

WERA
December 8, 2011

Understanding the Achievement (Accountability) Index

Pete Bylsma, Renton School District

Kathryn Sprigg, Highline School District

Sarah Rich, State Board of Education

Topics Covered

1. Why the Index was created
2. Index components (outcomes, indicators, benchmarks, ratings)
3. Business rules and formulas for computing the Index
4. Criteria used by State Board and OSPI for recognition purposes
5. Analyses of the Index results
6. Examples of how the Index is being used
7. State Board involvement
8. What comes next?

Accountability Systems

Educational accountability systems require several components:

- (1) measures of effectiveness
- (2) goals to guide improvement efforts
- (3) reports that provide useful information to policymakers, educators, and parents
- (4) a set of consequences that recognize exemplary performance and support those needing more help

Current Accountability System

New AYP system started in 2002, state system in place at that time was discarded

- 9 student groups, reading/math proficiency and participation, graduation rate
- 37 “cells” possible for schools, 111 for district
- Gradually increasing goal, all groups must meet standard by 2014
- **“Conjunctive” model** – not making it in one area means not making AYP
- Escalating negative sanctions when not making AYP, but only for Title I schools

Current Accountability System

- System is too complicated, invalid, and unrealistic
 - Different “rules” than those used by state
 - Larger minimum N, margin of error, excludes some students
 - Negative label applied when missing one goal, ELLs must take test despite not knowing English
 - Conjunctive model → all will eventually “fail”
- Resulted in unintended side effects
 - Focus on “bubble kids,” narrowing curriculum, states have lowered standards so all can pass by 2014

Rationale for a New System

- Original Legislative mandate: SBE to “adopt objective, systematic criteria” to identify successful schools/districts and those needing more help
- Realize AYP’s problems, need to create a better system
- Support legislative efforts to revise funding system
- 2009 Legislature passed ESHB 2261 – SBE must develop an **Accountability Index** to identify schools/districts for recognition and additional state support

Guiding Principles

- Be transparent and easy to understand
- Use existing data
- Rely on multiple measures
- Include assessment results from all grades (3-8, 10) and subjects tested statewide (reading, writing, mathematics, science)
- Use concepts of the federal No Child Left Behind (NCLB) Act and its Adequate Yearly Progress (AYP) system when appropriate
- Be fair, reasonable, and consistent
- Be valid and produce accurate results
- Focus at both the school and district levels
- Apply to as many schools and districts as possible
- Use familiar concepts when possible
- Rely mainly on criterion-referenced measures instead of norm-referenced measures
- Provide multiple ways to reward success
- Be flexible enough to accommodate future changes

Accountability Index

Outcomes & Indicators

Five Outcomes

Results from *4 assessments* (reading, writing, math, science) aggregated together from all grades and all students, *extended graduation rate* for all students, minimum N = 10

Four Indicators

1. *Achievement by non-low income students*
(% meeting standard/ext. grad rate)
2. *Achievement by low income students* (eligible for FRL)
3. *Achievement vs. Peers* (Learning Index and ext. grad rate controlling for ELL, low-income, special ed., gifted, mobility)
4. *Improvement* (change in Learning Index from previous year)

Creates a 5x4 matrix with 20 outcomes

Accountability Index Matrix

	Outcomes					
Indicator	<i>Reading</i>	<i>Writing</i>	<i>Math</i>	<i>Science</i>	<i>Ext. G.R.</i>	<i>Avg.</i>
<i>Non-low inc. achievement</i>						
<i>Low inc. ach.</i>						
<i>Ach. vs. peers</i>						
<i>Improvement</i>						
Average						Index *

* Simple average of all rated cells (*compensatory model*)

Index Benchmarks and Ratings

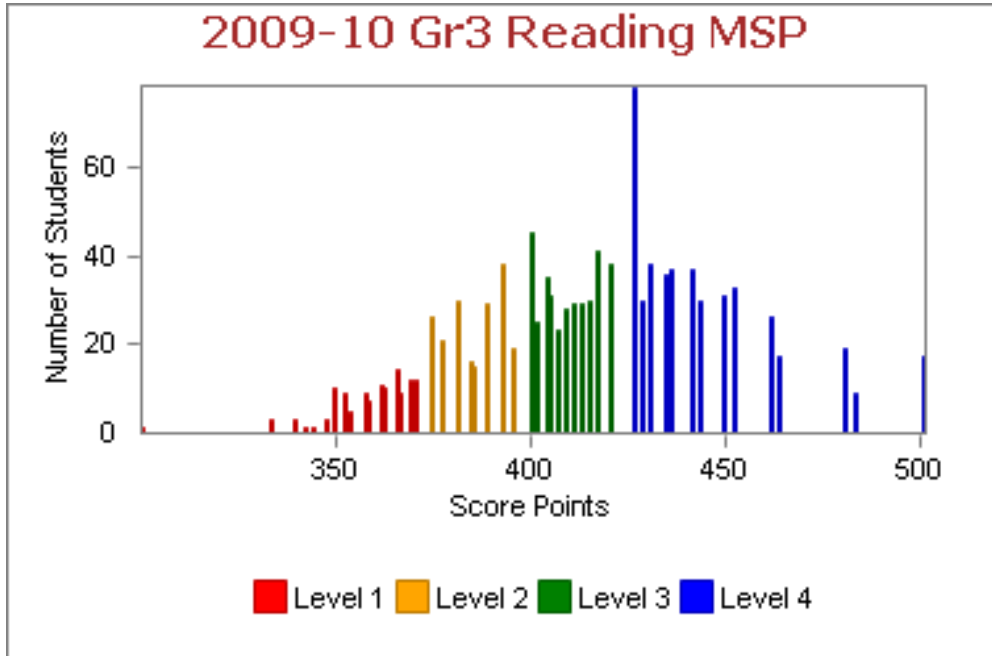
Indicator	<i>Reading</i>	<i>Writing</i>	<i>Math</i>	<i>Science</i>	<i>Ext. grad rate</i>	
<i>Achievement of - Non-low inc. - Low income (% met standard)</i>	<u>% MET STANDARD</u>		<u>RATING</u>		<u>RATE</u>	<u>RATING</u>
	90 – 100%		7		> 95	7
	80 – 89.9%		6		90 – 95%	6
	70 – 79.9%		5		85 – 89.9%	5
	60 – 69.9%		4		80 – 84.9%	4
	50 – 59.9%		3		75 – 79.9%	3
	40 – 49.9%		2		70 – 75%	2
< 40%		1		< 70%	1	
<i>- Achievement vs. Peers (Learning Index)</i>	<u>DIFFERENCE IN LEARNING INDEX</u>		<u>RATING</u>		<u>DIFFERENCE IN RATE</u>	<u>RATING</u>
	> .20		7		> 12	7
	.151 to .20		6		6.1 to 12	6
	.051 to .15		5		3.1 to 6	5
	-.05 to .05		4		-3 to 3	4
	-.051 to -.15		3		-3.1 to -6	3
	-.151 to -.20		2		-6.1 to -12	2
< -.20		1		< -12	1	

Benchmarks and Ratings

Indicator	<i>Reading</i>	<i>Writing</i>	<i>Math</i>	<i>Science</i>	<i>Ext. grad rate</i>
- <i>Improvement</i> (Learning Index)	CHANGE IN <u>LEARNING INDEX</u> > .15 .101 to .15 .051 to .10 -.05 to .05 -.051 to -.10 -.101 to -.15 < -.15				CHANGE <u>IN RATE</u> > 6 4.1 to 6 2.1 to 4 -2 to 2 -2.1 to -4 -4.1 to -6 < -6
			<u>RATING</u> 7 6 5 4 3 2 1		<u>RATING</u> 7 6 5 4 3 2 1

Learning Index (for Peers, Improvement)

- Calculated by OSPI for many years by grade & subject
(see “Scale” option on MSP/HSPE page of Report Card)
- Similar to a GPA (0-4 scale, better grades get more weight)



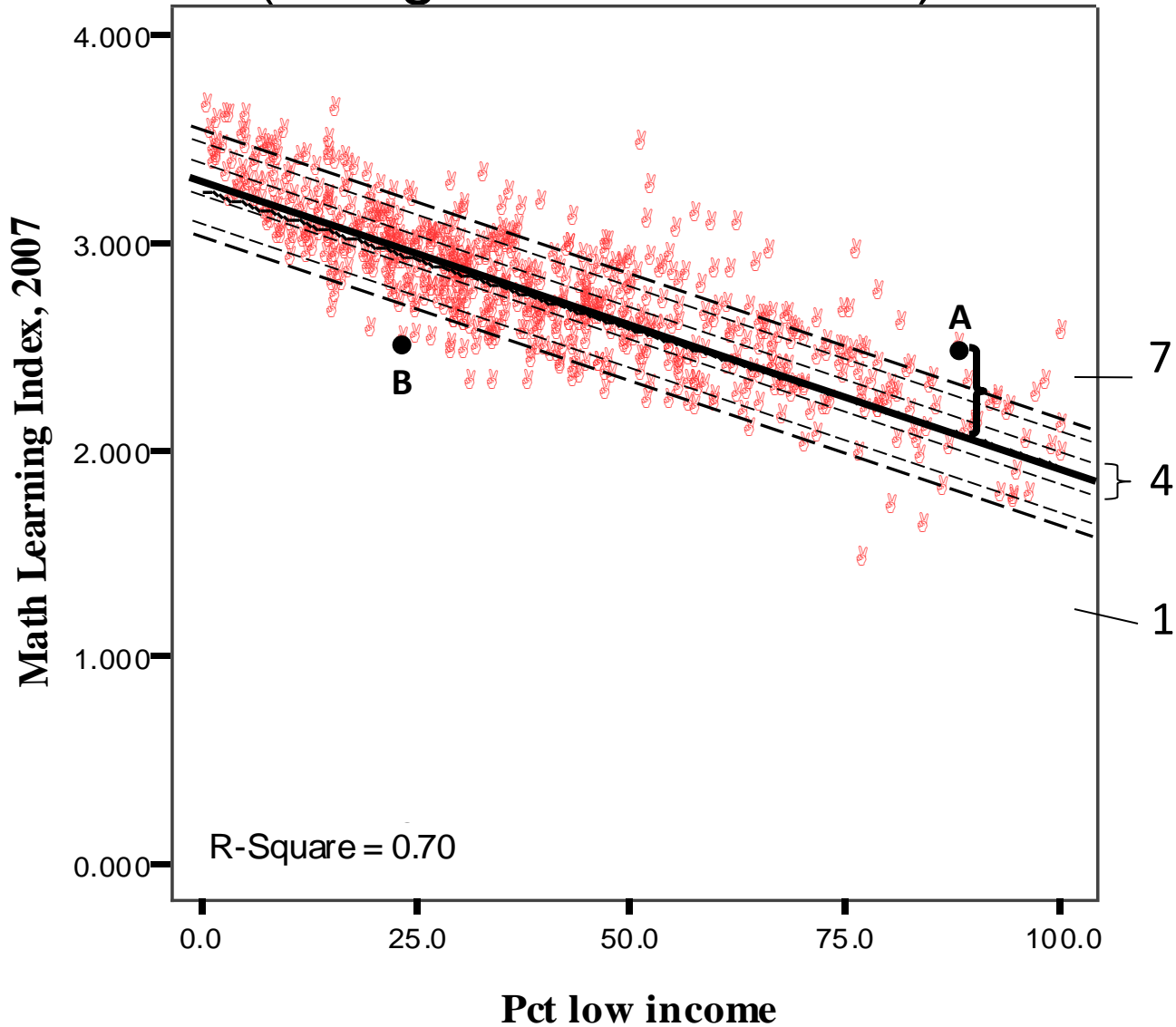
	Percent	Multiplier	Result
Not Tested	0.7	x 0 =	0.0
Level 1	12.6	x 1 =	12.6
Level 2	16.8	x 2 =	33.6
Level 3	30.7	x 3 =	92.1
Level 4	38.0	x 4 =	<u>152.0</u>
Learning Index (Total / 100)			2.90

- Accountability Index combines results for all tested grades
(easy to compute if only testing in one grade, e.g., writing and science)

Achievement vs. Peers

- Recognizes context affects outcomes
- Makes “apples to apples” comparisons (“statistical neighbors”) using multiple regression to control for 5 student variables—percent ELL, low-income (FRL), special education, mobile, gifted
- Separate analysis for each type of school (e.g., elementary, middle, high, multiple grades)
- Non-regular schools do not receive a “peer” rating
- Scores based on regression “residual”
- Complexity of statistical model presents a communications challenge

Illustration of Achievement vs. Peers (using 1 of 5 variables)



Counting ELL Results

Current policy required by NCLB

- Reading & math results are used in 2nd year of enrollment in US public school; English language ability is irrelevant.

Problem

- It takes 3+ years to achieve “academic” proficiency in English, so AYP is based on invalid ELL results.

Index Approach

- Continue testing ELLs as before, **BUT**
- Exclude ELL results from Index calculations in the first 3 years of enrollment (most exit the program within three years)

Other Adjustments

- Improvement indicator suppressed for high performers
 - Ceiling effect means high performers cannot improve much
 - If school cannot receive a rating of 7, rating is suppressed
 - When Learning Index reaches 3.85 in two consecutive years (this has not happened yet)
 - When graduation rate reaches 94% in two consecutive years (66 schools had results suppressed in 2010)
- Peer ratings are suppressed when FRL = 0
 - Some districts have no federal lunch program
 - No alternative found yet to measure SES in these schools
- WASL Basic counted as meeting standard (Level 3)
- ELLs meeting standard in 1st three years are included
- August retakes count, but not tests in grades 11 and 12

Tier Names and Ranges

Schools/districts
assigned to a “tier”
based on index score

Tier	Index Range
Exemplary	5.50 – 7.00
Very Good	5.00 – 5.49
Good	4.00 – 4.99
Fair	2.50 – 3.99
Struggling	1.00 – 2.49

Example - XXX High School

Indicator	<i>Reading</i>	<i>Writing</i>	<i>Math</i>	<i>Science</i>	<i>Grad Rate</i>	Average
<i>Non-low inc. ach.</i>	7	7	3	3	6	5.20
<i>Low-inc. ach.</i>	6	7	2	2	6	4.60
<i>Ach. vs. peers</i>	4	4	4	4	6	4.40
<i>Improvement</i>	5	2	1	4	3	3.00
Average	5.50	5.00	2.50	3.25	6.00	4.37

Indicator	<i>Reading</i>	<i>Writing</i>	<i>Math</i>	<i>Science</i>	<i>Grad Rate</i>
<i>Non-low inc. ach.*</i>	92.5	93.7	58.7	56.5	94.9
<i>Low-inc. ach.*</i>	87.2	91.8	44.8	40.8	94.2
<i>Ach. vs. peers**</i>	+0.05	+0.01	+0.03	+0.05	+10.3
<i>Improvement**</i>	+0.09	-.14	-.26	-.04	-2.5

↑
Index
(Good)

* Percent meeting standard for content areas, extended graduation rate

** All students, content areas measured using the Learning Index

2011 Statewide School Results

Tier	Index Range	Pct. of schools	Pct. of students
Exemplary	5.50 – 7.00	9.5%	8.4%
Very Good	5.00 – 5.49	14.4%	16.9%
Good	4.00 – 4.99	34.9%	39.6%
Fair	2.50 – 3.99	33.1%	31.1%
Struggling	1.00 – 2.49	8.1%	4.0%

2,071 schools had Index results

2011 Statewide Results by School Type and Tier

Tier	Elem.	Middle	High	Multiple	Total
Exemplary	9.6%	4.9%	14.9%	7.9%	9.5%
Very Good	14.1%	13.9%	22.7%	4.5%	14.4%
Good	36.3%	40.4%	32.9%	24.8%	34.9%
Fair	35.1%	35.0%	21.9%	38.3%	33.1%
Struggling	4.9%	5.7%	7.6%	24.4%	8.1%
# schools	1,056	366	383	266	2,071

Advantages of Index Metric

- **More valid** – Uses results of all students in more subjects, more differentiated than “Yes/No” system
- **More inclusive/comprehensive** – Uses smaller minimum N, includes results of all students (regardless of how long they have been enrolled), includes writing and science (helps prevent narrowing the curriculum), uses Learning Index to measure performance (reduces the focus on bubble kids); looks at improvement and “peers”
- **More transparent** – Does not include a margin of error, benchmarks are the same over time and among different subjects, schools and districts evaluated using same criteria, same N for all groups
- **Encourages high expectations/standards** – “Compensatory” model removes incentive to lower standards so all can be counted as “proficient” by 2014

Existing Recognition Systems

Set a Very High Bar

Schools of Distinction: Recognizes top 5% in four grade bands (elementary, middle, high, alternative) based on improvement in reading and math (composite)

OSPI/SBE: Started using Accountability Index in 2009 using 2-year averages

- *Overall Excellence Award* uses the Index score (top 5% by grade band)
- *Special Recognition* given “on the edges” when 2-year average is ≥ 6.00
Language arts, math, science, graduation rate, Improvement, achievement gap

US Dept. of Education: Very small number of schools received recognition under federal programs (e.g., Blue Ribbon Schools, Title I Distinguished Schools)

SBE/OSPI Recognition

Minimum 2-year average rating to earn recognition

	Outcomes					
Indicator	<i>Reading</i>	<i>Writing</i>	<i>Math</i>	<i>Science</i>	<i>G.R.</i>	Average
<i>Non-low inc. achievement</i>						Compare ¹
<i>Low inc. ach.</i>						↕
<i>Ach. vs. peers</i>						
<i>Improvement</i>						6.00
Average	6.00	6.00	6.00	6.00	6.00	Top 5%¹

¹ The *Overall Excellence* award is granted only if the average difference in the income gap and the race/ethnicity gap (using a separate matrix) is ≤ 2.5

Race/Ethnicity Ach. Gap Recognition

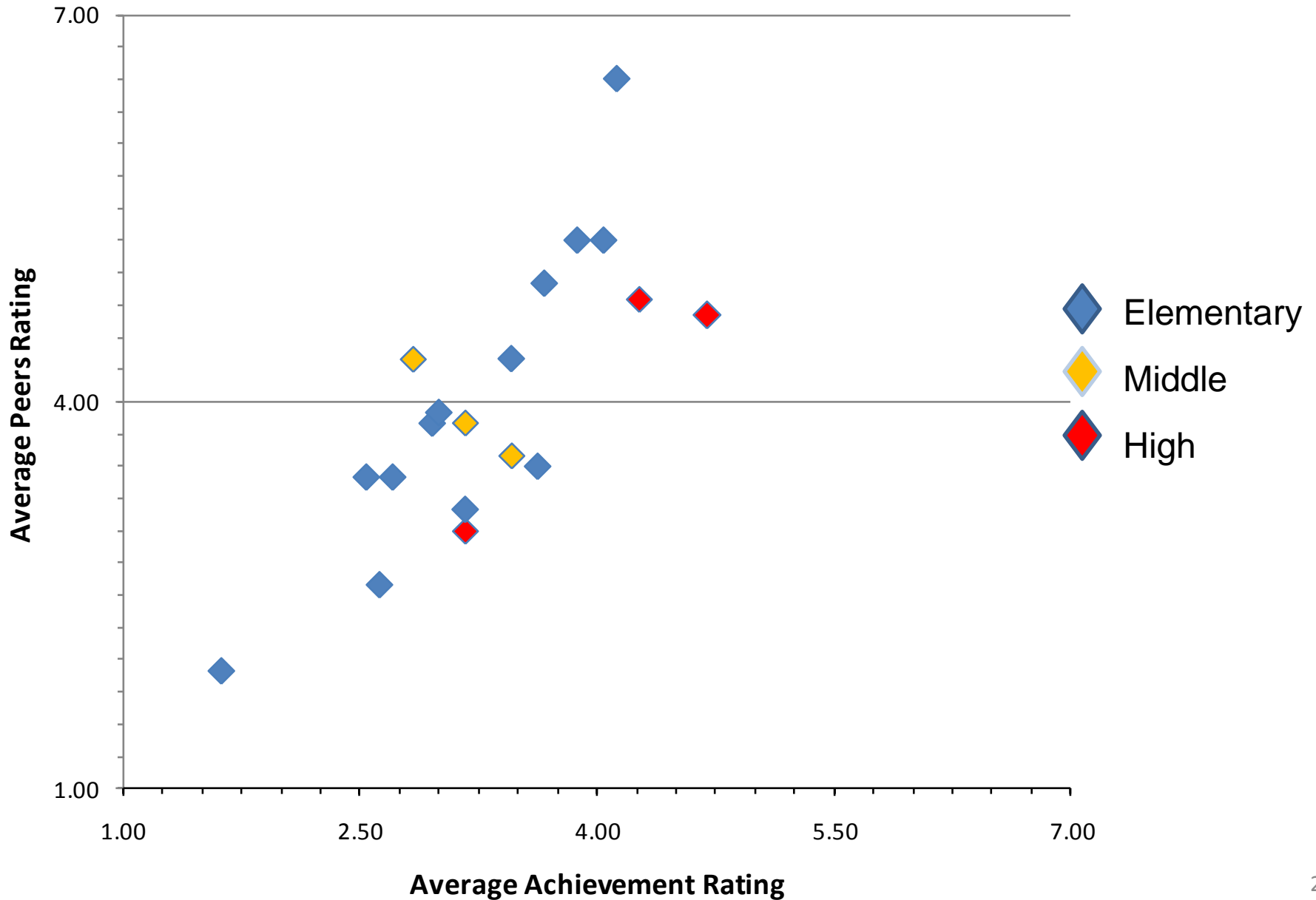
- Starting last year, ratings for race/ethnic subgroups were **reported** using a modified matrix
- Subgroups are organized into two groups
 - Whites, Asians
 - Black, Hispanic, Pacific Islanders, Multi-racial, Amer. Indian
- The *combined results* of the two groups will be used for **recognition** using the following criteria:
 - Must have NO GAP (or negative gap) between the row averages in two consecutive years
 - 2-year average for each row must be at least 4.25
 - *At least 4 of 9 cells in the row must be rated each year*
 - *Must be fewer than 10% students designated as gifted each year*

How Districts Are Using the Data

- Staff must first must learn about the new metric
 - Board, principals, staff
 - Central office prepares/shows results
(decide when and how to reveal results)
- Starting to be used in school improvement planning, goal setting, leader accountability, recognition, differentiated assistance

District Examples: Renton, Highline

3-Year Index Results - Peers & Achievement*



* Percent meeting standard in four subjects, average rating from both non-low income and low income students (8 cells)

Renton's Proposal

Phase I: Starting this year, use all 30 cells of the Accountability Index matrix, give recognition when 2-year average is 5.50 (“honors” status if ≥ 6.00)

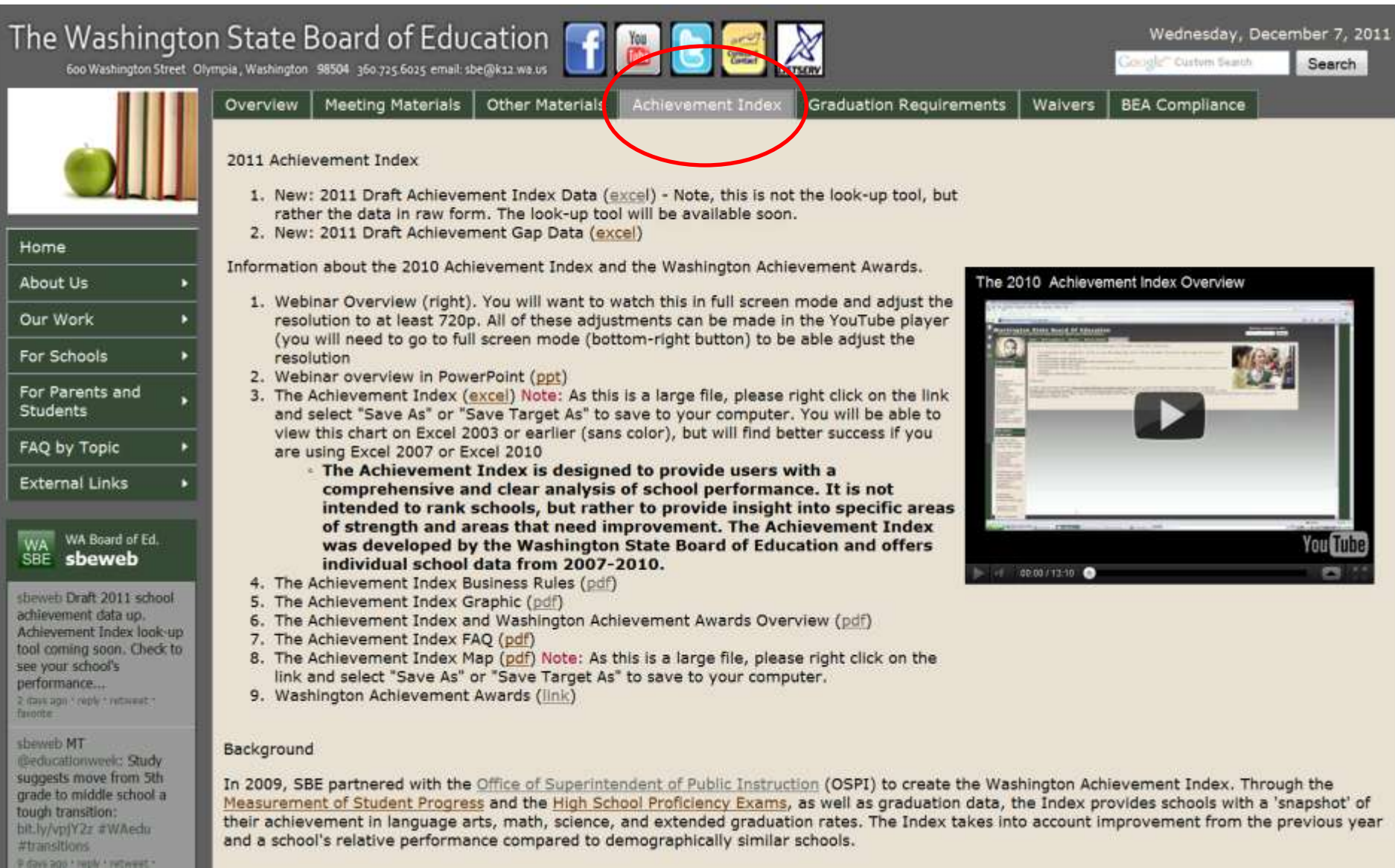
	OUTCOME					
INDICATOR	READING	WRITING	MATH	SCIENCE	GRAD. RATE	AVERAGE
Average rating by non-low inc. & low income	5.50	5.50	5.50	5.50	5.50	5.50
Achievement vs peers	5.50	5.50	5.50	5.50	5.50	5.50
Improvement	5.50	5.50	5.50	5.50	5.50	5.50
AVERAGE	5.50	5.50	5.50	5.50	5.50	5.50

Phase II: Explore other ways to give recognition using other measures next year (e.g., attendance, ELL growth)

Highline

On Line Resources: www.sbe.wa.gov

click on "Achievement Index"



The Washington State Board of Education

600 Washington Street Olympia, Washington 98504 360.725.6025 email: sbe@k12.wa.us

Wednesday, December 7, 2011

Google Custom Search Search

Overview Meeting Materials Other Materials **Achievement Index** Graduation Requirements Waivers BEA Compliance

2011 Achievement Index

1. New: 2011 Draft Achievement Index Data ([excel](#)) - Note, this is not the look-up tool, but rather the data in raw form. The look-up tool will be available soon.
2. New: 2011 Draft Achievement Gap Data ([excel](#))

Information about the 2010 Achievement Index and the Washington Achievement Awards.

1. Webinar Overview (right). You will want to watch this in full screen mode and adjust the resolution to at least 720p. All of these adjustments can be made in the YouTube player (you will need to go to full screen mode (bottom-right button) to be able adjust the resolution
2. Webinar overview in PowerPoint ([ppt](#))
3. The Achievement Index ([excel](#)) **Note:** As this is a large file, please right click on the link and select "Save As" or "Save Target As" to save to your computer. You will be able to view this chart on Excel 2003 or earlier (sans color), but will find better success if you are using Excel 2007 or Excel 2010
 - **The Achievement Index is designed to provide users with a comprehensive and clear analysis of school performance. It is not intended to rank schools, but rather to provide insight into specific areas of strength and areas that need improvement. The Achievement Index was developed by the Washington State Board of Education and offers individual school data from 2007-2010.**
4. The Achievement Index Business Rules ([pdf](#))
5. The Achievement Index Graphic ([pdf](#))
6. The Achievement Index and Washington Achievement Awards Overview ([pdf](#))
7. The Achievement Index FAQ ([pdf](#))
8. The Achievement Index Map ([pdf](#)) **Note:** As this is a large file, please right click on the link and select "Save As" or "Save Target As" to save to your computer.
9. Washington Achievement Awards ([link](#))

Background

In 2009, SBE partnered with the [Office of Superintendent of Public Instruction](#) (OSPI) to create the Washington Achievement Index. Through the [Measurement of Student Progress](#) and the [High School Proficiency Exams](#), as well as graduation data, the Index provides schools with a 'snapshot' of their achievement in language arts, math, science, and extended graduation rates. The Index takes into account improvement from the previous year and a school's relative performance compared to demographically similar schools.

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sbeweb Draft 2011 school achievement data up. Achievement Index look-up tool coming soon. Check to see your school's performance... 2 days ago · reply · retweet · favorite

sbeweb MT @educationweek: Study suggests move from 5th grade to middle school a tough transition: bit.ly/vpJY2z #WAedu #transitions 8 days ago · reply · retweet · favorite

The 2010 Achievement Index Overview



Enter School Code:	3540									
District	Olympia									
School	Leland P Brown Elementary									
							TIER	INDEX RANGE		
2011 Achievement Award: (* indicates the school has won this award for two years)							Exemplary	7.00-5.50		
TO BE ANNOUNCED							Very Good	5.49-5.00		
							Good	4.99-4.00		
							Fair	3.99-2.50		
							Struggling	2.49-1.00		

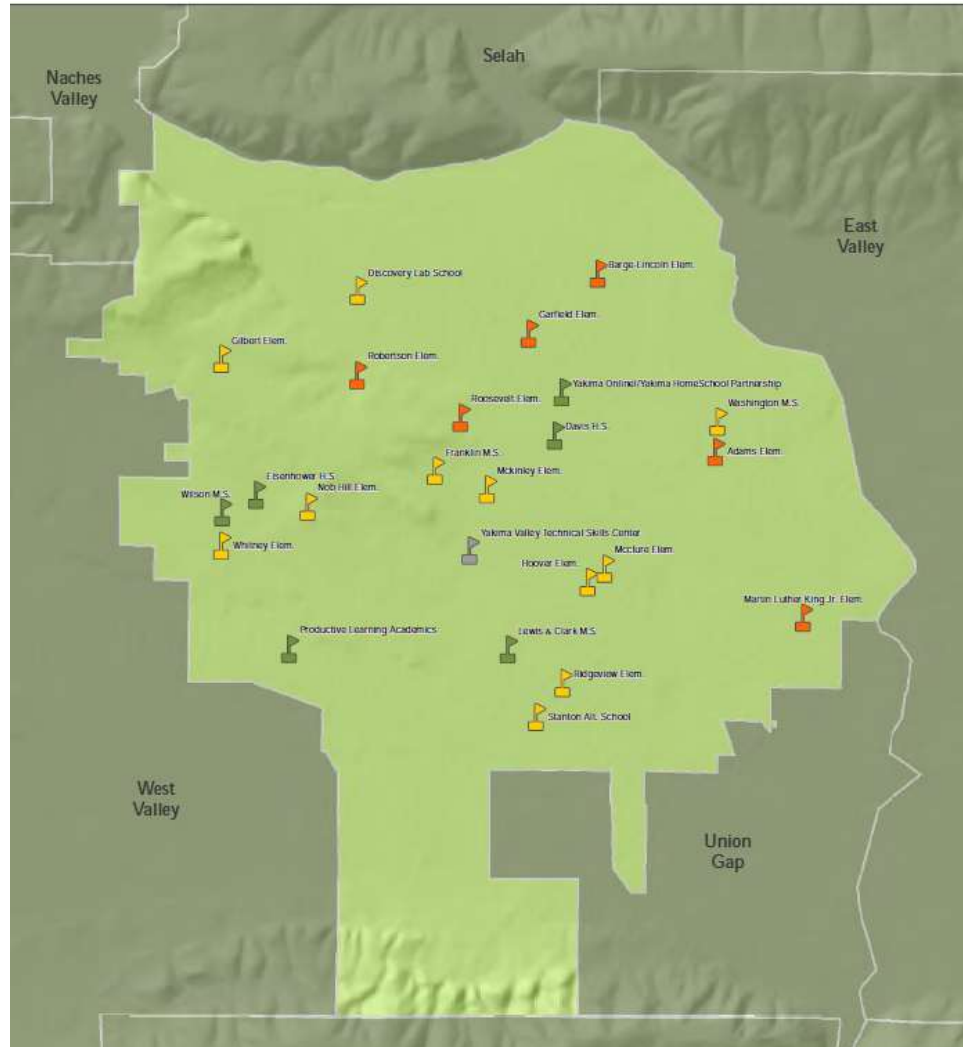
School Year 2010-2011

INDICATORS	OUTCOMES					Average
	Reading	Writing	Math	Science	Ext Grad Rate	
Achievement of non-low income students	6	6	5	4		5.25
Achievement of low income students	4	6	2	2		3.50
Achievement vs. peers	4	7	4	2		4.25
Improvement from the previous year	1	7	6	7		5.25
Index Scores	3.75	6.50	4.25	3.75		4.56 Good

2010-11 Achievement Gap

INDICATORS	Reading			Math			Ext Graduation Rate			Average
	Met Std	Peers	Imp	Met Std	Peers	Imp	Met Std	Peers	Imp	
Achievement of Black, Pacific Islander, American Indian/Alaskan Native, Hispanic stds	6	7	7	3	7	7				6.17
Achievement of white and Asian students	5	4	1	4	3	4				3.50
Achievement Gap										-2.67

GIS Mapping of Index Results



SBE/OSPI 2011 Index Next Steps

- Data review by districts: Dec 5-16
- Final Index data and Lookup Tool on line: Jan 1
- District level data: early Feb
- State level data: spring
- 2011 Achievement Awards announced: Feb
- 2011 Achievement Award ceremony: Apr 25 (tentative)
- New website: April

ESEA Waivers

FLEXIBILITY TO IMPROVE STUDENT ACHIEVEMENT AND INCREASE THE QUALITY OF INSTRUCTION

1. 2013–2014 Timeline for Adequate Yearly Progress (AYP)

- Flexibility to develop new ambitious but achievable Annual Measurable Objectives (AMOs) in reading/language arts and mathematics
- Eliminates AYP

2. Implementation of School Improvement Requirements

- Flexibility from requirement for school districts to identify or take improvement actions for schools identified for improvement, corrective action, or restructuring
- Eliminates Public School Choice (PSC) as a mandate
- Eliminates Supplemental Educational Services (SES) as a mandate
- Eliminates the 20% district Title I set aside to fund PSC and SES
- Eliminates the 10% set aside for professional development for schools

ESEA Waivers

3. Implementation of District Improvement Requirements

- Flexibility from requirement for states to identify or take improvement actions for districts identified for improvement or corrective action
- Eliminates the 10% set aside for professional development for districts

4. Rural districts

- Flexibility to use Rural and Low-Income School Program funds or Small, Rural School Achievement Program for any authorized purpose regardless of AYP status

5. Schoolwide Programs

- Flexibility to operate a schoolwide program in a Title I school that does not meet the 40 percent poverty threshold if the state has identified the school as a **priority school** or a **focus school**

ESEA Waivers

4 Required Principles

1. College- and Career-Ready Expectations for All Students
2. State-Developed Differentiated Recognition, Accountability, and Support
3. Supporting Effective Instruction and Leadership
4. Reducing Duplication and Unnecessary Burden

4 Required Principles

The Washington State Board of Education

Governance | Achievement | High School and College Preparation | Math & Science | Effective Workforce

Old Capitol Building, Room 253
P.O. Box 47206
600 Washington St. SE
Olympia, Washington 98504

Is Washington State Ready to Seek a Waiver From the Elementary and Secondary Education Act?

Adoption of College and Career-Ready Standards

- ✓ Involved in Smarter Balanced Assessment Consortium
- ✓ Adoption of the Common Core State Standards



State-Developed Differentiated Systems of Recognition, Accountability, and Support

- ✓ Achievement Index is a good start, but Washington would need to:
 - ✗ Refine the Achievement Index and include student growth
 - ✗ Develop a methodology to identify and support lowest performing schools (also required by SB 6006)
 - ✗ Set annual measurable objectives in at least reading and mathematics



Teacher and Principal Evaluation

- ✓ Pilot evaluation is a good start, but Washington would need to:
 - ✗ Use student growth as a significant factor
 - ✗ Use data as a factor in personnel decisions.



Reduce Duplication and Unnecessary Burden of Reporting

- ✓ Washington has recently reviewed reporting requirements per state law
- ✗ Washington would need to develop an outreach strategy to include diverse stakeholders



SBE's Role in Accountability

- House Bill 6696 assigned SBE responsibility and oversight for creating an accountability framework:
“The framework provides a unified system of support for challenged schools that aligns with basic education, increases the level of support based upon the magnitude of need, and uses data for decisions. Such a system will identify schools and their districts for recognition as well as for additional state support.”

Accountability Cont.

HB 6696 outlined 2 phases for SBE's accountability work:

- **Phase I:** Use the Index to recognize schools that raise achievement and close gaps
- **Phase II:** Implement the Index for identification of schools in need of improvement, and the use of state and local intervention models and state funds.
 - Seek federal approval of the Index

Waiver Pros and Cons

- **Upsides**

- Eliminates costly set asides (20%—PSC + SES; 10%—PD for districts; 10%—PD for schools)
- Eliminates AYP and 100% proficiency in 2014

- **Downsides**

- Requirements for teacher and principal evaluation
- WA's accountability system, not the fed's
- Timing of ESEA Reauthorization
- Possible legal challenges (Rep. Kline)

ESEA Waiver Considerations

- SBE is partnering with OSPI to develop a waiver application
- Intention is to use Achievement Index for accountability. Index will need enhancement in order to replace current AYP, but fundamental principals will remain.
- It is OSPI's decision to apply for a waiver; targeting the February 2012 deadline.
- If OSPI does not apply for a waiver, SBE is still responsible (per HB 6696) for creating an accountability framework and will move forward.