrollment Counts, Incentives	September 19, 2017
Funding Work Session – GCEI/CWI, local wealth, distribution of funding, etc.	October 20, 2017
Funding Work Session – Prek expansion, CTE, Community Schools etc.	mid November 2017
Work Session –Draft Recommendations on Funding	early December 2017
Work Session –Final Recommendations on Making Maryland a Top Performing System in the World and Funding	mid December 2017
Final Meeting – if necessary – Finalize Recommendations	late December 2017 (week of Dec 18-22)

Summary of Relevant P-20 Legislation Passed in the 2017 Legislative Session

Presentation to the Commission on Innovation and Excellence in Education

> Department of Legislative Services Office of Policy Analysis Annapolis, Maryland

> > April 26, 2017

Summary of Relevant P-20 Legislation Passed in the 2017 Legislative Session

Primary and Secondary Education

State Education Aid

State Aid to Public Schools

State aid for primary and secondary education increases by \$61.1 million in fiscal 2018 to \$6.4 billion, 1.0 % more than fiscal 2017 aid. State aid provided directly to the local boards of education increases by \$113.6 million, or 2.1%, while retirement aid decreases by \$52.5 million, or 6.7%. Fiscal 2017 to 2018 changes in major State education aid programs are shown in **Exhibit 1**.

The foundation program totals \$3.0 billion in fiscal 2018, an increase of \$43.3 million over fiscal 2017, or 1.5%. This increase is attributable to enrollment growth of 0.8% (6,658 full-time equivalent (FTE) students) and a 0.7% increase in the per pupil foundation amount due to inflation. The increase in the per pupil foundation amount brought it from \$6,964 per pupil in fiscal 2017 to \$7,012 per pupil in fiscal 2018.

Aside from the foundation program, the largest single increase is \$21.7 million for Limited English Proficiency. A portion of the increase is due to a 9.0% enrollment growth in English language learners (5,730 students) while the rest of the increase is attributed to the increase in the per pupil foundation amount. Compensatory education decreases by \$3.6 million (0.3%), special education increases by \$5.3 million (1.9%), and transportation funding increases by \$5.5 million (2.0%). The fiscal 2018 State budget also includes \$28.2 million in additional funds for supplemental grants contingent on enactment of *House Bill 684 (Ch. 6)*, which is discussed in more detail below. For more information on education aid by local school system, see the subpart "Aid to Local Government" within Part A – Budget and State Aid of the 90 Day Report.

Exhibit 1 State Aid for Education Fiscal 2017 and 2018 (\$ in Thousands)

Program	<u>2017</u>	<u>2018</u>	<u> \$ Change</u>	<u>% Change</u>
Foundation Program	\$2,961,988	\$3,005,270	\$43,281	1.5%
Net Taxable Income Grant	39,702	49,170	9,468	23.8%
Tax Increment Financing Grant	0	422	422	n/a
Geographic Cost of Education Index	136,898	139,127	2,229	1.6%
Supplemental Grant	46,620	46,620	0	0.0%
Foundation Special Grant	19,430	0	-19,430	-100.0%
Declining Enrollment Supplemental Grant	0	17,237	17,237	n/a
Compensatory Education Program	1,309,146	1,305,545	-3,601	-0.3%
Special Education Program	279,608	284,873	5,266	1.9%
Nonpublic Special Education	\$121,618	\$123,618	2,000	1.6%
Limited English Proficiency	227,020	248,684	21,664	9.5%
Guaranteed Tax Base	54,511	50,304	-4,207	-7.7%
Student Transportation	270,801	276,341	5,540	2.0%
Prekindergarten Expansion	4,300	7,972	3,672	85.4%
Prekindergarten Supplemental Grant	0	10,949	10,949	n/a
Aging Schools ¹	0	6,109	6,109	n/a
Other Programs ²	65,877	78,919	13,042	19.8%
Direct Aid Subtotal	\$5,537,519	\$5,651,160	\$113,641	2.1%
Teachers' Retirement	\$786,950	\$734,454	-\$52,496	-6.7%
Grand Total	\$6,324,469	\$6,385,615	\$61,145	1.0%

¹The Aging Schools Program is funded with general obligation bonds in fiscal 2018.

² Other programs include general and special funds supporting the School for Education Evolution and Development, formulas for specific populations, infants and toddlers, innovative programs, food service, teacher development, adult education, and other programs. The General Assembly authorized the Governor to transfer funds for innovative schools to the Maryland Education Development Collaborative (\$250,000) and from the Next Generation Scholars Program to the Bard High School Early College Baltimore (\$300,000).

Source: Department of Legislative Services

Funding for Baltimore City Schools and Other Systems

Although K-12 enrollment is increasing moderately statewide, declining enrollment has been a persistent issue for several school systems, including Allegany, Calvert, Carroll, Garrett, and Kent counties and, most recently, Baltimore City. The State has provided some additional aid for qualifying jurisdictions based on different criteria since fiscal 2012. Baltimore City lost nearly 1,000 students in the 2017-2018 school year compared to the prior year, which contributed to a decrease of approximately \$38 million in direct State aid for fiscal 2018. A portion of the decrease was attributable to a \$12.7 million one-time grant received in fiscal 2017 to address declining enrollment from the prior year. These impacts are part of the \$130 million structural deficit that the Baltimore City Public Schools (BCPS) was facing for fiscal 2018.

The Commission on Innovation and Excellence in Education, which was established by Chapters 701 and 702 of 2016, is reviewing the adequacy study and State funding formulas as part of its charge and will be making substantial recommendations by December 31, 2017. However, in an effort to provide a more sustainable funding approach for school systems with declining enrollment until the Commission on Innovation and Excellence in Education completes its work and the Governor and the General Assembly act on the recommendations, while also helping BCPS in the short term, the General Assembly adopted a package of legislation in the 2017 session.

Declining Enrollment and Prekindergarten Supplemental Grants: House Bill 684 provides declining enrollment and prekindergarten supplemental grants to eligible local boards of education for fiscal 2018 through 2020. A local board is eligible for an enrollment-based supplemental grant if the county's most recent prior three-year average FTE enrollment is greater than the FTE enrollment in the previous school year. A local board is eligible for a prekindergarten grant if the local board offers a full-day program for all four-year-olds who are enrolled in public prekindergarten. Fifty percent of the amount is provided in fiscal 2018, 75% in fiscal 2019, and 100% in fiscal 2020. **Exhibit 2** shows estimated funding via the two supplemental grants, the great majority of which will benefit BCPS.

In order for BCPS to receive additional State funds under the Act, Baltimore City must increase its local contribution to BCPS by specified amounts each year. The Baltimore City school board must contract with an independent certified public accountant to conduct an audit of BCPS. The board must also develop a financial recovery plan by August 1, 2017, that addresses all repeat findings of the Office of Legislative Audits and includes steps to achieve greater efficiencies, balance the BCPS budget, and eliminate the BCPS structural deficit by fiscal 2020. Both the bill and *House Bill 152 (Ch. 23)*, the Budget Reconciliation and Financing Act (BRFA) of 2017, require BCPS to report quarterly beginning November 1, 2017, for two years on specified information related to resolving the budget deficit, including cost efficiencies that can be achieved in collaboration with the Baltimore City government. Finally, the Baltimore City government must develop a plan to sell, lease, convey, assign, or dispose of surplus school system assets.

				Exhibit 2					
	Ď	eclining Enı	ollment and	Prekinderga	irten Supp	lemental Gı	rants		
			£	in Thousand	IS)				
	Supplei	mental PreK G	rants ¹	Declining	Enrollment (Grants	Total Ch	ange under tl	ne Bill
	50%	75%	100%						
County	FY 2018	FY 2019	FY 2020	FY 2018	FY 2019	FY 2020	FY 2018	FY 2019	FY 2020
Allegany	\$0	80	\$0	\$793	\$0	\$262	\$793	\$0	\$262
Anne Arundel	0	0	0	0	0	0	0	0	0
Baltimore City	10,174	15,261	22,370	13,546	10,043	5,809	23,719	25,305	28,179
Baltimore	0	0	0	0	0	0	0	0	0
Calvert	0	0	0	240	310	321	240	310	321
Caroline	0	0	0	0	0	0	0	0	0
Carroll	0	0	0	1,606	1,492	1,622	1,606	1,492	1,622
Cecil	0	0	0	190	0	0	190	0	0
Charles	0	0	0	0	0	0	0	0	0
Dorchester	0	0	0	0	0	0	0	0	0
Frederick	0	0	0	0	0	0	0	0	0
Garrett	248	372	504	209	154	112	457	526	616
Harford	0	0	0	356	532	727	356	533	727
Howard	0	0	0	0	0	0	0	0	0
Kent	73	117	169	142	0	0	215	117	169
Montgomery	0	0	0	0	0	0	0	0	0
Prince George's	0	0	0	0	0	0	0	0	0
Queen Anne's	0	0	0	22	0	0	22	0	0
St. Mary's	0	0	0	0	0	0	0	0	0
Somerset	455	695	956	0	0	0	455	695	956
Talbot	0	0	0	133	64	31	133	64	31
Washington	0	0	0	0	0	0	0	0	0
Wicomico	0	0	0	0	0	160	0	0	160
Worcester	0	0	0	0	0	0	0	0	0
\mathbf{Total}^{\perp}	\$10,949	\$16,446	\$23,999	\$17,237	\$12,595	\$9,044	\$28,186	\$29,041	\$33,042
¹ To the extent that the bi may be substantially large	ll provides suffic sr.	ient incentive for	local school system	s that do not prese	ntly offer unive	rsal full-day preki	indergarten, the ef	fect beginning i	n fiscal 2019

Teachers' Retirement and Pension Systems: House Bill 1109 (Ch. 5) relieves local boards of education from their fiscal 2017 obligation to collectively pay \$19,695,182 of their share of the employer normal cost. If the Governor does not transfer the fiscal 2017 deficiency appropriation to cover the foregone contributions by county school boards, the Governor must provide an equal amount in fiscal 2018 or 2019 for that purpose. For more information on this issue, see the subpart "Pensions and Retirement" within Part C – State Government of the 90 Day Report.

State Budget and Budget Reconciliation and Financing Act: In addition, the General Assembly took a series of actions in the fiscal 2018 State budget and the BRFA, *House Bill 152* to provide additional education aid or budget relief for BCPS and other school systems. Budget language requires jurisdictions that receive increases in their disparity grants in fiscal 2018 to provide the increase to their school systems above the required maintenance of effort (MOE) funding in fiscal 2018. This includes Baltimore City (\$946,445) and Cecil (\$196,240), Prince George's (\$4,245,462), Washington (\$52,938), and Wicomico (\$587,801) counties. In addition, Baltimore City must increase its education appropriation by \$10 million over MOE in fiscal 2018; if the city fails to appropriate the funds, \$10 million of the city's disparity grant funding will be given to BCPS.

The BRFA, *House Bill 152*, redirects video lottery terminal revenues from the Small, Minority, and Women-Owned Business Account (SMWOBA) to the General Fund in fiscal 2018, and to the Education Trust Fund in fiscal 2019 and 2020, in order to cover a portion of the increased cost of *House Bill 684*. After fiscal 2020, the revenues go back to SMWOBA. SMWOBA fund managers currently have approximately \$20 million in unencumbered funds to distribute as loans to eligible businesses.

Section 16 of the BRFA, *House Bill 152*, credited BCPS with \$4.6 million toward its required fiscal 2018 payment to support the Baltimore City Public School Construction and Revitalization Initiative (Chapter 647 of 2013). The funds are available due to city beverage container tax revenues, which are pledged to the school construction initiative, coming in above estimates.

Many BCPS students use Maryland Transit Administration (MTA) vehicles to get to and from school; MTA charges BCPS a discounted fare costing approximately \$6 million annually. Section 24 of the BRFA, *House Bill 152*, allows BCPS school children to ride MTA vehicles at no charge in the 2017-2018 school year and permits MTA to charge Baltimore City (not BCPS) no more than \$5.5 million in fiscal 2018 for the service, which may be paid with highway user revenues. Baltimore City receives an increase of approximately \$5.5 million in highway user revenues in the fiscal 2018 State budget.

Transit Services for Baltimore City Public School Students: Senate Bill 1149 (passed) requires MTA to provide ridership on transit vehicles to any eligible BCPS student from fiscal 2019 through 2021. MTA may not collect fees or reimbursement for these services, and the services must be provided between 5 a.m. and 8 p.m. for school-related or educational extracurricular activities. For a more detailed discussion of this issue, see the subpart "Transportation" within Part G – Transportation of the 90 Day Report.

Hunger-Free Schools Act of 2017: Senate Bill 361/House Bill 287 (both passed) extend through fiscal 2022 the provision in law that altered the enrollment count used to calculate State compensatory education aid in fiscal 2017 and 2018 for local boards of education that participate, in whole or in part, in the U.S. Department of Agriculture Community Eligibility Provision (CEP). This allows schools and school systems, including BCPS, to remain in the CEP and not lose State compensatory education aid.

Statewide Education Policy

Maryland Education Development Collaborative

Senate Bill 908 (passed) establishes the Maryland Education Development Collaborative (EDCO) to act as a think tank to study, advise, promote, and support public schools in developing programs that enhance twenty-first century learning and socioeconomic diversity among students. This includes collaborating with stakeholders to provide a research and development approach to twenty-first century learning. EDCO is designed to disseminate information on best practices, programs, and resources; provide technical assistance and training to local school systems and public schools; and develop a database of evidence-based programs existing in the State's public schools that enhance learning and diversity, among other duties. EDCO must employ an executive director and may maintain offices in the State and enter into contracts with institutions of higher education to assist in research and development activities. The General Assembly restricted \$250,000 in the fiscal 2018 State budget for EDCO, contingent on enactment of *Senate Bill 908*.

Career Training Goals

Senate Bill 317 (Ch. 149) requires the State Board of Education (State board), in consultation with DLLR and the Governor's Workforce Development Board, to develop statewide goals each year from 2018 through 2024 so that by January 1, 2025, 45% of high school students successfully complete a career and technical education program, earn industry-recognized occupational or skill credentials, or complete a registered youth or other apprenticeship before graduating from high school. By December 1, 2017, the State board must develop a method to consider a student's attainment of a State-approved industry credential or completion of an apprenticeship program as equivalent to earning a score of 3 or better on an Advanced Placement examination for purposes of the Maryland Accountability Program. By December 1, 2017, and annually thereafter, the State board must report to the Governor and to the General Assembly on the progress toward attaining the specified goals. For more information on this issue, see the subpart "Income Tax" within Part B – Taxes and subpart "Labor and Industry" within Part H – Business and Economic Issues of the 90 Day Report.

Assessments and Accountability

The State board, the State Superintendent of Schools, each county board of education, and each public school must implement a program of education accountability for the operation and management of the public schools under State law. The State board and the State Superintendent must implement specified assessment programs in reading, language, mathematics, science, and social studies that include written responses.

Limitations on Mandated Assessments: Senate Bill 452/House Bill 461 (both passed) require local boards of education and exclusive employee representatives for teachers in the local school systems to meet and confer regarding school assessments and, by December 1, 2017, and every two years thereafter, mutually agree to a limited amount of time that may be devoted to federal, State, and locally mandated assessments for each grade. If the parties fail to mutually agree, the time that may be devoted to specified assessments must be limited to 2.2% of the minimum required annual instructional hours for every grade except for eighth grade, which must be limited to 2.3%.

The bills also require the middle school social studies assessment to (1) consist of criterion-referenced and performance-based tasks; (2) be administered to the greatest extent possible within existing class periods; and (3) be implemented beginning in the 2019-2020 school year. The current high school social studies assessment must be redesigned by MSDE in collaboration with other entities to meet the same criteria as the middle school social studies assessment by the 2018-2019 school year.

Consolidated State Plans and Improvements Plans: The Every Student Succeeds Act (ESSA) is the most recent re-authorization of the federal Elementary and Secondary Education Act (ESEA), which provides federal funds for elementary and secondary education. Maryland is in the process of transitioning to a new student accountability plan under ESSA that requires significantly more data collection and publishing and changes the school improvement requirements as explained below. MSDE must submit its consolidated State plan with the new accountability measures and school improvement indicators to the U.S. Department of Education by September 18, 2017, for implementation beginning in the 2017-2018 school year.

Under the previous authorization of ESEA, known as No Child Left Behind, each state educational agency (SEA) was required to hold schools accountable based solely on results on statewide assessments and one other academic indicator. Under ESSA, each SEA is required to have an accountability system that is state-determined and based on multiple indicators, including at least one indicator of school quality or student success and, at a state's discretion, an indicator of student growth. ESSA also significantly modified the requirements for differentiating among schools and the basis on which schools must be identified for comprehensive or targeted support and improvement. ESSA gives SEAs and local educational agencies discretion to determine the evidence-based interventions that are appropriate to address the needs of identified schools.

House Bill 978 (Ch. 29) requires the State's educational accountability program to include at least three school quality indicators that measure the comparative opportunities provided to students or the level of student success in public schools. One of the school quality indicators must be school climate surveys. Other school quality indicators may include: class size; case load; opportunities to enroll in Advanced Placement courses and International Baccalaureate Programs; opportunities for dual enrollment; opportunities to enroll in career and technology education programs; chronic absenteeism; data on discipline and restorative practices; and access to teachers who hold an Advanced Professional Certificate or have obtained National Board Certification. The school quality indicators used may not be based on student testing. Of the academic indicators established by the State board, one must be access to or credit for completion of a well-rounded curriculum that is indicative of on-track progress at key transition points within elementary and secondary education.

The Act requires the State board to establish a composite score that includes both academic and school quality indicators that provide for meaningful differentiation of schools. The composite score must (1) incorporate a methodology that compares schools that share similar demographic characteristics, including the proportion of economically disadvantaged students; (2) be reported in a manner that states for each score the individual indicator score that is used to calculate the composite score for each school; (3) be calculated numerically in a percentile form; and (4) may not be reported using a letter grade model.

The combined total of the academic indicators may not exceed 65% of the composite score. No academic or school quality indicator may be weighted as less than 10% of the total amount of the composite score. Subject to these restrictions, the final weights of the academic and school quality indicators must be determined by the State board with stakeholder input.

Comprehensive and targeted support and improvement plans must be implemented in compliance with existing collective bargaining agreements between the local boards of education and the exclusive bargaining representative. For each public school identified by MSDE for comprehensive support and improvement, the local board of education must develop and implement a plan to improve student outcomes at the school. The plan must be developed in consultation with specified individuals and stakeholders, and the school, local board, and MSDE must approve and annually review the plan.

For each public school identified by MSDE for targeted support and improvement, the school must develop and implement a plan to improve student outcomes at the school. A targeted support and improvement plan must meet the same specified requirements as those for comprehensive support and improvement plans. The local board of education must monitor and annually review the plan.

After a two-year period from the date of a plan's implementation, if a local board of education determines that student outcomes have not improved at a public school, the local board must consult with the school to develop additional strategies and interventions including funding, community supports, and grants provided in the Public School Opportunities Enhancement Program. After a three-year period, if MSDE determines that student outcomes have not improved at a public school and intervention is necessary, MSDE must collaborate with the local board of education in determining the appropriate intervention strategy, subject to existing collective bargaining agreements. An intervention strategy may not include (1) creating a State-run school district; (2) creating a local school system in addition to the existing 24 school systems; (3) converting or creating a new public school without local board approval; (4) issuing scholarships to public school students to attend nonpublic schools through direct vouchers, tax credit programs, or education savings accounts; and (5) contracting with a for-profit company. A decision of MSDE regarding an intervention strategy is final.

The Governor vetoed the bill, but the General Assembly overrode the veto during the 2017 session and the bill became law, *House Bill 978*.

Kindergarten Assessment: Senate Bill 145/House Bill 654 (both passed) alter the date by which a statewide kindergarten assessment that is administered with the purpose of measuring school readiness is required to be completed from October 1 to October 10.

Early Learning Assessment: Senate Bill 667/House Bill 548 (both passed) authorize a county board to administer the early learning assessment to enrolled prekindergarten students in the county after consultation with prekindergarten teachers, including teachers nominated by the exclusive bargaining representative, in determining how to implement the assessment. The bills otherwise authorize the early learning assessment to be administered to prekindergarten students only to identify a disability.

Students with Disabilities

The federal Individuals with Disabilities Education Act (IDEA) requires that a student with a disability be provided a free appropriate public education in the least restrictive environment, in accordance with an Individualized Education Program (IEP) specific to the individual needs of the student. The parent of a child with a disability is a member of the IEP team that is responsible for developing and reviewing a child's IEP and for making revisions to the IEP.

Parental Consent: Senate Bill 710/House Bill 174 (both passed) require the IEP team to obtain written consent from a parent if the team proposes to (1) enroll the child in an alternative education program that does not issue or provide credits toward a high school diploma; (2) identify alternative assessment aligned with the State's alternative curriculum; or (3) include restraint or seclusion in the IEP to address the child's behavior. If the parent does not provide written consent at the IEP team meeting, the IEP team must send the parent written notice within 5 business days of the IEP meeting that the parent has the right to either consent or refuse to consent to an action described above. If the parent does not provide the written consent or refusal to consent within 15 business days of the IEP team meeting, the IEP team may implement the proposed action. If a parent refuses to consent to the proposed action, the IEP team may use the dispute resolution process to resolve the matter.

Study of Individualized Education Programs: House Bill 1240 (passed) requires MSDE, in consultation with each local school system, to review and assess the current allocation of State and local education staff and other State agencies and supporting resources that are available to assist the parents and guardians of children with disabilities to participate in the IEP process, including procedures relating to the identification, evaluation, and educational placement of a child, the provision of a free and appropriate education teachers. A report to the General Assembly is due by December 31, 2018, on its findings. On or before July 1, 2018, MSDE, in consultation with the Department of Budget and Management and the Department of Legislative Services, must contract with a public or private entity to conduct an independent study of the IEP process in the State, including specified information, and to make specified recommendations. MSDE must report the findings and recommendations of the independent study to the General Assembly on or before July 1, 2019.

Specialized Intervention Services: Senate Bill 1 (passed) requires that, beginning with the 2018-2019 school year, each local board of education must, by December 1 of each year,

submit a report on specialized intervention services to the State board. The report must include information on the number of students in kindergarten through grade 3 receiving the services, the grades in which the services were provided, and the annual budget (including federal, State, and local funds) for the services. MSDE must establish guidelines for the report that each local board must submit. MSDE and each local board of education must annually post the information required under the bill on their respective websites.

Dispute Resolution Process: Senate Bill 943/House Bill 456 (both passed) require MSDE to develop a dispute resolution process to be used by families of children with disabilities and child care providers for resolving complaints of discrimination based on a child's disability. In developing the specific components of the dispute resolution process, MSDE must convene a workgroup that includes specified entities, including MSDE's Office of Child Care, child care providers, and representatives from advocacy organizations. By October 1, 2017, MSDE must submit to the General Assembly a report that includes the dispute resolution process developed by the workgroup and draft legislation or regulations to implement the dispute resolution process.

Early Childhood Education

Universal Prekindergarten: House Bill 516 (Ch. 25) is an emergency bill that establishes the Workgroup to Study the Implementation of Universal Access to Prekindergarten for 4-Year-Olds. The workgroup is required to estimate the number and proportion of eligible four-year-old children currently being served by publicly funded prekindergarten programs using specified data and to make recommendations regarding an implementation plan based on the January 2016 report, A Comprehensive Analysis of Prekindergarten in Maryland, to make quality, full-day prekindergarten universally available to 4-year-old children. The workgroup is required to submit a report of its findings and recommendations to the Commission on Innovation and Excellence in Education on or before September 1, 2017. The commission must submit its final education programs recommendations on numerous including prekindergarten bv December 31, 2017.

Primary, Secondary, and Higher Education into the Workforce (P-20)

Pathways in Technology Early College High Schools

Chapter 144 of 2016 established the Pathways in Technology Early College High (P-TECH) schools in Maryland, which are public schools that offer grades 9 through 14 and that integrate high school, college, and the workplace. The result is intended to be a seamless pathway that enables students to graduate in six years or less with a high school diploma, an associate's degree or certificate, and relevant professional experience. One of the goals of P-TECH schools, which distinguishes them from other early college programs, is for students to earn a credential and workplace skills that are aligned with industry needs and expectations. Other aspects of the P-TECH program are open admission and no cost to students. At least 50% of available space in a P-TECH school must be reserved for students who met the free and reduced-price meal income criteria.

The first P-TECH schools in Maryland opened for students in Baltimore City in the 2016-2017 school year with 50 ninth grade students at Paul Laurence Dunbar High School and 50 ninth grade students at Carver Vocational-Technical High School. The fiscal 2018 budget includes \$855,000 for the P-TECH program. Of this amount, \$600,000 is for P-TECH planning grants for an additional six P-TECH schools. The budget states that funds for new P-TECH schools during the 2017-2018 school year may be used only for one P-TECH school for Allegany County public schools; one P-TECH school serving Queen Anne's County, Talbot County, and Caroline County public schools; and two P-TECH schools for Prince George's County public schools.

Senate Bill 319 (passed) alters many aspects of the P-TECH School Program and establishes funding mechanisms for the program. The P-TECH funding mechanisms established in the bill include (1) inclusion of P-TECH students in the K-12 Foundation Program funding formula for public schools; (2) P-TECH planning grants; (3) P-TECH supplemental school grants; (4) P-TECH supplemental college grants; and (5) inclusion of P-TECH students in the Senator John A. Cade Funding Formula for local community colleges and the Baltimore City Community College (BCCC) funding formula.

Specifically, after the fourth year of the program P-TECH students are included in the full-time equivalent student enrollment for the Foundation Program funding formula as follows: (1) multiply the number of students who are enrolled in the fifth year of the program by 0.50 and (2) multiply the number of students who are enrolled in the sixth year of the program by 0.25. The State share of a P-TECH supplemental school grant is increased to at least \$750 per P-TECH student per school year and must be used for P-TECH school costs. A local board of education that receives a P-TECH supplemental school grant must match 100% of the State share.

The bill establishes a P-TECH supplemental college grant that is equal to the tuition and fees that would normally be charged for the classes in which the P-TECH student is enrolled. The State share of a P-TECH supplemental college grant must be calculated and distributed by the State to college partners. For counties that received a disparity grant in the prior fiscal year, the State share is 50%, and the local share is 50%. For counties that did *not* receive a disparity grant in the prior fiscal year, the State share is 25%, and the local share is 75%.

Under the bill, beginning in fiscal 2019, no new P-TECH planning grants may be awarded for new P-TECH schools until the 2016-2017 cohort of P-TECH students completes the six-year pathway sequence. The Maryland State Department of Education (MSDE) must report on the program annually and, by December 1, 2023, provide an evaluation of whether the P-TECH school program is successful in preparing students for the workforce or further postsecondary education.

Maryland Longitudinal Data System

Chapter 190 of 2010 established the Maryland Longitudinal Data System (MLDS) to contain individual-level student and workforce data from all levels of education and the State's workforce. The legislation also established the MLDS Center within State government to serve as a central repository for the data, to ensure compliance with federal privacy laws, to perform research on the data sets, and to fulfill education reporting requirements and approved public information requests. *Senate Bill 1165/House Bill 680 (both passed)* increase the length of time

during which student and workforce data used by the MLDS may be linked from 5 years from the date of latest attendance in any educational institution in the State to 20 years. In addition, the bills prohibit the MLDS Center from selling any information that may not be disclosed under the federal Family Educational Rights and Privacy Act and other relevant privacy laws and policies and also prohibit the center from charging user fees.

Teacher Preparation Programs

In general, to offer a teacher preparation program (undergraduate or graduate) that would certify a recipient to teach, an institution of higher education in the State must have national accreditation. As of September 2016, the U.S. Department of Education no longer recognizes an accrediting agency for teacher preparation programs. To address this problem, *House Bill 715* (*passed*) authorizes an alternative method of approving teacher preparation programs and makes other changes related to the approval of teacher preparation programs in the State. Specifically, the bill authorizes MSDE to approve the offering of teacher preparation programs by qualified institutions of higher education. The bill applies prospectively after July 1, 2016.

Maryland Commission on Innovation and Excellence in Education

SUMMARY Gap Analysis for Building Blocks 5, 6 & 8

Marc Tucker National Center on Education and the Economy

26 April 2017

What You Have

- Detailed analyses of the gaps between the policies and practices of:
 - Four of the top-performing jurisdictions (Finland, (China) Shanghai,
 Singapore, (Canada) Ontario
 - The three states topping the NAEP league tables (MA, NH, NJ)
 - o Maryland
- Complete lists of the sources of data on which each analysis is based
- Short summaries of each gap analysis
- Questions for the Commission that emerge from the analysis

Three points of leverage on teacher quality

- Quality of pool
- Quality of teacher education and training
- Licensure standards

Comments on these three strategies for raising the quality of teachers

- Top performers: Focus on quality of the pool of high school grads, quality of institutions.
- U.S. states: Focus on licensure, the least effective and least efficient of the available strategies (after-the-fact quality control).

POOL QUALITY: Teacher compensation

- **Top-performing countries**: Starting pay for teachers in is typically at the top of the civil service scale and higher than or equal to beginning engineers, accountants and registered nurses.
- U.S. states: Starting pay for teachers is at or near the bottom of the range for college-educated professionals.
- Maryland: The difference between the average pay of teachers and engineers is 41%, between teachers and accountants is 21%, and between teachers and registered nurses is 10%.

POOL QUALITY: Other financial incentives

- Singapore: Forgives the entire cost of teacher education and training for very highly qualified high school graduates who commit to teach in the public schools for 3 or 4 years and provides a modest salary to these students while in university.
- Massachusetts and New Hampshire: Provide financial assistance to talented high school graduates who commit to teaching STEM disciplines. New Hampshire has a similar initiative for rural teachers.

POOL QUALITY: Other financial incentives (cont.)

 Maryland: Incentive fund would fund 100% of cost of teacher training at public colleges and 50% at private colleges for prospective teachers for students who meet a bar substantially lower than that in top performing countries. Fund recipients must commit to teaching. The state has not yet funded this initiative.

POOL QUALITY: Working conditions

MOVING FROM A BLUE COLLAR FORM OF WORK
 ORGANIZATION TO A PROFESSIONAL FORM OF WORK
 ORGANIZATION

× SEE BUILDING BLOCK #6 FOR DISCUSSION

POOL QUALITY: Quartile from which high school grads who become teachers come

- Top-performing countries: Ranges from top 25% in Finland to top 50% in Shanghai.
- U.S. states, including Maryland: No policy comparable to top performers, not enough data to specify quartile, estimate needs to account for fact that average high grad *years* behind those abroad. States are not tracking the data needed to know from what quartile their teachers are coming.

POOL QUALITY: Selectivity and status of teacher education institutions

 Top global performers: Moving toward greatly reducing the number of higher education institutions permitted to offer teacher education preparation programs and limiting them to research universities. Finland's universities now admitting 1 in 10 applicants to teacher education programs, other countries also very selective.

POOL QUALITY: How it works

- Highly selective countries: Finding that poorly qualified high school grads no longer apply; highly qualified applicants that would never have applied before now applying.
- Top performers: Screening teacher education applicants not just for academic performance in high school, but also for ability to relate to young people and passion for teaching.

POOL QUALITY: University selectivity strategy

 No U.S. state is restricting the right to offer teacher education to high-status universities or restricting admission to very high performing high school graduates the way top performers do.

TEACHER ED QUALITY: Content

- Top-performing countries: Research university standard.
- Top-performing countries: Elementary school teachers typically specialize in either math and science or native language and social studies and must major or at least minor in subjects to be taught.
- U.S. and Maryland: Wide variation in content offerings in university.

TEACHER ED QUALITY: Craft

- All top-performing countries: All future teachers must have at least a year of preparation in craft; no alternate routes allowed.
- Most top-performing countries: Apprenticeship must be served to Master Teachers.
- U.S. including MD: States implementing new requirements for more practice teaching in schools, but not a requirement that they must apprentice to Master Teacher.

TEACHER ED QUALITY: Alignment with Schools

- Top-performing countries: Curriculum of schools of education is tightly aligned with curriculum and work organization structures of schools.
- U.S. States: There is no such alignment.

LICENSURE

- Most top-performing countries: Provisional license granted to teacher education graduates; a full license is granted after certification by Master Teacher after mentoring for a year or more.
- Most U.S. states: License granted to graduates who can pass a low-level test (ETS Praxis Core and Praxis II). MA has implemented more demanding content tests. New Jersey has implemented a new Stanford University test of craft. Towson University is piloting it.

USE OF TIME, SCHOOL ORGANIZATION, CLASS SIZE

- Teaming in top-performing countries:
 - As much as 70% of teachers' time not spent teaching; instead, it is used for systematic improvement of instruction, work done in teams organized by subject, grade, special research topics, and with struggling students.
 - Teacher/pupil ratios about the same as the U.S.
 - Class sizes larger: data shows that this trade-off between larger class size and time for disciplined improvement regime greatly improves student performance.

USE OF CAREER LADDERS

- Career Ladders in top-performing countries:
 - Work organization complemented by very well-developed career ladders.
 - Y-shaped, leading to Master Teacher and School Principal from same root.
 - As teachers get better and better at the work, more responsibility, authority, status and compensation—a true professional services organization.

USE OF CAREER LADDERS

- Career Ladders in top-performing countries:
 - Based on demonstrated skill as teacher, team member, team leader, mentor and research leader.
 - Combination of career ladder and new form of school organization create truly professional organization.
 - Professional development integral part of the work: learning while working.

ORGANIZATION AND TEACHER SPECIALIZATION

- Specialization in top-performing countries:
 - Elementary teachers required to specialize in either math and science or native language and social studies.
 - Matched by requirement that teacher education institutions require prospective elementary teachers to major or minor in the subjects they will specialize in. Teaching of craft in teachers college is closely linked to the way they learn the content.
Building Block #6 School Organization and Management

THE STATES COMPARED TO TOP PERFORMERS

- No U.S. state has implemented career ladders, these new forms of school organization, or specialization in elementary school teaching by subject as a matter of policy.
- Baltimore City schools have begun to develop a career ladder that has the potential to grow into something like the much more developed models seen in the top-performing countries.

LEADERSHIP DEVELOPMENT, U.S. MILITARY STYLE, IN TOP-PERFORMING COUNTRIES

- Potential leaders identified early and carefully groomed for further development.
- As they go up the leadership career ladder, leaders offered training for the next step on the ladder.

LEADERSHIP DEVELOPMENT, U.S. MILITARY STYLE, IN TOP PERFORMING COUNTRIES

- Go up the ladder based on 1) leadership performance in current job, 2) evaluation of performance on training for the next step in the ladder (carefully sequenced to match the ladder)—*NO alternative routes up the ladder!*
- Supervisors evaluated as they go up the ladder on their record in developing next-gen leaders.

LEADERSHIP DEVELOPMENT, U.S. MILITARY STYLE, IN TOP-PERFORMING COUNTRIES

- As sequenced training goes up the ladder, focus moves from tactics to strategy.
- As adapted to elementary and secondary education in top performers, main emphasis throughout is understanding how the new system based on professional standards, roles and responsibility works and how to implement it.

LEADERSHIP DEVELOPMENT IN THE STATES

- No state has developed a leadership development system of the sort just described.
- Only Massachusetts has developed an overall strategy based on the top performer's design.
- Massachusetts engaged NISL to train principals statewide to develop capacity to implement design.

LEADERSHIP DEVELOPMENT IN THE STATES

• Prince George's County did something similar with

NISL a few years ago for aspiring principals.

Maryland Commission on Innovation and Excellence in Education

THANK YOU!



Building Blocks 5, 6 & 8

An Abundant Supply of Highly Qualified Teachers Professional Work Environments Leadership Development



BUILDING BLOCK 5

ASSURE AN ABUNDANT SUPPLY OF HIGHLY QUALIFIED TEACHERS WITH THE NECESSARY DISPOSITIONS, KNOWLEDGE AND SKILLS

SUMMARY

All of the world's top-performing education systems regard high teacher quality as a linchpin of their strategy to produce high student achievement with equity. From a regulatory standpoint, there are only two options for doing this. One is to control quality at the point of entry into the postsecondary institutions whose graduates will become teachers. The other is to control entry into the profession at the point at which graduates of teacher education institutions become teachers. The first is done by regulating which institutions are allowed to provide teacher education and by regulating the criteria for admission to teacher education programs. The second is done with licensure.

The top performers place much more emphasis on the former than the latter. This makes sense because controlling quality with licensure, after the prospective teachers have been through a teacher education program, is very wasteful. These countries want a system that will produce the highest quality at the lowest cost. That drives them toward strategies that emphasize quality control at the source, when high school graduates are making their decisions about what they want to do.

This strategic stance leads to certain outcomes. First, the top performers put substantial effort into collecting and analyzing data on teacher demand and supply. They want to be sure that they are educating as many teachers as they will need in each arena in which they will need teachers, but they do not want to prepare many more than they need. Because, in most of these counties, the ministry of education funds the higher education institutions directly, it can allocate the slots that are needed each year based on the projected needs.

But knowing how many teachers you will need is no guarantee that you will get them, much less that you will get the quality you want. To get high quality applicants, they do several things. First, they make sure that the compensation offered teachers, especially beginning teachers, is comparable to the compensation of beginning high-status professionals in their society. Some countries specify in legislation a requirement that the ministry track the compensation being offered, for example, to beginning engineers or to their top-level civil servants, and then peg the salaries of beginning teachers to those benchmarks and adjust them annually to make sure they are keeping pace.

But these countries know that compensation alone will not attract the young people they want. To get graduates who could be engineers, architects, accountants or doctors, they know they have to offer working conditions comparable to the working conditions these young people could expect if they entered professions like these. So they have made major changes in the way they organize and manage their schools to make them less like places where blue collar workers work and more like places that high status professionals work (See the summary for Building Block #6 for a description of these working conditions and compensation regulations). Next, these countries create other incentives to make the choice of a teaching career attractive to the high-quality candidates they seek. Shanghai, for example, offers free room, board and tuition at their teachers' colleges to their top high school graduates and, in addition, offers to pay them a modest salary while in college. In exchange, the students have to agree under contract to serve as a teacher for five years after being hired as a teacher.

But the most important policy for assuring high quality in their teachers used by the top performers is to make it hard to get into a teacher education program. The most dramatic instance of this policy in action can be found in Finland, which at one time had close to 50 institutions offering teacher education. They shut down all of them and reopened only eight, all of them in their research universities. So, no one can become a schoolteacher in Finland who cannot meet the entrance standards of their top universities. Other countries have been moving in this direction, too. It is harder, usually much harder, to get into teacher education programs in the top-performing countries than in any state in the United States.

All of the top-performing countries surveyed recruit their teachers from the top half of high school graduates going to college. Three of them recruit from a significantly smaller and higher performance band.

These countries have discovered that, when they make it hard for poorly prepared high school students to get into their teacher education programs, well-prepared students who would not have considered going into teaching, instead decide to do so. Even these well-prepared students cannot be assured of getting a place in their teacher education programs. Only 10 percent of the applicants to teacher education programs are admitted in Finland. The country with the "lowest" standards only admits 27.5 percent of those who apply. We know of no undergraduate teacher education program in the United States that accepts less than 100 percent of those who apply if they meet the university's general admission requirements, whatever those requirements may be.

Because our teacher's colleges typically admit 100 percent of the high school graduates who get into the university, they do not, aside from Massachusetts, have any admission requirements designed to determine whether the applicant might make a good teacher. That is not true in the top-performing countries. These countries typically have admissions criteria that include not just academic qualifications, but also measures of the degree to which the applicant can connect with young people and their enthusiasm for teaching as a vocation.

Because these countries do a better job of getting their high school graduates to high standards and because these countries then select the students for admission from a substantially higher performance band of their high school graduates than we do, their future teachers enter college with a much better command of the subjects they will teach than our teachers do and, even more important, they leave college with a much better command of those subjects.

In many of the top-performing countries, elementary school teachers are required to specialize in either their native language and social studies or mathematics and science. In college, these future elementary school teachers must either major or minor in these

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subjects. This is in stark contrast to the United States, where elementary school teachers are expected to teach all subjects. Many of our elementary school teachers did not like mathematics or science, and took as little of it as possible in schools and less in college. Their command of these subjects is shaky at best. This simply does not happen in countries that require their elementary school teachers to specialize and to at least minor in the subjects they will teach while in college.

The top performers not only make sure that their future teachers have a deep command of the subjects they will teach, but they also make sure that they have a strong command of the craft of teaching them. They require extended practicums in schools, typically under the strong guidance of master teachers, people who have been certified both as excellent mentors and as excellent teachers.

There are no "alternative routes" into teaching in any of the top-performing countries, as this is defined in the United States. Anyone who wishes to become a teacher must meet all the requirements that anyone else has to meet. Nor are these demanding criteria waived in the face of teacher shortages because they do not have teacher shortages.

None of the top-performing states we surveyed matched the profile just presented of the top countries. None have a policy that would require them to source their teachers from the top half of college-going high school graduates. None limit the right to offer a teacher education program to high status post-secondary institutions. None have pegged their teachers' compensation to compensation in high-status professions. None have instituted large-scale programs to change the way schools are organized and managed so as to make teaching attractive to highly qualified high school graduates. None has offered a free college education or a salary to highly capable high school graduates if they commit to a career in education. None have required their elementary school teachers to specialize in mathematics and science. Alone among the states, Massachusetts has instituted a rigorous assessment of teacher's content knowledge which aspiring teachers must pass to be licensed in the state, more rigorous than the widely-used Praxis tests. Eleven states, including the top-performing state New Jersey, have begun to administer a well-regarded test developed at Stanford University to measure teacher's craft knowledge.

Like the other states, Maryland requires its teacher education institutions to meet the standards of the relevant accrediting body. But those are very low standards compared to the standards of the top performers in other countries. Recently the Maryland State Department of Education became an alternative accrediting body for the state teacher education programs. The state could use this authority to raise standards.

Maryland is the only state we analyzed that conducts supply and demand studies of teachers. It shares that data with the teacher education institutions, which have volunteered to adjust their openings in the relevant programs in the light of the data. Maryland cannot, of course, do as good a job of matching supply to demand because the state does not control the number of slots in each institution allocated to training teachers for particular specialties.

Not for Public Distribution A Gap Analysis for Maryland

The state Task Force on Teacher Education has recommended the use of financial incentives to attract high quality high school graduates willing to commit to teaching in high-needs schools. This recommendation has been incorporated in the draft ESSA proposal to be submitted to the U.S. Department of Education. Senate Bill 666, passed in 2014, would respond, in part, to this recommendation by setting up an incentive fund for prospective teachers. Maryland residents who have moderately high high school GPAs and composite scores on the SAT or ACT, and pledge to teach in a high-poverty Maryland school, are eligible to receive 100% of tuition, room, board and fees at a Maryland public institution of higher education, or 50% at a private institution. Following graduation they must teach in high-needs schools for at least the number of years in which they received state funding. However, this incentive has not yet been funded.

Maryland does require that all teacher education participants have an internship experience in a designated professional development school. This experience must last at least 100 days, which is comparable to the residencies in the top-performing countries.

The licensure exams used in Maryland are the same as those used by most American states; they are set to a standard of content mastery far below that expected of young people entering the teaching profession in the top-performing countries.

With these specific exceptions, our findings for Maryland were the same as those for the other states we surveyed described above.

QUESTIONS FOR MARYLAND

Does Maryland want to:

- 1. Source its teachers from the top half of the students graduating from high school who are going on to college?
- 2. Limit admissions to teacher education programs to students who have a very strong academic record and have a strong capacity for connecting with young people and a strong vocation for teaching?
- 3. Limit the right to offer a teacher education program to a subset of universities with selective admissions programs or to students who meet a higher criterion for admission than many existing universities?
- 4. Require its universities to establish programs for elementary school teachers to specialize in either mathematics and science or English and social studies?
- 5. Forgive tuition, room and board at Maryland's public universities for students in the top—say—five percent of their high school classes if they commit to serving in Maryland schools when they get their license to teach, provided that they meet the university's admissions standards?
- 6. Adopt the teacher licensure standards being used in Massachusetts or similarly rigorous standards, for both content mastery and mastery of craft?
- 7. Abolish 'alternative routes' into teaching?

BUILDING BLOCK 6

REDESIGN SCHOOLS TO BE PLACES IN WHICH TEACHERS ARE TREATED AS PROFESSIONALS, WITH INCENTIVES AND SUPPORT TO CONTINUOUSLY IMPROVE THEIR PRACTICE AND THE PERFORMANCE OF THEIR STUDENTS

SUMMARY

Through the first half of the 20th century, the elementary and secondary schools were competing with the professions for the relatively small number of people with university degrees. Because the schools needed so many teachers, the people designing the new mass education system needed to find a way to organize and manage the schools so they could make the best use of normal school—not university—school graduates. Indeed, the record shows that the designers of this system wanted as teachers young women who could be let go when they got pregnant and would cause as little trouble as possible while employed. Taking a cue from the hugely successful industrial enterprises springing up everywhere, policy makers chose to rely on the managers of their school systems to organize and run schools that would deliver the basic skills to their students. That is why most schools were built on a model in which administrators closely supervised the work of faculty who were never called blue-collar workers, but who were treated like blue-collar workers. Though our teachers now have at least bachelors degrees, the management model has hardly changed at all. The schools are still organized in pretty much the same way and teachers' roles have not budged.

Over the last thirty years, however, the top-performing countries have largely left this model behind and moved toward ways of organizing schools based not on the turn-of-the-last-century industrial model, but instead on a much more professional model of work organization.

In this new model, there are many fewer people in the central office, telling the schools what to do and how to do it. Much more of the resources available for public education go to the schools, much less to the whole infrastructure above the schools. Teachers are told what the goals are and then given the resources and support they need to enable their students to reach them, and they have much more freedom as they decide how to get their students to the standards the state has established for them. The faculty do not work alone, they spend a lot of time working together in teams to develop better ways of doing almost everything. Even when they are teaching, their classrooms are lined with other teachers, who will later critique their work and come up with ideas for improving the lessons the teacher they were watching was teaching. The drive to get better and better never stops. Master teachers give master classes for other teachers. Teacher teams research the world's best practices on, say, teaching reading to young children whose mother tongue is different from the language used in class, and then, using that research, design their own lessons, carefully evaluating whether they are getting the results they want and changing course in the light of their evaluation data, in the same way a development team in an engineering company might. Teacher teams that are getting exceptional results are asked to write articles for refereed journals, and to present their findings to other teachers in the district, province, even the whole country, in much the same way that researchers and engineers in high-tech firms routinely do.

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This professional model of work organization produces much better results than the old mass production factory model in the top-performing countries. But, as with any high status profession, it only works if the professionals are very well educated and highly trained. But there is a twist. It turns out that implementing this model is a powerful tool for recruiting top high school graduates to school teaching. That is especially true if this model is implemented along with the kinds of career ladders in teaching that have been pioneered in Shanghai and Singapore and are now spreading among the top performers.

In the United States, the job the schoolteacher does is the same on the day before retirement that it was on the young teacher's first day on the job. If a teacher wants advancement, she has to leave teaching for school administration. Increased compensation is largely based on time in service and credit for courses that may or may not improve the teacher's skills. In the first few years of teaching, the beginner has a strong incentive to learn enough to survive. But, after that, there is no incentive at all to get better at the work.

That is, of course, not true in the high-status professions, where, as one gets better and better at the work, one rises through the ranks, getting more authority, responsibility, status and compensation as one goes up the ladder. The absence of such a system is a very important reason why very capable high school graduates avoid teaching and many of our best young teachers leave the field. In Singapore and Shanghai, and increasingly elsewhere, there is a formal career ladder in teaching. At the step on the ladder that signifies that the teacher has become highly competent, the ladder branches in one direction to the rank of master teacher and in the other to school principal. In some countries, these two positions are compensated at the same level. The presence of such systems have proven to be a very important lever in the tool kit of the top performers as they seek top high school graduates to go into teaching and create incentives for them, once hired, to get better and better at the work they do.

We now turn to a listing of the key features of the systems we have been describing, and a comparison of the degree to which Maryland and the top-performing American states implement systems with these features.

Forms of school organization in which teachers are given a lot of time to work together in teams to improve teaching and learning in a systematic way

In the countries that have made the most progress toward the new professional forms of work organization, up to 70% of a teacher's time in school is not spent in front of classes teaching, but is instead spent working in teams to consult with each other about particular students who are not performing as they should; developing a plan of action for them and get them back on track; tutoring individual students who can only make the progress they need to make with one-on-one attention; visiting with parents or others in the community whose help is essential in improving the performance of particular students; visiting each others' classrooms to observe a new lesson developed by a team being taught for the first time to critique and improve it; watching a master teacher at work to learn from her; visiting a class being taught by a new teacher as part of a regular mentoring program for that new teacher; but, more than any of these, to participate as a member of a team with an assignment to substantially improve instruction in the school by researching, developing, evaluating and implementing a better way to teach some part of the curriculum. Teachers typically meet by grade for an

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hour each week and by subject matter for an hour each week. It is often the case that classroom-sized rooms are set aside for each grade in which teachers have cubicle offices equipped with phones and computers, to facilitate the work they do together as well as informal professional communication.

None of the states we surveyed, including Maryland, have implemented such systems statewide.

Well-developed career ladders that structure a professional career in teaching

In the top performing jurisdictions countries with the best-developed career ladder systems, progression up the career ladder is typically based on meeting a set of criteria showing that the teacher is 1) highly skilled at teaching, 2) both a good contributor to the work of teacher teams (at the lower rungs of the ladder) and a good leader of teams (at the upper rungs of the ladder), 3) an effective mentor of both new teachers and teachers lower on the ladder (especially important for teachers on the upper rungs of the ladder) and 4) skilled at the kind of action research that teacher leaders are expected to lead to improve the performance of the school and its students. None of the states we surveyed has a statewide career ladder system of any kind. Baltimore has recently begun a preliminary form of such a system, but it is not yet as robust as the systems described above. Maryland does incentivize teachers to pursue National Board Certification by offering them \$2,000 (to be doubled to \$4,000 starting in 2019), but this is not the same as a career ladder in teaching because it does not offer teachers new roles and responsibilities as they get progressively better and better over the course of their entire careers.

Strong support for new teachers

The top-performing countries typically require that new teachers participate, when first hired, in mentoring programs lasting one to three years, with a reduced teaching load, under the close supervision of a teacher who has reached the position of master teacher on the teacher career ladder. In some countries, full licensure for the new teacher is conditional on the agreement of the mentor that the new teacher fully meets the standards set by the ministry of education.

Massachusetts and New Jersey require that new teachers be mentored for one year following certification. Maryland requires that new teachers be mentored for three years. New Hampshire does not require mentoring. In Maryland, Massachusetts and New Jersey, mentors are self-selected and receive minimal training for mentoring. None of these states require that the mentors be master teachers or that they meet an established standard of effectiveness as mentors, as is the case in the top-performing jurisdictions. One of the reasons that the mentoring programs of the states we surveyed do not require that mentors be master teachers is that they do not have state criteria for designating teachers as master teachers, because they do not have career ladders that would have required them to create such criteria.

Policies designed to enhance the professional role of teachers and to enable teachers to drive and not just respond to the process of school improvement

None of the states we surveyed, including Maryland, have policies intended to give teachers the skills they need to become effective action researchers, to encourage schools to use research methods to systematically analyze the worldwide research

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Not for Public Distribution A Gap Analysis for Maryland

literature before undertaking projects to improve the performance of their schools, to use research methods to evaluate the effectiveness of their school improvement initiatives, to publish the results of their investigations in juried publications run by universities or to disseminate the results of their research to other schools in their districts or other districts.

QUESTIONS FOR MARYLAND

Does Maryland want to:

- 1. Create an initiative designed to provide incentives and support to Maryland schools and districts to design and implement new forms of professional work organization of the kind being adopted in the top-performing countries, including greatly reducing the teaching load of teachers and giving the them much more time to work in teams to systematically improve instruction? Is there a way to do this that is coordinated with the measures Maryland might take to improve teacher quality in the state?
- 2. Build on the start that has been made in Baltimore to create a statewide career ladder for teachers as robust as the best systems in the top-performing countries and to use such a system as the basis for allocating leadership roles for teachers in the state and for compensating them?
- 3. By law, make teachers' compensation competitive with compensation in the high- status professions?
- 4. Build on its current program for mentoring new teachers to require that mentors be master teachers, reduce mentors' teaching load to give them the time to mentor new teachers, give mentees reduced time teaching in order to observe other teachers and participate in teacher team meetings, give mentor teachers a significant role in deciding whether their mentees should get a full license to teach?
- 5. Create an initiative designed to a) give teacher teams the research skills they would need to carefully evaluate the claims researchers and educational material publishers make about the effectiveness of their research and develop data gathering and analysis plans for their action research on improving their own instruction in the school improvement projects? b) Encourage universities to create refereed journals for teachers' research? and c) Encourage teachers unions, school boards, universities and others to develop opportunities for teachers whose research is particularly useful to share their research results with others throughout the state?

BUILDING BLOCK 8

CREATE A LEADERSHIP DEVELOPMENT SYSTEM THAT DEVELOPS LEADERS AT ALL LEVELS TO MANAGE THE NEW SYSTEMS EFFECTIVELY

SUMMARY

Schools in the United States are typically larger, sometimes much larger, than in the rest of the world. Because that is so, and because mass education systems in other countries developed later than in the United States, and so were less influenced by the mass production industrial model of organization, most schools in other countries were, until recently, run by head teachers who continued to teach part time. That is why the people who run schools in other countries are more often called 'heads' than 'principals.' It is also true that ministries of education typically play stronger roles in making policy in these countries than state departments of education do in the United States, and school district offices in the suburbs and cities of these countries are much smaller than district central offices in the United States. Among the consequences of these differences is that schools and principals in other countries typically have much more autonomy than is the case for school principals in the United States. Principals spend much more time in those countries working with their faculties on improving teaching and learning, coaching their staff and building a strong school culture, and much less time gathering data for the central office and responding to its directives. Central offices in the United States tend to favor principals who are compliant, whereas the local central office in these other countries is too small to bother the principals much and the ministry is too far away.

Because of this history, most of the top-performing countries did not until recently give a lot of thought to or make much policy about the sourcing, training and regulation of school leaders.

In retrospect, this gave them a big advantage. Over the last 30 or so years, as these countries realized that they had to redesign their systems to get much better student performance without spending much more money, they realized that their school heads needed to play a very special role in this transformation. Their principals would be required to lead the charge at the local level. They would need to understand the new professional model of school organization and they would have to have the skills needed to make it work. These countries were very focused on implementation of the new model, and, early on, they saw their school heads as the key to implementing it successfully.

By way of contrast, principals in the United States do not see themselves as head teachers, deeply steeped in teaching and learning, admired by the faculty for their skills as a teacher, a true colleague. Instead, they see themselves as the central office sees them, as school 'administrators,' a term that comes from the factory floor, not from the school world. These other countries could create an approach to the sourcing, education, training and further development of school leaders from scratch. In the United States, it will be much harder, because there is a very well-established system for doing all these things that does not fit with the new design for organizing and managing schools and schooling very well at all.

In many ways, the top performers approach the sourcing, education, training and support of school leaders in much the same ways as they approach those functions for teachers.

First, in the top-performing countries, in contrast to the latest practice in the United States, no one becomes a principal who has not been a first-rate teacher. They treat their school professionals like professionals. In the minds of the people who head the education systems in these countries, the heads of law practices are attorneys, the heads of engineering firms are engineers, the heads of medical practices are physicians and so it is natural to expect that the people who head schools must have demonstrated strong competence as a teacher.

Second, just as these countries pay a lot of attention to the quality of the pool from which they select their teachers, they also pay a lot of attention to the quality of the pool from which they select their school leaders. Some of the countries that are leaders in this arena actually got this idea from a close study of the development of leaders in the U.S. military. In this case, it means that current school leaders are expected to give many teachers opportunities to lead small, short-term teams and to make good judgments about which of them appear to have what it takes to become a good leader. Having identified them, they are then expected to give them a carefully chosen set of such opportunities, with more and more responsibility over time. This selection of progressively more challenging assignments is supposed to be matched with increasingly powerful opportunities to develop the skills that the individual will need to meet the next challenge. The ministry typically structures a carefully chosen array of such opportunities, ranging from a short course at the university to an assignment overseas for as long as several months to benchmark one or more national education systems.

Because everyone knows that the best opportunities are offered to those who have demonstrated the most skill and dedication and the greatest potential, opportunities for professional development are eagerly sought after, and when offered, are quickly taken as an honor and not an obligation to be suffered through. Just as in the United States Army, and in the typical large law firm, people in mid-level and upper level echelons are judged in part on their ability to identify and groom the talent the organization will need, and their own advancement is based in significant measure on their skill at these crucial tasks.

This system of carefully grooming and mentoring teachers for leadership positions of increasing responsibility and authority is well understood by everyone in the system. In some systems, required course work is specified along with a required apprenticeship to a designated master principal. In other systems, these requirements are present but less formalized. But mentoring and apprenticeship to highly competent school leaders is a common thread that runs through the top-performing systems.

The process of grooming and mentoring does not end when teacher leaders become assistant principals, vice-principals and then principals. School leaders have their own career ladders in the best of these systems and the top of the ladder is not the job of principal. It runs into the local central office and into the ministry of education. Promising principals are offered the opportunity to get advanced degrees, up to and through doctorates, at state expense. They are expected to serve in many kinds of schools, especially in schools serving large populations of disadvantaged students, as a

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condition of moving up the ladder. At every step of the way, advancing leaders are exposed to a widening array of knowledge, moving, as they go up the ladder, from the tactical to the strategic, just as in the American military and in strong companies. And, again, at every step of the way, the 'curriculum' is designed to deepen the leaders' ability to implement the overall design embraced by the state, in all its parts and pieces.

The aim throughout is to give these leaders the insights, skills and knowledge needed to build a first-rate staff and then create an environment in which that staff will want to do the best work of which they are capable, stretching all the time to get better and better. These principals do not see their job as keeping school. They see their job as designing and leading high performance organizations with very high expectations for their students and the skill and knowledge to help them reach those expectations: inspiring, strategic, skillful, knowledgeable, empathetic, hard driving and deeply moral.

In the top performing systems, the training of the teachers and the training of school leaders are closely aligned with each other and with the state's policies on standards, curriculum, assessment and school design and organization. That alignment, combined with a strong orientation toward apprenticeship in carefully selected schools, makes it possible for the state to develop school faculties ready to hit the ground to implement very complex designs for school improvement as a real team.

We know of no state that has a statewide system in every district for identifying teachers with strong leadership potential and deliberately developing that potential over a period of many years with a carefully selected, progressively more challenging set of assignments, coupled with a set of matching opportunities for professional development. However, in 2014, Maryland created the Governor's Promising Principals Academy, which draws from all 24 districts in the state and serves up to 48 candidates per year. Prince George's County has partnered with the National Institute for School Leadership to create an aspiring principals program designed to create a talent pipeline for aspiring principals in that county.

Like many other states, Maryland has requirements for getting licensed as a principal that involve time in service, completion of an approved program and passing a test. But the programs are not very selective, have no way to screen candidates for their leadership potential and depend on passing a test that was found by a recent study to be ineffective at predicting the job performance of school principals. Massachusetts is using a performance test that would appear to be better suited to its purpose.

All of the states we benchmarked have adopted the National Policy Board's Professional Standards for Education Leaders (PSEL, formerly known as ISLLC standards) for school principals, but it is not clear what that means in terms of the content of the preparation programs they participate in or the skills that their principals actually have. This list of skills, in any case, is not intended to match up with any particular state's design for its education system, which distinguishes these standards from those used in the top performing countries. This is a very important distinction. The standards for training school principals in the top-performing countries are based on the specific designs those countries have developed to produce superior student performance with very small school-to-school variation in student performance. They are intended to guide institutions in putting together professional development and training plans that are geared to that strategy. The PSEL standards are geared to no strategy. They are consensus standards for running the system that now prevails in the

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United States. That system, on the whole, is producing mediocre results at very high cost. The standards in the top-performing countries are intended to help those leaders understand their country's strategy for getting high student achievement and equity at a deep level and acquire not just general skills but the specific skills needed to fully implement that strategy.

One of the benchmarked states did just that, at a very important point in time. David Driscoll, Massachusetts Commissioner of Education when the famed Massachusetts Education Reform Act was passed, developed his strategy for implementing this complex and very comprehensive reform program, he turned to the National Institute for School Leadership to put virtually all the principals in the state through an extensive executive development program intended to give these school leaders the knowledge and skills they would need to implement new legislation intended to change the whole system in ways that in many respects mirrors the strategies used by the countries that lead the world's league tables in elementary and secondary education. At the time, Driscoll concluded that leadership training would be the most efficient and the most effective way to get the job done. His school principals became the point of the spear for the legislation that vaulted Massachusetts to the head of the pack.

QUESTIONS FOR MARYLAND

Does Maryland want to:

- 1. Require its school districts to develop and implement systems to identify teachers who show promise as leaders and mentor and groom them for leadership positions, first as teacher leaders and then as school leaders? Does it want to require school districts to do the same thing with their school principals: to structure a sequence of leadership positions in the district, and evaluate and reward their senior staff based on their record of identifying and successfully grooming the leadership talent the district will need in the years ahead?
- 2. Develop a statewide system of career ladders for principals and other school leaders, perhaps in tandem with a career ladder for teachers? Require school leaders, as a condition of going up that ladder, to serve in schools serving high proportions of disadvantaged students along the way?
- 3. Limit the availability of school leadership positions to people who have demonstrated that they are excellent teachers?
- 4. Structure a carefully developed array of professional development opportunities for school leaders that includes not only high-quality instruction in leadership at business schools and schools of education, but also opportunities to benchmark education systems in other states and countries in carefully structured programs designed to broaden their horizons and improve the state's awareness of important developments in school practice and leadership worldwide?
- 5. Begin to think through a leadership strategy for implementing the Commission's recommendations that involves teacher leaders, school leaders, district leaders and state leaders in one coordinated, multi-year program of leadership development that will get the whole state on the same page for the rollout of the Commission's recommended program?

Commission on Innovation and Excellence in Education Breakout Group Discussions April 26, 2017

BREAKOUT GROUPS (Brit Kirwan will float among the groups) All will meet in Room 170/180 immediately following lunch

Group A

Chester Finn * David Brinkley Anne Kaiser Elizabeth Ysla Leight Paul Pinsky Morgan Showalter David Steiner Steve Waugh **Group B** Buzzy Hettleman* Robert Caret Stephen Guthrie Adrienne Jones Nancy King Leslie Pellegrino Alonzo Washington Margaret Williams

Group C

Joy Schaefer* Scott Dorsey David Helfman Richard Madaleno Maggie McIntosh Craig Rice Karen Salmon Bill Valentine

* is group leader/reporter for today

BREAKOUT SESSION 1, GROUP A

BUILDING BLOCK 5: ASSURE AN ABUNDANT SUPPLY OF HIGHLY QUALIFIED TEACHERS WITH THE NECESSARY DISPOSITIONS, KNOWLEDGE, AND SKILLS

Does Maryland want to:

BB5-1. Source its teachers from the top half of the students graduating from high school who are going on to college?

BB5-2. Limit admissions to teacher education programs to students who have a very strong academic record and have a strong capacity for connecting with young people and a strong vocation for teaching?

BB5-3. Limit the right to offer a teacher education program to a subset of universities with selective admission programs or to students who meet a higher criterion for admission than many existing universities?

BB5-4. Require its universities to establish programs for elementary school teachers to specialize in either mathematics and science or English and social studies?

BREAKOUT SESSION 1, GROUP B

BUILDING BLOCK 5: ASSURE AN ABUNDANT SUPPLY OF HIGHLY QUALIFIED TEACHERS WITH THE NECESSARY DISPOSITIONS, KNOWLEDGE, AND SKILLS

Does Maryland want to:

BB5-5. Forgive tuition, room and board at Maryland's public universities for students in the top—say—five percent of their high school classes if they commit to serving in Maryland schools when they get their license to teach, provided that they meet the university's admissions standards?

BB5-6. Adopt the teacher licensure standards being used in Massachusetts or similarly rigorous standards, for both content mastery and mastery of craft?

BB5-7. Abolish 'alternative routes' into teaching?

BUILDING BLOCK 6: REDESIGN SCHOOLS TO BE PLACES IN WHICH TEACHERS ARE TREATED AS PROFESSIONALS, WITH INCENTIVES AND SUPPORT TO CONTINUOUSLY IMPROVE THEIR PRACTICE AND THE PERFORMANCE OF THEIR STUDENTS

Does Maryland want to:

BB6-1. Create an initiative designed to provide incentives and support to Maryland schools and districts to design and implement new forms of professional work organization of the kind being adopted in the top-performing countries, including greatly reducing the teaching load of teachers and giving them much more time to work in teams to systematically improve instruction? Is there a way to do this that is coordinated with the measures Maryland might take to improve teacher quality in the State?

BREAKOUT SESSION 1, GROUP C

BUILDING BLOCK 6: REDESIGN SCHOOLS TO BE PLACES IN WHICH TEACHERS ARE TREATED AS PROFESSIONALS, WITH INCENTIVES AND SUPPORT TO CONTINUOUSLY IMPROVE THEIR PRACTICE AND THE PERFORMANCE OF THEIR STUDENTS

Does Maryland want to:

BB6-2. Build on the start that has been made in Baltimore to create a statewide career ladder for teachers as robust as the best systems in the top-performing countries and to use such a system as the basis for allocating leadership roles for teachers in the State and for compensating them?

BB6-3. By law, make teachers' compensation competitive with compensation in the high-status professions?

BB6-4. Build on its current program for mentoring new teachers to require that mentors be master teachers, reduce mentors' teaching load to give them the time to mentor new teachers, give mentees

Commission on Innovation and Excellence in Education Breakout Group Discussions April 26, 2017

reduced time teaching in order to observe other teachers and participate in teacher team meetings, and give mentor teachers a significant role in deciding whether their mentees should get a full license to teach?

BB6-5. Create an initiative designed to (a) give teacher teams the research skills they would need to carefully evaluate the claims researchers and educational material publishers make about the effectiveness of their research and develop data gathering and analysis plans for their action research on improving their own instruction in the school improvement projects? (b) encourage universities to create refereed journals for teachers' research? and (c) encourage teachers unions, school boards, universities, and others to develop opportunities for teachers whose research is particularly useful to share their research results with others throughout the State?

BREAKOUT SESSION 2, GROUP A

BUILDING BLOCK 8: CREATE A LEADERSHIP DEVELOPMENT SYSTEM THAT DEVELOPS LEADERS AT ALL LEVELS TO MANAGE THE NEW SYSTEMS EFFECTIVELY

Does Maryland want to:

BB8-1. Require its school districts to develop and implement systems to identify teachers who show promise as leaders and mentor and groom them for leadership positions, first as teacher leaders and then as school leaders? Does it want to require school districts to do the same thing with their school principals: to structure a sequence of leadership positions in the district, and evaluate and reward their senior staff based on their record of identifying and successfully grooming the leadership talent the district will need in the years ahead?

BREAKOUT SESSION 2, GROUP B

BUILDING BLOCK 8: CREATE A LEADERSHIP DEVELOPMENT SYSTEM THAT DEVELOPS LEADERS AT ALL LEVELS TO MANAGE THE NEW SYSTEMS EFFECTIVELY

Does Maryland want to:

BB8-2. Develop a statewide system of career ladders for principals and other school leaders, perhaps in tandem with a career ladder for teachers? Require school leaders, as a condition of going up that ladder, to serve in schools serving high proportions of disadvantaged students along the way?

BREAKOUT SESSION 2, GROUP C

BUILDING BLOCK 8: CREATE A LEADERSHIP DEVELOPMENT SYSTEM THAT DEVELOPS LEADERS AT ALL LEVELS TO MANAGE THE NEW SYSTEMS EFFECTIVELY

Does Maryland want to:

BB8-4. Structure a carefully developed array of professional development opportunities for school leaders that includes not only high-quality instruction in leadership at business schools and schools of education, but also opportunities to benchmark education systems in other states and countries in carefully structured programs designed to broaden their horizons and improve the State's awareness of important developments in school practice and leadership worldwide?

BREAKOUT SESSION 2, ALL GROUPS (Time permitting) BUILDING BLOCK 8: CREATE A LEADERSHIP DEVELOPMENT SYSTEM THAT DEVELOPS LEADERS AT ALL LEVELS TO MANAGE THE NEW SYSTEMS EFFECTIVELY

Does Maryland want to:

BB8-3. Limit the availability of school leadership positions to people who have demonstrated that they are excellent teachers?

BB8-5. Begin to think through a leadership strategy for implementing the Commission's recommendations that involves teacher leaders, school leaders, district leaders, and state leaders in one coordinated, multi-year program of leadership development that will get the whole State on the same page for the rollout of the Commission's recommended program?

























A Truly Collaborative	Effort BALTIMORE CITY PUBLIC SCHOOLS
Teachers are essential to	The contract was
the transformation of	informed by teacher
City Schools	input
The contract was jointly	The contract is governed
developed from the	by a Joint Oversight
outset by the district and	Committee and Joint
the Baltimore Teachers	Governing Panel of labor
Union	and management



November 24, 2015

The Honorable Edward Kasemeyer Chair, Senate Budget & Taxation Committee 3 West Miller Senate Office Building Annapolis, Maryland 21401 The Honorable Maggie McIntosh Chair, House Appropriations Committee 130 Lowe House Office Building Annapolis, Maryland 21401

Dear Chair Kasemeyer and Chair McIntosh:

We are pleased to submit, for your consideration, two linked JCR reports: JCR R00A02.55 (p. 107) and JCR R74T00 (p. 130) which both address recommendations for addressing teacher quality issues in Maryland. The first report, assigned to the Maryland State Department of Education (MSDE), responds specifically to the request to make recommendations for restructuring the fiscal incentive program for educators (Quality Teacher Incentives).

The second report, assigned to the P-20 Task Force on Teacher Education, responds to the request for identifying best practices and international models for making teaching a respected career with career ladders.

Today we submit both reports, and call your attention to their parallel connection. Each report has recommendations that are referenced in the other report, so we urge you to read them together.

We look forward to discussing these reports and the implications of the recommendations with you on December 1, 2015.

Sincerely,

Jack Smith Interim State Superintendent of Schools

Joann & Boughman

Joann Boughman Senior Vice-Chancellor for Academic Affairs

cc: Bob Caret, Chancellor, USM Andy Clark, USM Jordan Butler, DBM Nathan Bowen, DBM Sara Baker, DLS Sarah Albert, DLS Rachel Hise, DLS Nancy Shapiro, USM Penelope Thornton Talley, MSDE Kristy Michel, MSDE Mary Gable, MSDE Sarah Spross, MSDE Amanda Conn, MSDE

Joint Chairmen's Report Report to Ensure High Quality Teachers (R75T00 PAGE 130)

Final Report



Annapolis, Maryland December 1, 2015

R75T00 p. 130

Report to Ensure High Quality Teachers: The P-20 Council established a task force on teacher education to develop recommendations and an action plan to ensure Maryland Programs produce high quality teachers. The budget committees are interested in the task force examining identified best practices of high performing countries and developing recommendations to producing high quality teachers and making teaching a profession with career ladders. The committees request the task force to submit a report with recommendations to ensure Maryland produces high quality teachers based on identified best practices by November 14, 2015.

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Executive Summary

In response to the JCR request (R75T00), this report provides a review of best practices of high performing education systems from around the world, a set of recommendations for producing high quality teachers based on those practices, and recommendations for transforming teaching into a profession with career ladders. High performing systems have lower rates of teacher attrition, as teachers who are well prepared and supported stay on the job longer, become even more effective over time, and have positive impact on student achievement.

Enacting the reforms and recommendations included in this report will require rethinking how current resources are used, revising current regulations and legislation to allow for greater flexibility, being open to reallocating some current resources, and investing some additional resources to earn a higher return on investment in the form of both increased teacher retention and student achievement.

Key recommendations from this report fall into four categories:

- 1) Pre-service preparation and teacher induction;
- 2) Professional development for current teachers, including collaborations with higher education;
- 3) Continuous improvement through accountability; and
- 4) Career ladders for teachers that could include joint appointments in higher education.

This report concludes with the following recommendations:

- The Maryland State Department of Education (MSDE) and the Maryland Higher Education Commission (MHEC) should prepare a cost analysis for the high priority recommendations offered in this report, and make recommendations for the 2017-18 fiscal year for budget reallocations to support those recommendations that have the greatest evidence of high return on investment as defined by higher teacher retention and student achievement.
- 2. MSDE, in collaboration with MHEC, should establish an incentive fund for pilot projects, and review evidence of progress on the key goals of recruiting and retaining high quality teachers in Maryland public schools, with the goal of improving student learning outcomes and increased college and career readiness.
- 3. A reallocation of current resources should be considered in several categories of current funding:
 - District-level and school-wide professional development funds: Current professional development funds in every district could be reallocated for new priorities and career ladder incentives.
 - Quality Teacher Incentive Funds (QTI): Restructuring the QTI funding to include several different buckets, including, but not limited to:
 - Rewarding teachers for National Board Certification and/or teaching in the lowest performing schools;
- Creating competitive pilot projects to improve teacher retention and recruitment and using 2015 PARCC scores as baseline; and
- Establishing three-year cycles with flexibility for determining the actual measures as needed.
- Projected teacher retention savings: The National Center for Teaching and America's Future (NCTAF, 2007) projected that Baltimore City and Prince George's County together spend over \$40 million dollars to attract and train teachers to replace teachers lost to attrition each year. If funding sources could be identified to invest in the strategies proven to contribute to long-term teacher retention and thus prevent those future costs, Maryland could realize a significant return on investment.
- Improving Teacher Quality State Grants (ITQ): These grants, authorized by Title II, Part A of the No Child Left Behind Act of 2001, overseen by MHEC, support higher education to prepare quality teachers and principals.

Process

In November 2013, the P-20 Leadership Council charged a Task Force with making recommendations for ensuring all Maryland teacher preparation programs produce high quality teachers. Co-chaired by then-Deputy Superintendent Jack Smith and Towson University Provost Tim Chandler, the Task Force met five times between December 2013 and April 2014. Other appointed members of the task force included representatives from P-12 schools, institutions of higher education, parent organizations, and teacher associations. The co-chairs also convened targeted subcommittees. By April 2014, the Task Force offered recommendations on pre-service teacher preparation, teacher induction, professional development for teachers, and continuous improvement through accountability to the P-20 Council.

Since April 2014, members of the P-20 Task Force have continued to work together to address the recommendations put forth in their original report. Representatives from the University System of Maryland (USM), MSDE, and various institutions of higher education in the state have collaborated on collecting additional evidence and through meetings such as the P-20 Task Force Focus Group of Deans, Superintendents, Principals, and Teachers, which convened on September 1, 2015 (see Appendix 1). Further, the USM's P-20 office continues to support Chancellor Robert Caret's work with the Governor Larry Hogan's P-20 Leadership Council. On October 19 2015, the USM P-20 office collaborated with MSDE and arrived at consensus on needs and priorities with regard to teacher preparation. At that meeting, the cochairs of the P-20 Task Force agreed to link the two JCR reports addressing this topic: JCR R74T00 p. 130 and JCR R00A02.55 p. 107, which is why they are being submitted together.

Finally, when the Task Force met in 2014, it considered the proposed federal regulations on teacher preparation that were under discussion. The current projection is that the federal

government will release the final teacher preparation regulations in December 2015, and that they will call for states to rank and evaluate all teacher preparation programs and use "student learning" as a metric. The recommendations in this report are consistent with the national conversations regarding teacher quality.

Introduction and Context

Despite longstanding myths about who enters the teaching profession, today's teaching force does not come from the bottom half of high school achievers. Rather, they are from the middle of the college-attending cohort.¹ Since 2000, the academic ability of both individuals certified and those entering teaching has steadily increased.² In order to accelerate this trend, policy makers are formulating ambitiously high admission requirements for entry into teaching, and preparation programs are admitting more high-quality candidates. The challenge, we believe, is that public education faces a serious threat as those who enter find little support and, as a result, leave quickly. In fact, focusing on recruiting top performers into the profession is proving to be a short-sighted method, as suggested in a new analysis. The study, *Beginning Teacher Longitudinal Survey*, reveals that teachers who come from highly selective universities were 85% percent more likely to leave the profession by the third year.³

The climate under which teachers enter their preparation programs, as well as the first job of successful candidates, heavily influences whether and how long they will stay in the classroom.⁴ While there are different definitions of teacher turnover (leaving one school for another) and teacher attrition (leaving the profession), to address staffing shortages we must focus on both the retention of teachers to the profession and to their schools.⁵ It is estimated that one-third of teachers leave the job during their first three years, and up to one half leave within the first five years.⁶ In 2012-13 in Maryland, the attrition rate for teachers with up to five years of experience was 39 percent.⁷ Further, turnover at high poverty schools is nearly one-third higher than for all teachers in all other schools.⁸ In Baltimore City, the attrition rate was 50 percent in 2012-2013, and in Prince George's County it was 58 percent.⁹

According to the Alliance for Excellent Education, a conservative estimate of the cost of teacher attrition in the United States is \$4.9 billion per year.¹⁰ However, the actual cost for replacing and training teachers who leave the profession and those who transfer to other schools is estimated at \$7 billion dollars, nationally.¹¹ For Maryland, that amount is over \$42 million dollars annually.¹²

Below is a table indicating a variety of studies trying to pin down the cost of teacher attrition. While the results vary from state to state and from study to study, there is no question that teacher attrition accounts for a significant drain on public school funds.¹³

Study	Area	Number of Teachers	Reported Turnover Rate	Claimed Cost of Teacher Turnover	Claimed Cost per Turnover Model 1: \$8,227 Model 2: \$52,513	
Texas Center for Educational Research (2000)	Texas Public Schools	258,000	15.5%	Model 1: \$329M Model 2: \$2.1B		
Chicago ACORN (2003)	64 Chicago Public Schools	2377	22.9%	Model 1: \$ 5.6M Model 2: \$42.2M Model 3: \$34.7M	Model 1: \$10,294 Model 2: \$77,574 Model 3: \$63,787	
Breaux & Wong (2003)	Nation			Model 1: 2.5 x initial salary Model 2: 1.75 x initial salary		
Alliance for Excellent Education (2005)		2,998,795	13.1%	13.1%	\$12,546	
Shockley et al. (2006)	2 Florida districts	Broward: 1206 St. Lucie: 320	Broward: 7.25% St. Lucie: 16.4%	Broward: \$15.3M St. Lucie: \$1.48M	Broward: \$12,652 St. Lucie: \$4,631	

The financial costs alone are worrisome, but the costs paid by students and their families are even more important. Teacher turnover has a negative impact on school quality, instruction and student achievement.¹⁴ According to the National Council on Teaching and America's Future and The New Teacher Project, those leaving the profession now exceed those entering.¹⁵ Teacher retention is the key issue in addressing teacher shortages.

Overwhelming evidence points to the need for teacher education programs and school districts to provide the conditions that make successful preparation and on-going teaching and learning possible in order to discourage high-quality educators from leaving the profession. The most widely recommended practices include

- Extensive and rigorous clinical experiences;
- Systematic induction programs that include mentorships; and
- Effective, job-embedded professional development.¹⁶

Multiple studies have confirmed that beginning teachers who are supported through comprehensive induction programs are less likely to transfer schools or leave the profession altogether, even when controlling for teacher and school characteristics. Within induction programs, elements like mentorships, dedicated time for collaboration, common planning time, and belonging to an external network of teachers, have the strongest impact on reducing the chance of a teacher leaving after the first year.¹⁷ Teacher retention is an urgent policy issue. Stakeholders throughout school districts bear the brunt of these costs.

Experienced, high-quality teachers are positively associated with higher student achievement, better student attendance, and lower instances of disciplinary infractions. Research indicates that it may take teachers a decade to become consistently effective once they are in the classroom, making it that much more important to get teachers to enter and stay in the profession.¹⁸ Papay and Kraft found that teachers in their tenth to thirtieth years of teaching increased student test scores by an average of 40 percent.¹⁹ Attracting high-quality candidates and keeping high-performing teachers in the profession have widespread implications for the academic and social well being of Maryland's students.

Maryland P-20 Teacher Education Task Force Recommendations

On November 18, 2013, the Governor's P-20 Leadership Council charged a P-20 Task Force on Teacher Education with making recommendations and creating an action plan to ensure that all teacher preparation programs in Maryland will produce the high-quality teachers Maryland's students deserve. Co-chairs Jack Smith (Deputy Superintendent, Maryland State Department of Education) and Tim Chandler (Provost, Towson University) convened five meetings of the Task Force between December 2013 and April 2014. The appointed members included representatives from PreK-12 schools, the higher education community, parent organizations and teacher associations. In addition to the monthly Task Force meetings, the cochairs presided over sub-committee meetings, conference calls, and electronic reviews of documents.

The Task Force on Teacher Preparation grew out of a collaboratively planned Teacher Education Summit¹ which was held on October 11, 2013, at Towson University. The keynote speaker, Chancellor Nancy Zimpher of the State University of New York System, challenged the assembled participants to think broadly about their aspirational goals and the changing context of teaching and teacher preparation. The Task Force accepted the charge and framed a set of recommendations that attempts to balance the on-the-ground realities with transformational best practices. The Task Force agreed that the recommendations should:

- Address the gap between teacher preparation programs and the on-the-ground realities in schools.
 - Align and integrate teacher preparation programs with the world of classroom teachers.

¹ Partners for the Summit included USM, MSDE, MHEC, MICUA, and MACC.

- Prepare all teachers with background and strategies to understand and adapt to changing student populations; including cultural differences, poverty, and special learning, social and emotional needs.
- Recognize that while new teachers must be adequately prepared in advance to enter the classroom, preparation must link seamlessly with school district induction and embedded professional development to ensure a successful and long-lasting teaching career.
- Use multiple qualitative and quantitative measures to study teacher preparation and look for evidence-based ways that lead to building continuous improvement.
- Develop a common Maryland framework that, while allowing for program flexibility and innovation, holds all education preparation providers both traditional and alternative accountable to a common set of rigorous expectations.
- Address the need for cycles of regular review and evaluation.

In responding to the charge, the Task Force examined national research reports and policy documents assembling categories of best practices; reviewed existing Maryland statutes and regulations related to teacher preparation; reached out to stakeholder groups; and circulated multiple drafts of the recommendations. The Task Force engaged with a variety of stakeholders including deans and directors of education at Maryland's two-year and four-year colleges and universities; principals and professional development coordinators convened by the University of Maryland; local school district superintendents; teachers and teacher association representatives; alternative certification providers; parent organizations; a number of national professional organizations; and the business community.

Maryland has also been a leader, through the use of Race to the Top (RTTT) funding, in reflecting global priorities. The increase in the quality and quantity of teachers in the science, technology, engineering and mathematics (STEM) areas has been a focus for the last four years. Additionally, RTTT prioritized preparing principals and teachers to be effective in challenging schools. The Task Force recommendations underscore the belief that closing the achievement gap is paramount in preparing all of Maryland's students for college and for successful careers.

Building on a strong foundation of educational excellence in Maryland, and taking lessons from many sources, the P-20 Task Force on Teacher Preparation offered recommendations in four key areas:

- A. Pre-service teacher preparation;
- B. Pre-tenure teacher induction;
- C. Professional development for current teachers; and
- D. Continuous improvement through accountability.
- A. Pre-Service Teacher Preparation
 - 1. Establish higher Maryland standards for admission to all teacher preparation programs.
 - Align teacher preparation programs, including Associate of Arts in Teaching (AAT) programs, with Maryland College and Career Readiness Standards (MCCRS).

- 3. Transition to Professional Learning Networks built on a model of internships and residencies to increase the number and variety of field placements for teacher candidates.
- 4. Increase the number and variety of field placements to promote adaptive expertise, with the final placement organized in a way that simulates what is expected in the first year of teaching.
- 5. Prioritize in-state programs for field placements, internships, and post-baccalaureate residencies.
- 6. Invest in scholarships, loan forgiveness, and early college/teacher academies to recruit highly qualified students into teaching careers.
- B. Pre-Tenure Induction
 - 1. Establish a three-year residency model for all pre-tenured teachers that engages higher education teacher preparation programs in collaborative partnerships with school districts.
 - 2. Establish collaboratively supported Teaching Innovation Centers (hubs of innovation).
 - 3. Fund three initial pilot Teaching Innovation Centers with state "seed" money and subsequently with savings from reduced teacher attrition.
- C. Professional Development for Current Teachers
 - 1. Establish career-long professional development programs and career ladders for educators that are aligned with the high expectations of MCCRS.
 - 2. Establish a school/university partnership process for building professional development programs for educators:
 - a. Programs should be collaboratively developed by PreK-12 and higher education; and
 - b. Programs should build strong content and pedagogy competencies.
 - 3. Reallocate existing funds for professional development to support the new collaboratively developed models.

D. Continuous Improvement through Accountability

- 1. Build Maryland accountability recommendations around the ideal conditions that contribute to the development of highly effective teachers and set a high bar for qualifications and expectations for all teacher preparation programs;
- 2. Align current Institutional Performance Criteria to reflect school reform initiatives;
- 3. Ensure that higher education institutions have access to all data necessary for continuous improvement research; and
- 4. Align elements of the Council for the Accreditation of Educator Preparation (CAEP) standards for accreditation with Maryland's priorities to ensure efficient and effective use of resources.

Career Ladders: An idea whose time has come to the teaching profession

Over 30 years ago, in 1983, A Nation at Risk²⁰ recommended:

"The teaching profession needs to recognize and reward expertise by following the lead of other professions that create diverse and flexible career options; link compensation to performance, expertise and responsibilities; and work to retain 'high achievers'."

That landmark report included a number of recommendations that have yet to be fully implemented in school improvement plans:

- Insist on higher standards for teacher-preparation programs;
- Introduce teacher salaries that are professionally competitive and based on performance;
- Introduce 11-month contracts for teachers allowing more time for curriculum and professional development;
- Introduce career ladders that differentiate teachers based on experience and skill, and infuse more resources into teacher-shortage areas;
- Build incentives for drawing highly qualified applicants into the profession; and
- Create and support mentoring programs for novice teachers that are designed by experienced teachers.

Today, 30 years and a generation later, "Gen Y teachers" — a new generation with different career aspirations — are projected to make up nearly half of the workforce in 2020.²¹ According to the 2012 MetLife Survey of the American Teacher, fewer teachers in general want to become principals, but there is growing interest in teachers teaching in "hybrid roles" — those roles that keep them part-time in the classroom combined with other roles of service and leadership in education.²² Interest in these hybrid roles is particularly strong among mid-career teachers, high school teachers, and those in urban schools or schools with high proportions of low-income students.²³

In 2013, the National Network of State Teachers of the Year did a state-by-state analysis of the different state-based policies and initiatives related to recognizing and promoting teacher leadership, as well as teacher career advancement initiatives in local districts. Their recent publication *Creating Sustainable Teacher Career Pathways: A 21st Century Imperative*, presented a comprehensive look at the most promising, evidence-based alternatives to our traditional career trajectories for teachers.²⁴ Examples included: tiered teacher licensure systems that include "master" or advanced level status; teacher leader/master teacher endorsements or designations; the development of continuums of teaching practice that distinguish the competencies of teachers throughout their careers; and more comprehensive teacher career advancement initiatives. Their thesis is undeniable: The teaching profession needs to evolve to meet 21st-Century career expectations for a new generation of teachers and learners.

Unlike most professions requiring licensure (nursing, architecture, law, civil engineering), teaching has historically been described as an "unstaged occupation," with fewer opportunities to access higher earning and higher status positions than one would experience in other "staged professions." In addition, in most states, upward movement on the salary scale is determined by number of years served, together with degree attainment, rather than actual performance, although that appears to be changing. This form of rank and pay movement is used across Maryland school districts, with the exception of Baltimore City.²⁵

Although much has been written about the stages in the professional life of teachers, the "career path" of a teacher is generally flat or narrowly linear.²⁶ The main opportunity for career advancement for teachers has been leaving the classroom to become a school administrator. "Mid-career" teachers often experience burnout, stress, and dissatisfaction.

Research shows that teachers improve their proficiency and effectiveness the most during the first seven years of teaching; and the failure to provide comprehensive, high-quality induction programs is costly in terms of lost human capital and diminished teacher effectiveness in the early career stages²⁷.

It is clear that, without structural changes to the teaching profession—including better working conditions, competitive compensation, flexibility, and career staging—it will be increasingly difficult to attract and retain enough highly motivated and qualified teachers into the profession. Currently, only nine percent of students in the "top third" of their academic cohort express interest in going into teaching.²⁸ Building additional career stages that value and reward high performing teachers may be one way to motivate promising newcomers to the profession to set longer-term goals that involve leading from the classroom.²⁹

The over-arching goals of a teacher career advancement continuum is to ensure consistent access by all students to excellent teachers and teaching teams, create the conditions for advancing student learning for all students, increase the effectiveness of all teachers, and to retain the most effective and talented teachers.

Teacher leadership opportunities will likely be critical in recruiting talented individuals into the teaching profession who might otherwise choose other professions. In addition, these teachers will expect opportunities to participate in decision-making at the school and district level, to assume specific leadership roles, and to be provided with recognition and financial rewards for high performance.

The P-20 Task Force on Teacher Preparation included recommendations for implementing career ladders in Maryland.

What Can We Learn from International Models?

Some international systems have more defined career paths than those in the U.S, examples of which are Singapore, Shanghai, and Australia. Others, such as Finland, Ontario and Japan, have less defined career ladders; but seek to engage all teachers in more collaborative work, sharing practice and research on teaching. What appears to be universal in all these countries is that teachers generally come from the top of their graduation cohort; and that the teaching profession is conferred with high status and, often, high pay. Many countries set attracting the "best and the brightest" into teaching as a national priority.

The table below summarizes some of the characteristics of the international models that are most commonly used as examples of best practice when describing teacher preparation and the teaching profession.³⁰

Teacher Policies in Select Countries

SINGAPORE

Recruitment and training: Teachers are recruited from the top third of high school graduates, with only one of eight applicants accepted for admission to the only teacher training institute in Singapore (the National Institute of Education [NIE], located in the Nanyang Technological University, one of the most prestigious institutions of higher education).

Career advancement: A teaching career can take the following tracks: the teaching track which can lead to becoming Principal Master Teachers, the leadership track for those seeking a formal leadership position in the school (the highest being Director-General of Education); and the specialist track focused on research and teaching policy (Chief Specialist). Singapore also has a new performance management system with a clearly defined, comprehensive teacher competency model designed to attain work-related goals, match teachers to a career path, and determine annual bonuses.

SHANGHAI

Recruitment and training: Teacher recruitment is not standardized across China, but is often competitive in urban areas. Teachers may be educated in special upper secondary schools (for pre-school and primary positions), normal colleges (equivalent to junior colleges), and normal universities in a four-year bachelor's degree program. Teachers must pass the National Mandarin Language Test; and those who do not graduate from a university must also pass four examinations in the areas of pedagogy, psychology, teaching methods and teaching ability. Shanghai requires that primary school teachers must hold postsecondary subject degree diplomas, and secondary school teachers must hold a bachelor's degree plus a professional certificate.

Career advancement: Schools have multiple levels of leadership, including the principal and party secretary, three directors, and teaching and research groups. These consist of teachers of the same subject and grade level who are led by master teachers. These groups meet together for up to two hours each week to plan lessons and examine student progress. Teaching and research groups are led by senior or master teachers and are designed to support junior teachers and improve overall instruction in the schools.

FINLAND

Recruitment and training: Teaching is regarded as Finland's most respected profession. Finnish teacher education programs are extremely selective, admitting only one in every ten students who apply. All teachers must now hold a master's degree.

Career advancement: Finland does not have specific leadership roles for teachers; rather, teachers are provided with significant autonomy in how they approach curriculum design and instruction. This professional autonomy and high degree of trust makes teaching a very attractive job, with 90 percent of trained teachers remaining in the profession for the duration of their careers. There are no formal teacher evaluations with the focus instead on self-evaluation. There is neither performance pay nor bonuses.

SOUTH KOREA

Recruitment and training: Teaching is a highly respected career with good working conditions (a high degree of collaboration among teachers), competitive pay and job stability. It is highly regulated at the elementary level, with the country's 11 teachers' colleges being relatively selective. At the secondary level, there are multiple pathways to certification including attendance at a comprehensive university, with selection occurring at the hiring phase. As a result, there is a shortage of elementary teachers and only 30 percent of secondary candidates can find jobs. All teachers must pass an employment test administered by the Metropolitan and Provisional Offices of Education to be hired.

Career advancement: South Korea is currently institutionalizing a Master Teacher system, piloted in 2008. Master teachers must have ten to 15 years of experience. They remain in a teaching role, but are expected to share their expertise with less experienced teachers as well as develop curriculum, instructional practices and evaluation systems. They receive a small monthly stipend for these roles.

ONTARIO

Recruitment and training: Canada is consistently able to recruit high quality students into teaching, with the majority drawn from the top 30 percent of their college cohorts. Ontario requires a minimum threeyear postsecondary degree from an acceptable post-secondary institution, plus one year of teacher education, before one can teach. Teachers must apply to the Ontario College of Teaching (OCT), an autonomous licensing body for the province of Ontario. Currently, there is an oversupply of teachers in Ontario, enabling districts to be selective in hiring.

Career advancement: Teachers apply for "additional qualification" in order to allow the career teacher to pursue different career options and specialist positions, including supervisory or leadership positions. The OCT recently implemented a professional designation for teachers called the "Ontario Certified Teacher." Designed as a symbol of respect for the role of teachers versus other educational roles, it is available for all teachers in good standing.

JAPAN

Recruitment and training: Teaching is a highly respected profession, and the system is highly selective at both the admission and hiring stages. Only 14 percent of applicants are accepted into preparation programs, and only 30 to 40 percent are hired in public schools. Teachers must pass a National Entrance Examination to be admitted to an undergraduate program. A teacher's certification depends on the amount of education a teacher has when graduating. Most teachers hold a bachelor's degree. Teachers undergo a one-year induction program before becoming a full-teacher.

Career Advancement: Teachers may move from teacher to head teacher and then to principal. There are multiple salary grades within, based on performance and experience. Japan is known for its "lesson study" system in which groups of teachers meet to learn informally from their colleagues and exercise significant professional autonomy over the delivery of instruction.

AUSTRALIA

Recruitment and training: Each state or territory has jurisdiction over how teachers are recruited, trained, and certified, although all require a bachelor's degree. Recruiting and retaining highly qualified teachers is a priority of the Department of Education, Employment and Workplace Relations (DEEWR), as a result of concerns over teacher shortages.

Career Advancement: Although there are no specified career paths in Australia, teachers typically have access to a career structure that involves two to four stages, with annual salary increments associated with each stage. These stages range from beginning teacher to experienced teacher, lead teacher, or learning area/grade-level co-coordinator. By the "lead teacher stage," teachers are expected to demonstrate exemplary teaching, educational leadership, and the ability to initiate and manage change.

A summary of the outstanding common elements used abroad does not lead to any surprises and comparisons to Maryland's context are revealing.

What do high performing systems include?	How are they funded and actualized?		
 Competitive entry to programs Longer course of study, longer practicum University-school partnerships Sustained mentorships Devoted time for collaboration and professional learning Action research Teacher-led problem solving Training institutions 	 Subsidized undergraduate education Professional development (PD) providers compete for contracts Some mentor programs are voluntary Mix of training institutes in local government-run locations as well as universities 		
 Time and resources devoted to professional development 	 High- and low-achieving schools are paired 		

1. High performing systems have many practices in common, but funding and programming is different across contexts:

2. Low teacher attrition rates are associated with high performing systems:³¹

Maryland	6-8% annual, 13% 1 st year, 30% by 5 th year			
Finland	<1% annual			
	90% retained to retirement			
Ontario	2% annual			
Singapore	<3% annual			
Australia				
Japan	most through retirement			
Shanghai	"very few"			
Korea	1% annual			

3. How does student performance in these international comparisons compare to Maryland students' performance?

Many of these systems share reasonably high student outcomes on indicators like higher education enrollment rates and TIMSS / PISA scores:

26.77	Maryland	Finland	Ontario	Singapore	Australia	Japan	Shanghai	Korea
Higher Ed Enrollment	64.1%	92%	83%	27%	89%	61%	60%	97%
TIMSS	509	514	512	611	505		-	613
PISA	481, 498	519, 524	518, 523	573, 542	504, 512		613, 570	554, 536

While international comparisons have their limitations, clearly, these international comparisons point to opportunities for expanding our thinking in Maryland. The P-20 Task Force recommended piloting the best practices recommended by research and international models. In early September 2015, the P-20 Task Force Co-Chairs opened a dialogue with deans of education and local education agency superintendents to explore the possibility of pilot programs related to teacher preparation, induction, and professional development. Both deans and superintendents were receptive to the idea of pilot projects, and we recommend that MSDE explore opportunities for reallocating funds to fund pilot project in diverse locations across the state.

Focus Group of Maryland LEA Superintendents and Maryland's Education Deans

On September 1, 2015, the P-20 Teacher Preparation Task Force Co-Chairs convened an all-day focus group of seven deans of education (both public and private universities); eight local education area superintendents; one principal; and five teachers currently teaching in Maryland public schools (both traditionally trained and trained through alternative preparation

programs).² The purpose of the focus group was to open a dialogue between deans and superintendents that might lead to innovative, collaborative pilot projects.

The focus group addressed the following questions in a free-flowing and open discussion:

- Describe the ideal teacher preparation program. (What are the essential elements for the preparation and training of teachers?)
- What would need to change in current settings to get us closer to your vision? What would be the ideal relationship, in your opinion, between higher education and school systems? How can (or should) the higher education community contribute? What do teachers need most – and, is the need dependent on professional experience? Do new or novice teachers need different PD from experienced teachers? What should we do about that?
- Professional Development of current teachers: What would be the ideal relationship, in essential elements, for the preparation and training of teachers?
- Do you think superintendents and deans would be willing to work together to create a few pilots across the state in exchange for waivers or exceptions from specific regulations? What, specifically, might be areas of partnership or collaboration between IHEs and LEAs?

Discussion questions for conversation: P-12 Principals and Teachers and Education Deans:

- What are the greatest challenges to having enough quality mentors?
- What are the greatest challenges and opportunities for partnerships between IHEs and schools?
- How are professional development decisions made in your school? How are time and resources allocated?
- How would you create a career ladder for teachers other than the traditional route of having teachers move into administrative and supervisory roles?

Over the course of the day, a series of themes emerged that resonate with the themes of this report: the importance of high quality teacher preparation; the importance of high quality mentoring and professional development; the challenges of teacher recruitment, retention and screening; and the tight connections that must be established between public schools and educator preparation programs. The deans and superintendents universally praised the professional development school (PDS) model, but it became clear during the discussion that the PDS model needed to be redefined to become more flexible and more accessible.

Superintendents agreed that newly-hired teachers do not all arrive with the soft skills necessary for the job (i.e., organizational skills, collaboration skills, experience communicating with families, and cultural proficiency, including proficiency with "learning systems" and "high

² Full focus group report is in Appendix A

leverage practices").

A continuing concern of superintendents is that a large number of newly hired teachers have been trained in other states, and professional development for those teachers has been a huge burden.

All superintendents agreed that, like teachers in high performing systems, all teachers should be trained to use data and trained as researchers. All teachers need to understand the "what, how, and why" of student learning assessment.

Both deans and superintendents agreed that internships need to start before the third undergraduate year, and they should include early field experiences to give both the candidates and the university programs an opportunity to confirm candidates have dispositions for teaching.

Deans strongly endorsed the recommendation that induction should be a collaborative effort with schools spanning a three-year period, including the final academic year of internship and the first two years of employment as teachers. It was suggested that edTPA or other approved performance assessments be moved to the end of the first year of teaching rather than to the end of the teacher preparation program. This reaffirmed the recommendation that induction should be considered a collaborative part of a five-year teacher preparation sequence that extends from the sophomore or junior year of college to the tenure decision by the district at the conclusion of the third year of teaching.

Both deans and superintendents supported the idea of providing teachers time to mentor and to observe each other. This topic of career ladders for experienced educators was also raised in the discussion. Principals have used experienced teachers as mentors, but they have not had extensive experience or models that extend the mentor model beyond an "add on" to teacher workload. There was general interest in exploring the use of full-time coaches as a pilot project in some districts.

Deans and superintendents agreed that we need to develop a strategy for recruiting a diverse population of teachers. All districts are chasing the same limited population of teachers of color and/or teachers who speak languages other than English. The focus group participants recommended creating an active recruiting effort that would focus on under-represented populations. Broadening the recruitment efforts raised a question about entry-level standards: Should there be a wider opening and narrower back end to recruit more candidates and then ensure good training?

Having qualified teachers in every classroom can be a challenge. This raises the question: Are there ways that the teacher of record can oversee a teacher corps that works directly with students?

Alternative preparation programs were part of the discussion with the principals and

teachers. Maryland could benefit from policies that would create a way for alternative certification for academic core teachers that could mirror the idea of the adjunct professor. These teachers could teach specific courses such as foreign language and advanced mathematics and sciences. Also, MSDE should explore how technology can be leveraged to expand certification offerings. In both traditional and alternative programs there was agreement that better quality control is needed, but there was also an understanding that we need multiple ways to fulfill entry point requirements. Using GPA and national test scores solely as measures may exclude potential candidates with promise to be good teachers.

All participants felt there was an urgent need to find out what is driving teachers out or driving prospective teacher education students away from the major.

Special attention must be given to addressing the bureaucratic problems associated with special education that lead to teacher burnout and teacher turnover. Best practices, such as hiring secretaries to manage IEPs (Individual Education Plans for special education), reorganizing casework, and differentiated teacher roles, should be explored and considered. These could include master teachers who oversee work and success coaches, creating career ladders for teachers.

The discussion of career ladders included considering the medical school model of mentors and clinical professors coming from the teacher profession, and building a statewide cadre of master teachers to be shared by districts. (One superintendent shared an anecdotal observation: There is less teacher turnover at schools with high rates of mentorships.) Mentors would benefit from online training opportunities and refresher courses.

Participants agreed that higher education needs to be more involved in the first one- to two years of teaching – bridging the gap between college, induction, and professional development. Beginning teachers are only "3/4 baked" and need support during first two years or leading up to the tenure decision.

Suggestions for pilot projects included the development of a menu of options for continuing education for entering teachers with options for entry into master's programs and MSDE credit. Courses could be held in schools and focus on how to translate theory into the classroom.

Professional Development Schools

Many higher education and school leaders see professional development schools as a beneficial structure that lends both coherence and direction to the internship process, but critics raised concerns that current outdated PDS regulations impede innovation by reducing alternative structures and paths.

All participants wanted more evidence of the effectiveness of professional development schools in Maryland. Twenty years after the introduction of PDS, few studies offer insight into the effectiveness of the model with respect to student success or retention of teachers in the field. The PDS has not been examined to determine if certain elements such as mentoring, IHE engagement with the schools or professional development are the lynchpin for success or if the synergy of the process creates the impact for success. It is equally true that little is known about the variability of effectiveness across sites within a university network as well as across universities.

The group recommended that MSDE encourage universities to collaborate with local schools to design alternative PDS models. These proposals should include identifiable innovations and incorporate an evaluation component that compares the model with current PDS practices. A review process prior to implementation that includes schools, universities, and MSDE or an alternative independent group should be in place. Examples of this strategy exist in the proposed model developed by Baltimore County Schools in conjunction with Towson University. The model addresses the needs of the county, while providing Towson University an enhanced model of internship.

In the mid-term, selected data currently collected by universities to meet CAEP/NCATE requirements should be collected and analyzed across sites by an independent organization to offer comparable data reviews and inform universities of their current strengths and areas for improvement. Data from employers, teacher graduates, and mentors would be sources of data for this reporting as well as employment records.

In the long term, the Task Force should take this and other findings, including economic costs and benefits, into restructuring PDS models and guidelines. The goals of the restructuring should be clearly defined early in this process and include teacher retention, teacher professional development, and student learning.

PD schools need to focus on and reflect today's students who are currently sitting in Maryland's classrooms. They need to:

- Establish more diverse programs and good mentors;
- Train in well-functioning schools with diverse populations; and
- Have access to students in all areas of the university (e.g. nursing, social work) to offer wrap-around services.

At the conclusion of the focus group, deans at the higher education level and superintendents, teachers and principals at the K-12 level agreed that they would welcome an opportunity to apply for funding for pilot projects to address these shared goals.

Council for the Accreditation of Educator Preparation (CAEP) Accreditation

The CAEP accreditation standards call upon all educator preparation programs to create a culture of evidence to inform their work, and we strongly support this fundamental orientation. However, currently, neither the state nor individual institutions have the infrastructure to support that comprehensive data collection. The Task Force acknowledged that another group, the National Council of Teacher Quality (NCTQ), is attempting to usurp the regular accreditation process, but the P-20 Task Force categorically rejects the premise that NCTQ can replace national accreditation standards as accountability standards for Maryland teacher preparation programs.

The education deans recommended that MSDE appoint a study group to address the following issues with particular attention to effectiveness and efficiency of Maryland's CAEP agreement:

- Entry criteria (3.0 and consideration of SAT or ACT scores) with recommendations that accommodate Maryland's special relationship with community colleges through the AAT programs;
- Data collection, including employer surveys, measures of impact on student learning, and indicators of teacher effectiveness;
- Cost analysis and recommendations to address possible cost-sharing agreements with MSDE;
- Fairness with respect to accreditation of both EPPs and MAAPs; and
- Sampling as an acceptable method of data collection and analysis to allow for programlevel generalization back to the institution.

Recommendation for the Creation of an Implementation Group

Maryland has an opportunity to lead the nation in a reconsideration of teacher preparation and professional development that could lead to dramatic improvements in student learning and student success. Maryland is not only a "Race to the Top" state, Maryland is also a "First in the World" state, and together those two designations catapult Maryland to a position of national visibility and national leadership in public education P-20 -- from pre-school through college and career.

The co-chairs of the P-20 Teacher Preparation Task Force recommend the creation of an implementation group to be made up of stakeholders with an interest in the improvement of the teaching force, including: MSDE, P-12 local education agencies, and public and private twoand four-year institutes of higher education, to make recommendations that would lead to significant policy changes in:

• The program approval process for teacher preparation programs (redesign of teacher education) that would expand on the current PDS model to establish shared funding, responsibility, and accountability for preparation and induction;

- The allocation and uses of state and local professional development resources to support induction and career ladders; and
- Designated funding for pilot projects that would provide demonstration models and rigorous evaluation of scalable innovations in preparation, retention, professional development, and career ladders.

Pilot projects might propose some or all of the elements below:

- Re-examination of district human resource policies to see if they are effective in recruiting teachers who are high academic achievers; identifying and managing talent; and providing diverse and flexible career options as part of retaining "high achievers;"
- Proposals for federal and state legislation and grant programs that support new school staffing structures and leadership roles for teachers as well as advance teacher career paths;
- Proposals for policies that encourage higher education institutions to match the supply of prospective educators to demand and increase the selectivity of admissions policies to undergraduate and graduate programs for educators;
- Removal of barriers to the mobility of teachers between districts and states, as well as between careers inside and outside of education, by re-structuring teacher pension systems and making them more portable;
- Structures to incorporate teacher leadership roles into state licensure systems, and districts to recognize and deploy teachers in leadership positions and differentiated roles with appropriate credentials;
- Implementation of [state level] guidelines for standards-based assessment and teacher evaluation systems that create the groundwork for differentiated career paths and compensation systems;
- Re-thinking the one teacher/one classroom organization of schools to facilitate new staffing structures that differentiate roles of teachers and extend the reach of highly effective teachers;
- Re-structuring time, space, scheduling, and other support structures within schools to ensure all teachers have opportunities for collaboration, peer learning, and sharing of practice;
- Implementing shared leadership and collaborative structures between principals/administrators and teachers/teacher leaders, and encourage decision-making at lower levels of the organization with substantive teacher input;
- Encouraging collective responsibility by teachers for the success of their colleagues by promoting peer coaching and peer input into teacher evaluation;
- De-emphasizing seniority in the assignment of teachers to leadership roles and identifying highly effective teachers regardless of years of experience;
- Implementing flexible job structures that recognize the life and career cycles of teachers; such as sabbaticals, job-sharing, and part-time work;
- Taking advantage of technology in extending the reach of highly effective teachers through blended learning structures and promoting teacher

collaboration and professional development through social media and other technological tools; and

 Developing sustainable systems for teacher career advancement that are not dependent on one-time grants or discretionary state or federal funding streams.

Conclusion

Maryland has an opportunity to be a national leader in recruiting, preparing and keeping the highest quality teachers in public schools. Intensive work with stakeholder groups over the past two years has resulted in an assessment and analysis of national and international best practices as they relate to the Maryland context.

Furthermore, the current projection is that the federal government will release the final teacher preparation regulations in December 2015, and that they will call for states to rank and evaluate all teacher preparation programs and use "student learning" as a metric. As noted in JCR R00A02.55, new assessment data, such as the Partnership for Assessment of Readiness for College and Careers (PARCC) scores, will be released at various times this fall and early winter and will have two years of data on student achievement that will allow for a stronger evidence-based analysis.

Given the breadth and depth of the recommendations that have earned consensus and approval from a broad group of stakeholders, including K-12 leaders and teachers, higher education leaders, deans and faculty, teachers and teacher unions, and parents and public education policy makers, the co-chairs of the P-20 Teacher Education Task Force recommend that the legislature task MSDE and MHEC to prepare a cost analysis for the high priority recommendations offered in this report and make recommendations for the 2017-18 fiscal year for budget reallocations to support those recommendations that have the greatest evidence of high return on investment as defined by higher teacher retention and student achievement.

Furthermore, MSDE should establish an incentive fund for pilot projects and review evidence of progress on the key goals of recruiting and retaining high quality teachers in Maryland public schools, with the goal of improving student learning outcomes and increased college and career readiness. Funding incentives will not necessarily be completely dependent on new dollars. Rather, there are several opportunities for reallocation of current resources that should be considered:

- District-level and school-wide professional development funds: Current professional development funds in every district could be reallocated for new priorities and career ladder incentives.
- Quality Teacher Incentive Funds (QTI): Restructuring the QTI funding to include several different buckets, including, but not limited to:
 - Rewarding teachers for National Board Certification and/or teaching in the lowest performing schools;

- Creating competitive pilot projects to improve teacher retention and recruitment and using 2015 PARCC scores as baseline; and
- Establishing three-year cycles with flexibility for determining the actual measures as needed.
- Projected teacher retention savings: An "advance" on teacher retention savings, based on the estimate that PGCPS and Baltimore City alone spend \$42 million per year to attract and train replacement teachers (NCTAF, 2007).
- Improving Teacher Quality State Grants (ITQ): These grants, authorized by Title II, Part A of the No Child Left Behind Act of 2001, overseen by MHEC, support higher education to prepare quality teachers and principals.

A summary of the high priority recommendations found in this report is listed below:

Pre-Service Tenure Induction

Establish a 3-year residency model for all pre-tenured teachers that engages higher education teacher preparation programs in collaborative partnerships with school districts.

- Fund initial pilot Teaching Innovation Centers with state "seed" money and subsequently with savings from reduced teacher attrition.
- Create Professional Learning Networks built on a model of internships and residencies to increase the number and variety of field placements for teacher candidates.
- Increase the number and variety of field placements to promote adaptive expertise, with the final placement organized in a way that simulates what is expected in the first year of teaching.
- Prioritize in-state programs for field placements, internships, and post-baccalaureate residencies.

Professional Development for Current Teachers

Create effective, job-embedded professional development that is aligned with the needs of students and teachers.

- Establish a collaboratively-developed P-20 school/university partnership process for building professional development programs that meet individual teacher needs.
- Reallocate existing professional development funds to support collaboratively-developed models.

Continuous Improvement through Accountability

Align current Institutional Performance Criteria and Council for the Accreditation of Educator Preparation (CAEP) standards with Maryland's education priorities to ensure efficient and effective use of resources.

- Ensure that higher education institutions have access to all data necessary for continuous improvement research.
- Build Maryland accountability recommendations around the ideal conditions that contribute to the development of highly effective teachers and set a high bar for qualifications and expectations for all teacher preparation programs.

Career Ladder

Introduce career ladders that differentiate teachers based on experience and skill, and infuse more resources into teacher-shortage areas.

- Create and support mentoring programs for novice or struggling teachers that are designed by more experienced teachers.
- Introduce 11-month contracts for teachers allowing more time for greater leadership roles that could include writing curriculum and planning, facilitating professional development, or observing and giving feedback to other teachers.

Appendix A: Focus Group Report

P-20 Teacher Preparation Task Force Focus Group: Deans, Superintendent, Principals and Teachers September 1, 2015 10:00 a.m.-3:00 p.m. Carver Professional Development Center

Attendees:

Education Deans: Donna Wiseman (UMCP), Laurie Mullen (TU), Traki Taylor (BSU), Joshua Smith (Loyola), Deborah Kraft (Stevenson), Pat Welch (MSU), Gene Schaffer (UMBC) Superintendents: Kevin Maxwell (PGCPS); Henry Wagner (Dorchester); Kimberly Hill (Charles); John Fredericksen (Wicomico); Susan Brown (Harford); Heather Moorefield (Harford); Karen Salmon (MSDE); Renee Spence (PSSAM) Principals: Shantay McKinily (Baltimore City) Teachers: Heather Husk (SMCPS); Colleen Gill (SMCPS); Michelle Batten (AACPS); Casey Kirk (MSDE); Susannah Miragliuolo (Baltimore City) Facilitators: Jack Smith (MSDE); Nancy Shapiro (USM); Staff: Gail Hoerauf-Bennett (MSDE); Dewayne Morgan (USM); Stephanie Hall (USM)

All participants were given a set of questions in advance

Discussion questions for conversation: LEA Superintendents and Education Deans

- Describe the ideal teacher preparation program. (What are the essential elements for the preparation and training of teachers?)
- What would need to change in current settings to get us closer to your vision? What would be the ideal relationship, in your opinion between Higher Ed and School Systems? How can (or should) the higher education community contribute? What do teachers need most---and is the need dependent on professional experience? Do new or novice teachers need different PD from experienced teachers? What should we do about that?
- Professional Development of current teachers: What would be the ideal relationship, in essential elements, for the preparation and training of teachers?)
- Do you think superintendents and deans would be willing to work together to create a few pilots across the State in exchange for waivers or exceptions from specific regulations? What, specifically might be areas of partnership or collaboration between IHEs and LEAs?

Discussion questions for conversation: P-12 Principals & Teachers and Education Deans

- What are the greatest challenges to having enough quality mentors?
- What are the greatest challenges and opportunities for partnerships between IHEs and schools?
- How are professional development decisions made in your school? How are time and resources allocated?

• How would you create a career ladder for teachers other than the traditional route of having teachers move into administrative and supervisory roles?

Over the course of the day, a series of themes emerged:

- Knowledge and Skills Gained Through Teacher Training
- Mentoring and professional development
- Teacher retention and professional development
- Teacher Recruitment and Screening
- Teacher retention and professional development
- Professional development schools

Knowledge and Skills Gained Through Teacher Training:

Superintendents agreed that newly hired teachers do not all arrive with the soft skills necessary for the job (procedural things, collaboration skills, communication with families, cultural proficiency/ AKA "learning systems" AKA "high leverage practices"). A large number of newly hired teachers have been trained in other states.

All Superintendents agreed that all teachers should be trained to use data, trained as researchers (this is supported by what high performing systems are doing). Teachers need to arrive in schools understanding what, how, and why to assess.

LEAs need to define what all new teachers need to know and be able to do

- IHEs need to provide opportunities online and through MATs
- Hubs of Innovation where IHEs provide theory and abstract, working with LEAs to make it practical
- Make opportunities available to all areas of the State

Both deans and superintendents agreed that internships that start at the third year are problematic. The consensus was that all candidates should have early field experiences to give them and the university programs an opportunity to confirm they have dispositions for teaching.

Deans were strong supporters of the idea that induction should be a collaborative effort with schools, spanning the year of internship and the first two years of employment as teachers. One dean suggested that EdTPA or other approved performance assessments be moved to the end of the first year of teaching rather than the end of the teacher preparation program, reaffirming that induction should be considered a collaborative part of teacher preparation.

Can there be regional meetings with superintendents and education deans?

Mentoring:

Both deans and superintendents supported the idea of providing teachers time to mentor and time to observe each other, if resources were available. This topic was also raised in the discussion of career ladders for experienced educators. Principals have used experienced teachers as mentors, but they have not had extensive experience or models that extend the mentor model beyond an "add on" to teacher workload. Some school districts have full time coaches, but it is not a generalized practice in Maryland.

Teacher Recruitment and Screening:

All participants in the focus group expressed concern about the drop-off in numbers of students entering teacher preparation programs. The teacher shortages in the districts will be exacerbated by the lower enrollments in teacher preparation programs.

There is a need to develop a strategy for recruiting a diverse population of teachers. All districts are chasing the same limited population of teachers of color and/or teachers who speak languages other than English. The discussants recommended creating an active recruiting effort that would focus on some of the less represented populations. Should there be a wider opening and narrower back end to recruit more candidates and then ensure good training?

Having qualified teachers in every classroom can be a challenge. Are there ways that the teacher of record can oversee a teacher corps that works directly with students?

Alternative preparation programs were part of the discussion with the principals and teachers. Maryland needs a way for alternative certification for academic core teachers that could mirror the idea of the adjunct professor. These teachers could teach specific courses such as foreign language and advanced. Also, MSDE should explore hoe technology can be leveraged to expand certification offerings. In both traditional and alternative programs there was agreement that better quality control is needed, but also an understanding that we need multiple ways to fulfill entry point requirements. Using GPA and national test scores may end up excluding potential candidates with promise to be good teachers.

Clear indicators need to be set for:

- Entry into higher ed
- Entry into teacher ed
- Entry into practicum year
- Placement as a full time teacher
- Granting of tenure

Is there a correlation between Praxis scores and good teaching? Is Praxis I serving as a barrier to potentially good teachers gaining entry into the teaching profession?

We need to fully engage the community colleges (AAT) in recruitment/attraction efforts.

Teacher retention:

We need to find out what is driving teachers out or driving prospective teacher ed students away from the major.

We need to address the bureaucratic problems associated with special education that lead to teacher turnover. We should search for best practices such as hiring IEP secretaries and reorganizing the work. Could there be a different type of teacher, such as a case management specialist. (This could include teachers that are master teachers that oversee work and success coaches, creating career ladders for teachers.)

Consider differentiated levels of teaching (analogy to medical profession).

Build a master teacher statewide pipeline.

Anecdotally shared: Less turnover at schools with high rates of mentorships.

Higher ed needs to be more involved in the first 1-2 years of teaching – bridging the gap between college, induction and professional development. Beginning teachers are only "3/4 baked" and need support during first 2 years.

Mentors would benefit from online training opportunities and refresher courses.

There could be a menu of options for continuing education for entering teachers with options for entry into Master's programs and MSDE credit. Courses could be held in schools and focus on how to translate theory into the classroom.

Career ladders:

- Having the opportunity to mentor a teacher can change the mentor teacher's outlook
- Teachers should be offered leadership opportunities
- Teachers can serve as adjunct faculty to IHEs
- Master teachers can provide PD in their own and other counties
- Principals need to be trained to recognize teacher leadership talents

Professional Development Schools:

Professional Development Schools have been a signature element of Maryland's teacher preparation model. PDS's are defined by collaborations between IHE's and schools, but both deans and superintendents noted that PDS regulations need to be updated to accommodate different models, including broader geographic networks, virtual communities of practice, and alternative certification for career changers. In addition, the committee recommends a research study to assess the return on investment of PDS networks.

Twenty years after the introduction of PDS, few studies offer insight into the effectiveness of the model in terms of teacher intern success with students or retention in the field. The last study that was done, (Tom Proffitt, 2000) indicated that students trained in PDS schools were retained at a significantly higher rate than non-PDS trained teachers.³² The co-chairs of the P-20 Task Force on Teacher Preparation recommend that MSDE work with IHEs to systematically examine which elements and interventions lead to the greatest success for PDSs. Such a study would assess elements such as mentoring, job-embedded professional development and/or school leadership development with respect to teacher retention and student achievement.

Meanwhile, MSDE can invite K-12/ higher education pilot projects that expand the definition of the PDS. These pilot project proposals would incorporate an evaluation component that compares the innovation model with existing PDS practices. Examples of this strategy exist in the proposed model developed by Baltimore County Schools in conjunction with Towson University. The model addresses the needs of the county while providing Towson University an enhanced internship model.

In the mid-term, selected data currently collected by universities to meet CAEP/NCATE requirements should be collected and analyzed across sites by an independent organization to offer comparable data reviews and inform universities of their current strengths and areas for improvement. Data from employers, teacher graduates and mentors would be sources of data for this reporting as well as employment records.

In the long term, the taskforce should take this and other findings, including economic costs and benefits, into restructuring PDS models and guidelines. The goals of the restructuring should clearly defined early in this process and include teacher retention, teacher professional development, and student learning.

PD schools need to focus on and reflect today's students who are currently sitting in Maryland's classrooms

- Need more diverse programs and good mentors
- Need to train in well-functioning schools with diverse populations
- Schools should be able to access students in all areas of the university (e.g. nursing, social work) to offer wrap-around services

Follow up items:

- Send teacher prep report to all participants
- Send draft report to all participants
- Send meeting notes to all participants

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