Title:	**Incorporating Student Growth into Statewide Accountability Systems**	
As Related To:	☐ Goal One: Advocate for effective and accountable P-13 governance in public education ☒ Goal Two: Provide policy leadership for closing the academic achievement gap ☐ Goal Three: Provide policy leadership to strengthen students' transitions within the P-13 system	☐ Goal Four: Promote effective strategies to make Washington's students nationally and internationally competitive in math and science ☐ Goal Five: Advocate for policies to develop the most highly effective K-12 teacher and leader workforce in the nation ☒ Other
Relevant To Board Roles:	☒ Policy Leadership ☒ System Oversight ☒ Advocacy	☒ Communication ☒ Convening and Facilitating
Policy Considerations / Key Questions:	There are several critical issues for SBE to consider when designing the new Washington Achievement Index and accountability system. 1. What is student growth data, and how should it be incorporated into the new Index? 2. What are best practices for building stakeholder engagement regarding accountability systems and student growth? 3. What should be considered when making decisions about using the Index and the new Annual Measurable Objectives to identify schools in need of intervention? 4. What should Washington consider, related to student growth, when transitioning to new assessments (Smarter Balanced Assessment Consortium)?	
Possible Board Action:	☒ Review ☐ Adopt ☐ Approve ☐ Other	
Materials Included in Packet:	☒ Memo ☐ Graphs / Graphics ☐ Third-Party Materials ☐ PowerPoint	
Synopsis:	OSPI will begin to calculate student growth percentile data using the Colorado Growth Model this summer. Building-level data will be available by fall 2012, for inclusion in a new draft Achievement Index aligned with ESEA flexibility principles. Richard Wenning was invited to present as a national expert on the design and implementation of education accountability and performance management systems. He served until June 2011 as the Associate Commissioner of the Colorado Department of Education and led its Office of Performance and Policy. While there, Richard led public policy development resulting in enacted statutes for standards and assessments, education accountability, and educator effectiveness. He also led the design and implementation of Colorado's new education accountability system, including the SchoolView® data system and Colorado Growth Model. Dr. Wenning serves as a peer reviewer for the US Department of Education in the ESEA Flexibility request process.	

Accountability 2.0
Next-Generation Design & Performance

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www.schoolview.org

OVERVIEW

- Accountability 2.0
- Understanding school performance
- Importance of coherent & collaborative design
- Differentiated accountability and support
- Policy considerations

Accountability Complexity

- Accountability for educator effectiveness now layered onto systems for student, school, district, state & federal accountability
- Better when these multiple layers are aligned to support the business we are in

3

Our Business

- Maximize student progress toward & attainment of college and career readiness
  - Bright line: **all kids ready by exit**
  - Requires a definition of readiness & the content & performance standards leading there
  - Requires measurement system that determines how well students are progressing toward & reaching the destination

4

Policy Perspective on Growth

- **Why is measuring student growth so important?**
  - NCLB (Accountability 1.0) had right intent but…
    - AYP metric not useful for school performance management
    - Incentives focused on short-term increases in percent proficient, on "bubble" kids, invited moral hazard
    - Instead of long-term effectiveness and progress for all kids toward college & career readiness
  - ESEA waivers & design of educator effectiveness systems provides opportunity to get the measures & incentives right

5

Next Generation Performance

- Dramatic, not incremental improvements required for students that need to catch up to become college & career ready (CCR)
  - **From a system where most students that start behind stay behind to a system where most catch up**
- Implies that our accountability systems should provide information that fuels a consensus for change & capacity for improvement

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Desired System: Accountability 2.0

- Coherent system focused on learning and building performance management capacity at all levels
  - Student, educator, school, district, state and federal
  - Maximize local ownership of high quality information to drive insight and action
- We should ensure educator effectiveness system design not stuck in Accountability 1.0
  - But is that where we are heading?

7

Consequential Validity

- Henry Braun (2008)
  - *Assessment practices and systems of accountability are consequentially valid if they generate useful information and constructive responses that support one or more policy goals without causing undue deterioration with respect to other goals.*

8

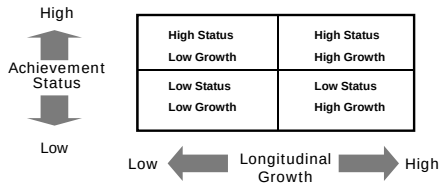
Marshaling a Consensus for Change

There is a difference between retrospectively identifying fault and blame-worthiness and a prospective strategy for corrective actions and building a consensus for a vision of change.

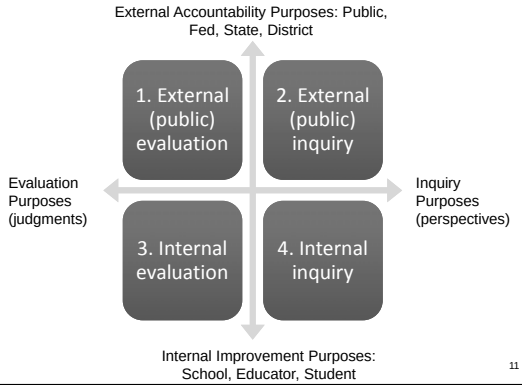
Christopher Edley (2006)

9

Understanding Performance



Coherent Design Serves Multiple Purposes



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What Models?

- What statistical models of longitudinal student growth will promote the most coherence and alignment in our accountability system?

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Questions Set the Table

- Growth models address specific questions
  - Different techniques are good at answering different questions
  - Different questions lead to different conversations which lead to different uses and outcomes
  - Starting with the right questions simplifies development and motivates the proper use of the growth model results

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Some Framing Ideas

- *We understand best those things we see emerge from their very beginnings.*

  --Aristotle
- *All Models are wrong but some are useful.*

  --George E. P. Box
- *It is better to have an approximate answer to the right question than a precise answer to the wrong question.*

  --John Tukey

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Ed Effectiveness Policy Questions

- Answers to policy questions about purpose, values, use, and desired impact should shape the SEA's design approach and selection of technical solutions
  - Rather than the other way around, which seems to be happening quite a bit

Some Key Policy Questions

- What questions do we want to answer about growth rates of students associated with educators?
  - Normative and criterion-referenced growth?
  - Individual and collective attribution?
- How many categories of effectiveness and ineffectiveness are important and which are consequential?
- What body of evidence will be combined to infer educator effectiveness individually and collectively?
  - How will evidence be weighted and combined and by whom?
  - How will stakeholders be involved in reviewing simulations of options?
- How will evidence about educator effectiveness be communicated to the public and what is its connection to information received by parents about their students' and schools' performance?

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How much growth did a student make and is it good enough?

- **Describing** growth versus **ascribing** responsibility
  - The Colorado Growth Model began by separating the description of growth from discussions of responsibility/ accountability
  - Incorporating growth into accountability followed from the accepted description of growth
  - The description of growth facilitated stakeholder engagement and investigations of responsibility for good/bad growth
  - That in turn led to greater stakeholder support

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Describing Student Growth

- Discussing student growth, even with a vertical scale, is not a simple task
- Growth and change require context. Consider, for example, height:
  - A child might grow 4 inches between ages 3 and 4
    - 4 inches is a well understood quantity
  - The 4 inch increase becomes meaningful only when understood alongside the growth of other 3 to 4 year olds
- Student growth percentiles were developed to provide a norm-referenced basis for describing student growth

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Who/What is Responsible for Student Growth?

- Some analyses of student growth attempt to determine the amount of student progress that can be attributed to the school or teacher
  - Called value-added analyses, these techniques attempt to estimate the teacher/school contribution to student academic growth
- Value added is an inference – a causal conclusion drawn from the data
- All growth models can be used for value-added purposes

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Colorado Growth Model Asks…

What is?	⇨	How much growth did a child make in one year?
What should be?	⇨	How much growth is enough to reach college & career readiness?
What could be?	⇨	How much growth have other students made with the same starting point?

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Student Growth Percentiles

- Should we be surprised with a child's current achievement given their prior achievement?
  - Student growth percentiles answer this question
- Consider a low achieving student with 90th percentile growth and a high achieving student with 10th percentile growth
  - The low achieving student grew at a rate exceeding 90 percent of similar students
  - The high achieving student grew at a rate exceeding just 10 percent of similar students
  - The low achiever's growth is more exemplary than the high achiever's
- Judgments about the adequacy of student growth require external criteria together with standard setting

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Establishing Growth Standards Based Upon Growth Norms

- The most common adequacy criterion is judging growth toward an achievement goal (i.e., growth-to-standard)
- Results from student growth percentile analyses can be used to calculate growth trajectories for each student
- These trajectories indicate what future rates of growth will lead to and are used to make adequacy judgments
- This growth-to-standard approach was approved as part of Colorado's successful application to the Growth Model Pilot Program and ESEA Flexibility Request

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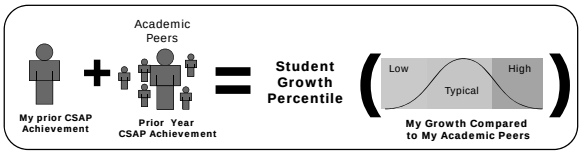
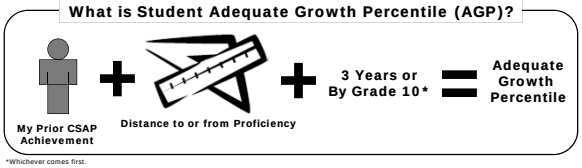
Understanding Student Growth Percentiles





*Whichever comes first.

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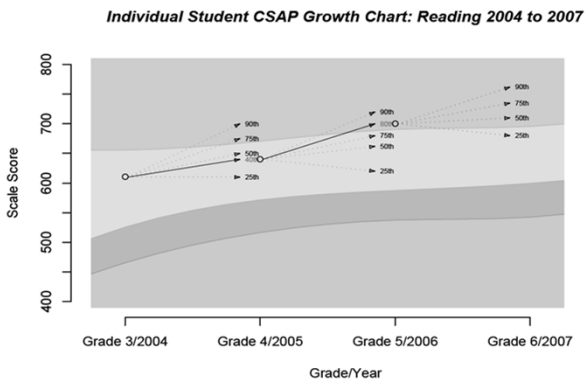
Development of Student Growth Percentiles

- The SGP methodology (The Colorado Growth Model) was developed by the Colorado Department of Education in partnership with Dr. Damian Betebenner of the Center for Assessment and made available for free to public and private entities
  - Available on http://cran.r-project.org/
  - Creative Commons-Share Alike-Attribution-Commercial Use License
- The SchoolView® and R-based visualizations of SGPs can be used for free for public purposes and cannot be used for commercial purposes
  - Creative Commons–Share Alike-Attribution-Noncommercial License



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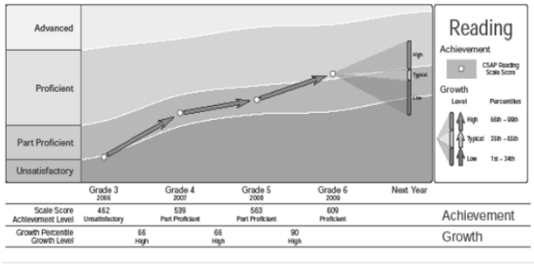
One Student's Growth Percentiles



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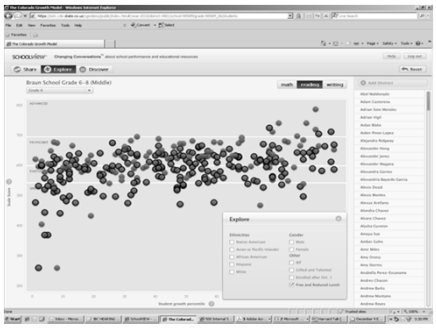
Students in a Grade in a School



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Views of Schools within a District

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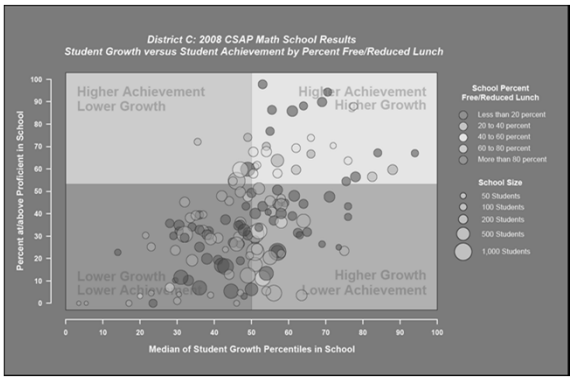

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View of Districts

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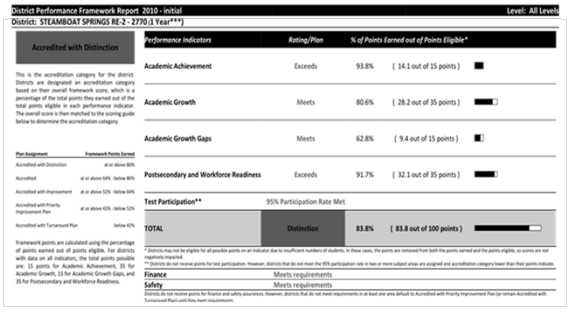


District Performance Framework Report 2010 - initial — Level: All Levels

District: STEAMBOAT SPRINGS RE-2 - 2770 (1 Year***)

Accredited with Distinction

This is the accreditation category for the district. Districts are designated an accreditation category based on their overall framework score, which is a percentage of the total points they earned out of the total points eligible in each performance indicator. The overall score is then matched to the scoring guide below to determine the accreditation category.

Plan Assignment	Framework Points Earned
Accredited with Distinction	at or above 80%
Accredited	at or above 64% - below 80%
Accredited with Improvement	at or above 52% - below 64%
Accredited with Priority Improvement Plan	at or above 42% - below 52%
Accredited with Turnaround Plan	below 42%

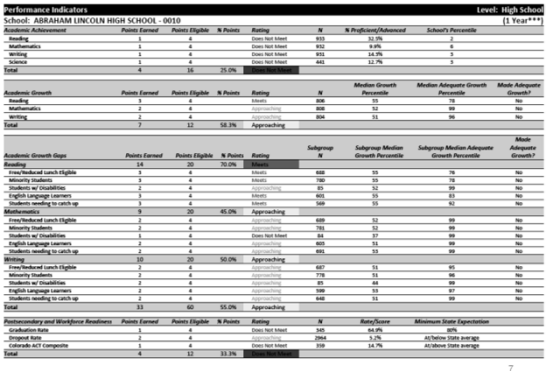
Framework points are calculated using the percentage of points earned out of points eligible. For districts with data on all indicators, the total points possible are: 15 points for Academic Achievement, 35 for Academic Growth, 15 for Academic Growth Gaps, and 35 for Postsecondary and Workforce Readiness.

Performance Indicators	Rating/Plan	% of Points Earned out of Points Eligible*	
Academic Achievement	Exceeds	93.8%	(14.1 out of 15 points)
Academic Growth	Meets	80.6%	(28.2 out of 35 points)
Academic Growth Gaps	Meets	62.8%	(9.4 out of 15 points)
Postsecondary and Workforce Readiness	Exceeds	91.7%	(32.1 out of 35 points)
Test Participation**	95% Participation Rate Met		
TOTAL	Distinction	83.8%	(83.8 out of 100 points)

* Districts may not be eligible for all possible points on an indicator due to insufficient numbers of students. In these cases, the points are removed from both the points earned and the points eligible, so scores are not negatively impacted.
** Districts do not receive points for test participation. However, districts that do not meet the 95% participation rate in two or more subject areas are assigned one accreditation category lower than their points indicate.

Finance	Meets requirements
Safety	Meets requirements

Districts do not receive points for finance and safety assurances. However, districts that do not meet requirements in at least one area default to Accredited with Priority Improvement Plan (or remain Accredited with Turnaround Plan) until they meet requirements.



Performance Indicators — Level: High School

School: ABRAHAM LINCOLN HIGH SCHOOL - 0010 — [1 Year***]

Academic Achievement	Points Earned	Points Eligible	% Points	Rating	N	% Proficient/Advanced	School's Percentile
Reading	1	4		Does Not Meet	933	32.9%	2
Mathematics	1	4		Does Not Meet	932	9.8%	6
Writing	1	4		Does Not Meet	931	14.3%	3
Science	1	4		Does Not Meet	441	12.7%	3
Total	4	16	25.0%	Does Not Meet			

Academic Growth	Points Earned	Points Eligible	% Points	Rating	N	Median Growth Percentile	Median Adequate Growth Percentile	Made Adequate Growth?
Reading	3	4		Meets	806	55	78	No
Mathematics	2	4		Approaching	808	52	99	No
Writing	2	4		Approaching	804	51	96	No
Total	7	12	58.3%	Approaching				

Academic Growth Gaps	Points Earned	Points Eligible	% Points	Rating	Subgroup N	Subgroup Median Growth Percentile	Subgroup Median Adequate Growth Percentile	Made Adequate Growth?
Reading	1.6	20	70.0%	Meets				
Free/Reduced Lunch Eligible	3	4		Meets	668	55	76	No
Minority Students	3	4		Meets	780	55	78	No
Students w/ Disabilities	2	4		Approaching	85	52	99	No
English Language Learners	3	4		Meets	601	55	83	No
Students needing to catch up	3	4		Meets	569	55	82	No
Mathematics	9	20	45.0%	Approaching				
Free/Reduced Lunch Eligible	2	4		Approaching	689	52	99	No
Minority Students	2	4		Approaching	781	52	99	No
Students w/ Disabilities	1	4		Does Not Meet	84	37	99	No
English Language Learners	2	4		Approaching	605	51	99	No
Students needing to catch up	2	4		Approaching	691	55	99	No
Writing	10	20	50.0%	Approaching				
Free/Reduced Lunch Eligible	2	4		Approaching	687	51	95	No
Minority Students	2	4		Approaching	778	51	96	No
Students w/ Disabilities	2	4		Approaching	85	44	99	No
English Language Learners	2	4		Approaching	599	53	97	No
Students needing to catch up	2	4		Approaching	640	51	99	No
Total	33	60	55.0%	Approaching				

Postsecondary and Workforce Readiness	Points Earned	Points Eligible	% Points	Rating	N	Rate/Score	Minimum State Expectation
Graduation Rate	1	4		Does Not Meet	545	64.9%	80%
Dropout Rate	2	4		Approaching	2964	5.2%	At/Below State Average
Colorado ACT Composite	1	4		Does Not Meet	359	14.7%	At/Above State Average
Total	4	12	33.3%	Does Not Meet			

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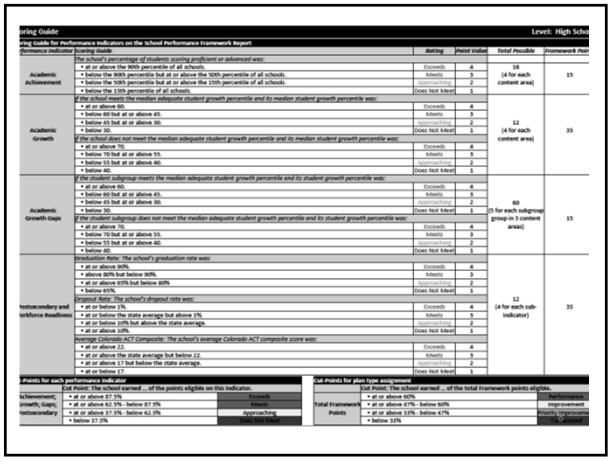
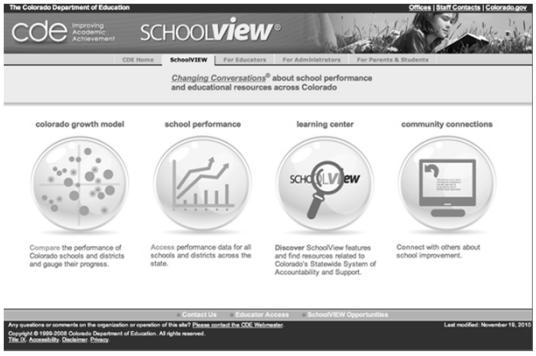


Scoring Guide					Level: High Schools
Performance Indicators on the School Performance Framework Report					
Performance Indicator	Scoring Guide	Rating	Point Value	Total Possible	Framework Points
Academic Achievement	The school's percentage of students scoring proficient or advanced was:				
	• at or above the 90th percentile of all schools.	Exceeds	4	16 (4 for each content area)	15
	• below the 90th percentile but at or above the 50th percentile of all schools.	Meets	3		
	• below the 50th percentile but at or above the 15th percentile of all schools.	Approaching	2		
	• below the 15th percentile of all schools.	Does Not Meet	1		
Academic Growth	If the school meets the median adequate student growth percentile and its median student growth percentile was:				
	• at or above 60.	Exceeds	4	12 (4 for each content area)	35
	• below 60 but at or above 45.	Meets	3		
	• below 45 but at or above 30.	Approaching	2		
	• below 30.	Does Not Meet	1		
	If the school does not meet the median adequate student growth percentile and its median student growth percentile was:				
	• at or above 70.	Exceeds	4		
	• below 70 but at or above 55.	Meets	3		
	• below 55 but at or above 40.	Approaching	2		
	• below 40.	Does Not Meet	1		
Academic Growth Gaps	If the student subgroup meets the median adequate student growth percentile and its student growth percentile was:				
	• at or above 60.	Exceeds	4	60 (5 for each subgroup group in 3 content areas)	15
	• below 60 but at or above 45.	Meets	3		
	• below 45 but at or above 30.	Approaching	2		
	• below 30.	Does Not Meet	1		
	If the student subgroup does not meet the median adequate student growth percentile and its student growth percentile was:				
	• at or above 70.	Exceeds	4		
	• below 70 but at or above 55.	Meets	3		
	• below 55 but at or above 40.	Approaching	2		
	• below 40.	Does Not Meet	1		
Postsecondary and Workforce Readiness	Graduation Rate: The school's graduation rate was:				
	• at or above 90%.	Exceeds	4	12 (4 for each sub-indicator)	35
	• above 80% but below 90%.	Meets	3		
	• at or above 65% but below 80%	Approaching	2		
	• below 65%.	Does Not Meet	1		
	Dropout Rate: The school's dropout rate was:				
	• at or below 1%.	Exceeds	4		
	• at or below the state average but above 1%.	Meets	3		
	• at or below 10% but above the state average.	Approaching	2		
	• at or above 10%.	Does Not Meet	1		
	Average Colorado ACT Composite: The school's average Colorado ACT composite score was:				
	• at or above 22.	Exceeds	4		
	• at or above the state average but below 22.	Meets	3		
	• at or above 17 but below the state average.	Approaching	2		
	• at or below 17.	Does Not Meet	1		

Points for each performance indicator	Cut Point: The school earned ... of the points eligible on this indicator.	
Achievement, Growth, Gaps, Postsecondary	• at or above 87.5%	Exceeds
	• at or above 62.5% - below 87.5%	Meets
	• at or above 37.5% - below 62.5%	Approaching
	• below 37.5%	Does Not Meet

Cut Points for plan type assignment	Cut Point: The school earned ... of the total framework points eligible.	
Total Framework Points	• at or above 60%	Performance
	• at or above 47% - below 60%	Improvement
	• at or above 33% - below 47%	Priority Improvement
	• below 33%	Turnaround



17 States with MOU

- 17 states have signed MOU to use the Student Growth Percentile methodology and SchoolView® display tools:
  - Arizona, Colorado, Georgia, Idaho, Indiana, Kansas, Massachusetts, Missouri, Nevada, New Hampshire, New York, Oregon, Rhode Island, Virginia, Washington, West Virginia, Wisconsin
  - Creative Commons-Attribution-Share Alike-Noncommercial Use http://creativecommons.org/licenses/

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Differentiated Accountability & Support - Key Components

1. Key Performance Indicators
2. Multi-Measure Framework
3. Incentives for Change & Innovation
4. Unified Planning Process
5. Service Mix & Delivery
6. Evaluation & Validation
7. Rollout Strategy - Communications, Stakeholder Engagement, Training

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Key Performance Indicators (KPIs)

- Establish KPI's and a multi-measure performance framework used for District, School, and educator accountability purposes.
  - Growth, Status, College & Career Readiness, Gaps & others…

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Multi-Measure Framework

- Develop a multi-measure framework with measures, metrics, and targets for each big indicator
  - **Use the framework evidence to identify schools for Reward, Focus, Priority & other state categories**
- Balance normative and criterion-referenced growth & status evidence
  - Take note of variance in state assessment cutpoints by subject
  - Consider different normative & criterion-referenced weightings for teacher, school, district, state purposes

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Multi-Measure Framework, cont.

At least two functions:

- **Improvement** - diagnostic feedback to support a solid planning process
- **Accountability** - summative evaluation with a set of performance categories that describe overall performance across KPIs & signal rewards (money, autonomy) and consequences (intervention)

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Incentives for Change and Innovation

Rewards, sanctions, and disclosure

- Recognition and financial awards for high growth schools & incentives to replicate
- State authority to close schools
- Public access to engaging, insightful information about student, school, district & state performance
  - Shine light on best, worst by demographics and type of school & encourage productive social collaboration

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Planning Process

- Develop a unified planning process based on the feedback from the multi-measure framework
  - Requires a robust qualitative review component
- Promote focused statewide inquiry into evidence, root causes, planning, and improvement

41

Service Mix

- Determine the differentiated service mix for tiers of schools based on the performance categories
  - Key support for all tiers is building solid district, school, educator performance management capacity (incorporates standards and assessments & cuts across federal program silos)
  - Service mix for middle tier?
  - Intervention mix for Gap schools? Measures matter a great deal in diagnosing the problem (status vs. growth gaps)
  - Intensive intervention for bottom 5% (Transformation, Turnaround, Replacement – consider grade span)

42

Service Delivery Strategy

- Role of SEA central (delivery across silos)
  - Regardless of local control context, foundation is quantitative & qualitative review of performance & practice with a consistent planning & evaluation process
- Role of regional delivery structures (education service agencies)?
- Role of Third Parties (EMOs, CMOs, Consultants) & SEA due diligence?

43

Evaluation Strategy

- Multi-measure framework, implementation benchmarks, qualitative reviews provide formative & summative feedback on success of support & interventions
- Key validation of measures:
  - extent of regular, constructive, and coherent use in discourse & practice across system levels
  - observed improvement in what different growth rates obtain in proficiency and CCR @ exit
- Establish a third-party evaluation process to compliment internal review of evidence

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Rollout Strategy Considerations

- Plan to bring all stakeholders along, establishing ownership, setting expectations that the SEA & they can deliver on
- Rollout of evidence: Is there time for sequence of no, low, then high stakes implementation?
- Sequence of statewide & local communications & training

45