Massachusetts' Next-Generation Accountability System

Summer 2018

MASSACHUSETTS DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION

AGENDA

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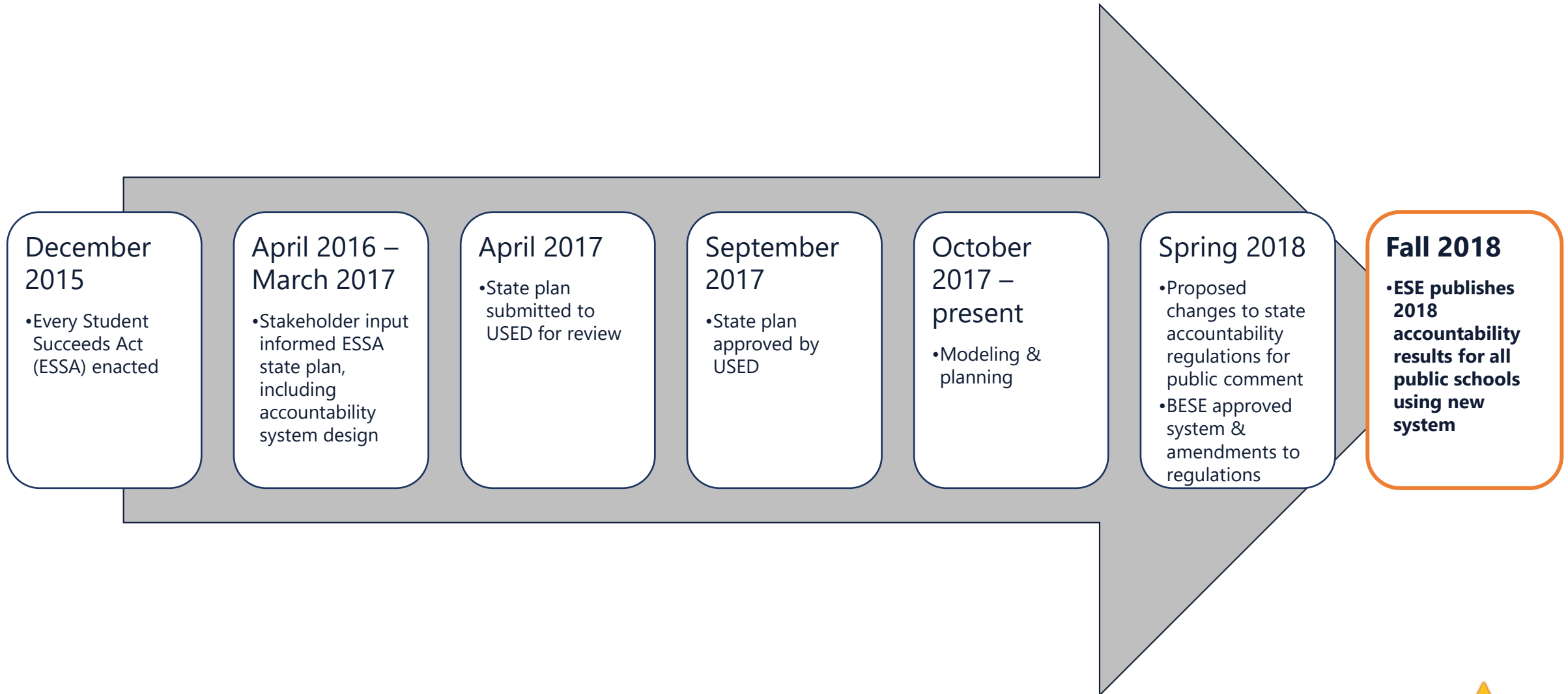9. Reporting

1 System highlights

System highlights

- Additional accountability indicators
  - Provide information about school performance & student opportunities beyond test scores

- Normative & criterion-referenced components
  - Accountability percentiles & progress toward targets

- Focus on raising the performance of each school's lowest performing students
  - In addition to the performance of the school as a whole

- Discontinuation of accountability & assistance levels 1-5
  - Replaced with accountability categories that define the progress that schools are making & the type of support they may receive from the Department

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Timeline & process

Timeline & process

December 2015
- Every Student Succeeds Act (ESSA) enacted

April 2016 – March 2017
- Stakeholder input informed ESSA state plan, including accountability system design

April 2017
- State plan submitted to USED for review

September 2017
- State plan approved by USED

October 2017 – present
- Modeling & planning

Spring 2018
- Proposed changes to state accountability regulations for public comment
- BESE approved system & amendments to regulations

Fall 2018
- **ESE publishes 2018 accountability results for all public schools using new system**

Timeline & process

- On June 26, 2018, the Board of Elementary & Secondary Education approved:
  - Proposed amendments to state accountability regulations
  - The framework for district & school accountability described in this presentation

3 Accountability indicators

Required accountability indicators

- ESSA requires states to include the following indicators in an accountability system
  - Academic achievement based on annual assessments in English language arts (ELA), math, & science
  - A measure of student growth or progress for elementary & middle schools
  - Graduation rates for high schools
  - Progress in achieving English proficiency for English learners
  - At least one measure of school quality or student success

Massachusetts' accountability indicators – non-high schools

Indicator	Measure
Achievement	• English language arts (ELA) average scaled score • Mathematics average scaled score • Science achievement (Composite Performance Index (CPI))
Student Growth	• ELA mean student growth percentile (SGP) • Mathematics mean SGP
English Language Proficiency	• Progress made by students towards attaining English language proficiency (percentage of students meeting annual targets required in order to attain English proficiency in six years)
Additional Indicator(s)	• Chronic absenteeism (percentage of students missing 10 percent or more of their days in membership)

Massachusetts' accountability indicators – high schools

Indicator	Measure
Achievement	• English language arts (ELA) achievement (Composite Performance Index (CPI)) • Mathematics achievement (CPI) • Science achievement (CPI)
Student Growth	• ELA mean student growth percentile (SGP) • Mathematics mean SGP
High School Completion	• Four-year cohort graduation rate • Extended engagement rate (five-year cohort graduation rate plus the percentage of students still enrolled) • Annual dropout rate
English Language Proficiency	• Progress made by students towards attaining English language proficiency (percentage of students meeting annual targets required in order to attain English proficiency in six years)
Additional Indicator(s)	• Chronic absenteeism (percentage of students missing 10 percent or more of their days in membership) • Percentage of 11th & 12th graders completing advanced coursework (Advanced Placement, International Baccalaureate, dual enrollment courses, &/or other selected rigorous courses)

English language proficiency indicator

- New indicator in 2018

- Set students on a non-linear path to achieving English language proficiency in six years

- Set targets for each English learner based on:
  - Starting point (initial ACCESS for ELLs assessment results);
  - Grade; &
  - Years in Massachusetts

- School & district performance will be measured based on the percentage of students meeting their targets each year

Accountability indicators

- Will use average scaled score for the science & high school test once all tests have transitioned to Next-Generation MCAS

- Accountability data may be negatively impacted by late or inaccurate district data submissions
  - Student Information Management System (SIMS)
    - Student enrollment/subgroup membership
    - Chronic absenteeism
  - Student Course Schedule (SCS)
    - Advanced coursework completion

4 Weighting of accountability indicators

Federal requirements

- "Substantial weight" on achievement, progress, EL proficiency, & graduation rate
  - Together, they must be given "much greater weight" than any measures of school quality or student success

Considerations for weighting achievement & growth

- The current ratio of achievement & growth is 3 (achievement) to 1 (growth)

- Impact of increasing weight of growth in system:
  - Could increase differentiation between similarly-achieving schools
  - Increases the value of a normative measure (there will always be a 1st percentile & a 99th percentile)
  - Decreases the value of grade 3 assessment results (no SGP for students in grade 3)
  - Decreases value of science assessment in system (no SGP for science)

Considerations for weighting achievement & growth

- All indicators need to be included in the weighting

- Progress towards English language proficiency only applies to a subset of schools, & weighting needs to be flexible

- Ratio between achievement & growth can be held constant between non-high schools & high schools but actual weightings will differ

- ESE intends to apply the same weighting rules to both the normative & criterion-referenced components of the system

- **For 2018 reporting, ESE will maintain the current ratio of achievement to growth (3:1)**

Proposed weighting of indicators in non-high schools

Indicator	Measures	Current Weighting 3:1	
		With ELL	No ELL
Achievement	• ELA, math, & science achievement values (based on scaled score)	60%	67.5%
Student Growth	• ELA/Math Student Growth Percentile (SGP)	20%	22.5%
English Language Proficiency	• Progress made by students towards attaining English language proficiency	10%	
Additional Indicators	• Chronic absenteeism	10%	10%

Proposed weighting of indicators in high schools & middle/high/K-12 schools

Indicator	Measures	Current Weighting 3:1	
		With ELL	**No ELL**
Achievement	• ELA, math, & science achievement	40%	47.5%
Student Growth	• ELA/Math Student Growth Percentile (SGP)	20%	22.5%
High School Completion	• Four-year cohort graduation rate • Extended engagement rate • Annual dropout rate	20%	20%
English Language Proficiency	• Progress made by students towards attaining English language proficiency	10%	
Additional Indicators	• Chronic absenteeism • Percentage of students completing advanced coursework	10%	10%

5 Normative component

Normative component – rationale

- Federal law (ESSA)
  - Requires states to identify the lowest performing 5 percent of schools as needing comprehensive support & intervention
  - Requires states to identify schools with low performing subgroups as needing targeted support & intervention

- State law
  - Requires that a school must be among the lowest performing 20 percent of schools statewide in order to be eligible for designation as "underperforming"

Normative component

- Accountability percentile 1-99, calculated using all available indicators for a school
- Compares schools administering similar statewide assessments
- Used to identify the lowest performing schools in the state
- Same calculation used at the subgroup level to identify low-performing subgroups

Comparisons

- Schools will be grouped & compared based on the assessment(s) administered in 2018
  - Non-high schools
    - Serving only a combination of grades 3-8
    - Administering only Next-Generation MCAS tests in ELA & math
  - Middle/high/K-12 schools
    - Serving grade 10 & at least one other grade 3-8
    - Administering a combination of Next-Generation & legacy MCAS tests in grades 3-8 & 10
  - High schools
    - Schools in which the only tested grade is grade 10
    - Administering only legacy MCAS tests
- Separate comparison categories will not be necessary once all grades/tests have transitioned to Next-Generation MCAS

Old vs. new percentiles

- 2018 accountability percentiles should not be compared to school percentiles from 2012-2017
  - Different comparison "universe"
  - Inclusion of additional indicators
  - Fewer years of data used in calculation

6 Criterion-referenced component

Criterion-referenced component – rationale

- Federal law (ESSA)
  - Requires states to establish ambitious long-term goals & measures of interim progress

- Perception
  - Accountability determination should not depend solely on the relative success of other schools

- Resource allocation
  - Accountability system built solely on a normative measure (percentile rank) may not sufficiently differentiate schools

Criterion-referenced component

- Focus on closing the achievement gap by raising the "achievement floor"
  - Gap-closing can occur as a result of a decline in performance by the high-performing group
- In addition to meeting targets for the school as a whole, the performance of the lowest performing students in each school will be measured
  - Every school has a group of lowest performers
  - Identified from cohort of students who were enrolled in the school for more than one year

Lowest performing students – cohort model

- For most schools serving grades 3-8, these students were:
  - Officially enrolled in current school for two consecutive years;
    - October 1, 2016 through October 1, 2017 (SIMS)
  - Tested in current school in 2017 & 2018; &
  - Not a first- or second-year English learner in 2018
- In schools where a legitimate cohort cannot be identified (fewer than 20 students), accountability results will be based on the performance of the "all students" group only

Lowest performing students – year-to-year approach

- In high schools, the cohort model cannot be used
- Improvement will be measured using a year-to-year approach based on students who were:
  - Officially enrolled in current school for two consecutive years;
    - October 1, 2016 through October 1, 2017 (SIMS)
  - Tested in grade 10 in current school in 2018, & attended grade 9 in the same school or district in 2017; &
  - Not a first- or second-year English learner in 2018
- In schools where a legitimate cohort cannot be identified (fewer than 20 students), accountability results will be based on the performance of the "all students" group only
- Same methodology will be applied to schools ending in grade 3

Identifying students in the lowest performing cohort

- Identified using a combined 2017 ELA & math average scaled score
- ESE will share each school & district's list via a secure dropbox
  - For 2018 accountability reporting, lists will be shared in spring 2018
  - For 2019 & beyond, lists can be shared earlier (e.g., in the fall)

Criterion-referenced component

- Targets set for each accountability indicator, for the school as a whole & for the lowest performing students in each school

Indicator	Non-high schools		High schools & middle/high/K-12 schools	
	All students	Lowest performing students	All students	Lowest performing students
ELA scaled score	✓	✓	✓	✓
Math scaled score	✓	✓	✓	✓
Science achievement	✓		✓	✓
ELA SGP	✓	✓	✓	✓
Math SGP	✓	✓	✓	✓
Four-year cohort graduation rate	N/A	N/A	✓	
Extended engagement rate	N/A	N/A	✓	
Annual dropout rate	N/A	N/A	✓	
EL progress	✓		✓	
Chronic absenteeism	✓	✓	✓	✓
Advanced coursework completion	N/A	N/A	✓	

*Minimum group size for each indicator = 20 students

Setting targets

- For 2018 reporting, targets will only be set for one year
    - Long-term targets will be set in the future
- Targets for achievement indicators will be based on the assessment performance of schools that have demonstrated improvement in the past
    - For example, the average improvement of "improvers" on MCAS
- Targets for non-assessment indicators will be based on analysis of past trends & reasonable expectations for improvement

Criterion-referenced component

- Points assigned based on progress toward target for each indicator, for both the aggregate & the lowest performing students

Declined	No change	Improved	Met target	Exceeded target
0	1	2	3	4

Criterion-referenced component calculation – non-high school

Indicator	All students (50%)			Lowest performing students (50%)		
	Points earned	**Total possible points**	**Weight**	**Points earned**	**Total possible points**	**Weight**
ELA scaled score	3	4	-	2	4	-
Math scaled score	2	4	-	2	4	-
Science achievement	2	4	-	-	-	-
Achievement total	**7**	12	60%	**4**	8	67.5%
ELA SGP	4	4	-	4	4	-
Math SGP	3	4	-	4	4	-
Growth total	**7**	8	20%	**8**	8	22.5%
EL progress	**2**	4	10%	**-**	-	-
Chronic absenteeism	**3**	4	10%	**4**	4	10%
Weighted total	**6.1**	9.6	-	**4.9**	7.6	-
Percentage of possible points	**63.5%**		-	**64.5%**		-
Criterion-referenced target percentage	**64%**					

Criterion-referenced component calculation – high school

Indicator	All students (50%)			Lowest performing students (50%)		
	Points earned	**Total possible points**	**Weight**	**Points earned**	**Total possible points**	**Weight**
ELA achievement	3	4	-	2	4	-
Math achievement	2	4	-	2	4	-
Science achievement	2	4	-	1	4	-
Achievement total	**7**	12	40%	**5**	12	67.5%
ELA SGP	4	4	-	4	4	-
Math SGP	3	4	-	4	4	-
Growth total	**7**	8	20%	**8**	8	22.5%
Four-year cohort graduation rate	3	4	-	-	-	-
Extended engagement rate	4	4	-	-	-	-
Annual dropout rate	3	4	-	-	-	-
High school completion total	**10**	12	20%	**-**	-	-
EL progress	**2**	4	10%	**-**	-	-
Chronic absenteeism	3	4	-	4	4	-
Advanced coursework completion	3	4	-	-	-	-
Additional indicators total	**6**	8	10%	**4**	4	10%
Weighted total	**7.0**	10.0	-	**5.6**	10.3	-
Percentage of possible points	**70.0%**		-	**54.1%**		-
Criterion-referenced target percentage	**62%**					

7 Categorization of schools

Categorization of schools

- Schools will no longer be placed in a vertical hierarchy of levels 1-5
- Number of schools that will be placed into a category based upon a relative standing will be cut in half from previous system
  - Approximately 90 percent of schools could be categorized based on their own performance against targets
- Most schools will have 50 percent of its categorization based on students that have been in the school for at least two years
- Category labels are primarily tied to the level of required assistance or intervention
- Stronger emphasis on schools commended for success

Categorization of schools

	Schools without required assistance or intervention (approx. 85%)		Schools requiring assistance or intervention (approx. 15%)	
Schools of recognition	**Meeting targets**	**Partially meeting targets**	**Focused/targeted support**	**Broad/ comprehensive support**
Schools demonstrating high achievement, significant improvement, or high growth	Criterion-referenced target percentage 75-100	Criterion-referenced target percentage 0-74	•Non-comprehensive support schools with percentiles 1-10 •Schools with low graduation rate •Schools with low performing subgroups •Schools with low participation	•Underperforming schools •Chronically underperforming schools

> **2018:** Performance against targets reported in 2 categories (meeting & partially meeting
> **2019:** Performance against targets reported in 3 categories (meeting, partially meeting, & not meeting)

Notes:
•School percentiles & performance against targets will be reported for all schools

Categorization of schools

- Current Level 4 & Level 5 schools will be classified as underperforming or chronically underperforming until an exit decision is made by the Commissioner

- Schools ending in grade 3 will be classified based on criterion-referenced component only
  - No student growth, therefore no accountability percentile

- Schools with no tested grades will be classified as "insufficient data"

- Schools with low assessment participation (below 95 percent) will be classified as needing focused/targeted support
  - By subgroup & by subject
  - Using a two-year participation rate average

Categorization of schools – non-high school examples

Non-high school #1

Accountability percentile	16
Criterion-referenced target percentage	51%
Participation rates	>95%
Low-performing subgroups	0
Accountability determination: **Partially meeting targets**	

Non-high school #2

Accountability percentile	31
Criterion-referenced target percentage	66%
Participation rates	>95%
Low-performing subgroups	1
Accountability determination: **Focused/targeted support**	

Categorization of schools – high school examples

High school #1

Accountability percentile	42
Criterion-referenced target percentage	75%
Participation rates	>95%
Low-performing subgroups	0
Graduation rate	66%
Accountability determination: **Focused/targeted support**	

High school #2

Accountability percentile	12
Criterion-referenced target percentage	76%
Participation rates	>95%
Low-performing subgroups	0
Graduation rate	70%
Accountability determination: **Meeting targets**	

8 Categorization of districts

Categorization of districts

- Districts will be classified based on the performance of the district as a whole
  - No longer categorized based on performance of lowest performing school
- District accountability percentiles will not be calculated
- Classified based on criterion-referenced component
  - Adjustments made for low graduation rates & low assessment participation
- Board may designate a district as underperforming or chronically underperforming

Categorization of districts

Districts without required assistance or intervention		**Districts requiring assistance or intervention**	
Meeting targets	**Partially meeting targets**	**Focused/targeted support**	**Broad/ comprehensive support**
Criterion-referenced target percentage 75-100	Criterion-referenced target percentage 0-74	•Districts with low graduation rate •Districts with low participation	•Underperforming districts •Chronically underperforming districts

> **2018:** Performance against targets reported in 2 categories (meeting & partially meeting
> **2019:** Performance against targets reported in 3 categories (meeting, partially meeting, & not meeting)

Notes:
•Performance against targets will be reported for all districts

9 Reporting

Accountability reports

- Accountability reports published for each district & school (fall 2018)

- Reports will include:
  - Overall classification
    - Including reason(s) for classification (e.g., low graduation rate, low-performing subgroup)
  - Criterion-referenced target percentage
  - Accountability percentile (schools only)
  - Data related to performance on each accountability indicator for each subgroup meeting the minimum group size (20 students)
    - All students
    - Lowest-performing students
    - High needs students
    - English learners
    - Students with disabilities
    - Economically disadvantaged students
    - Major racial/ethnic subgroups

District & school report cards

- ESE will publish redesigned district & school report cards in late fall 2018
- Will include measures of performance/opportunity beyond assessment & accountability results
  - Discipline rates
  - Availability of art education
  - Educator data
  - Grade 9 course-passing
  - Per-pupil expenditures

Thank you!

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