

Revising the State Achievement Index

Sarah Rich

Policy Director, SBE

Achievement and Accountability Workgroup

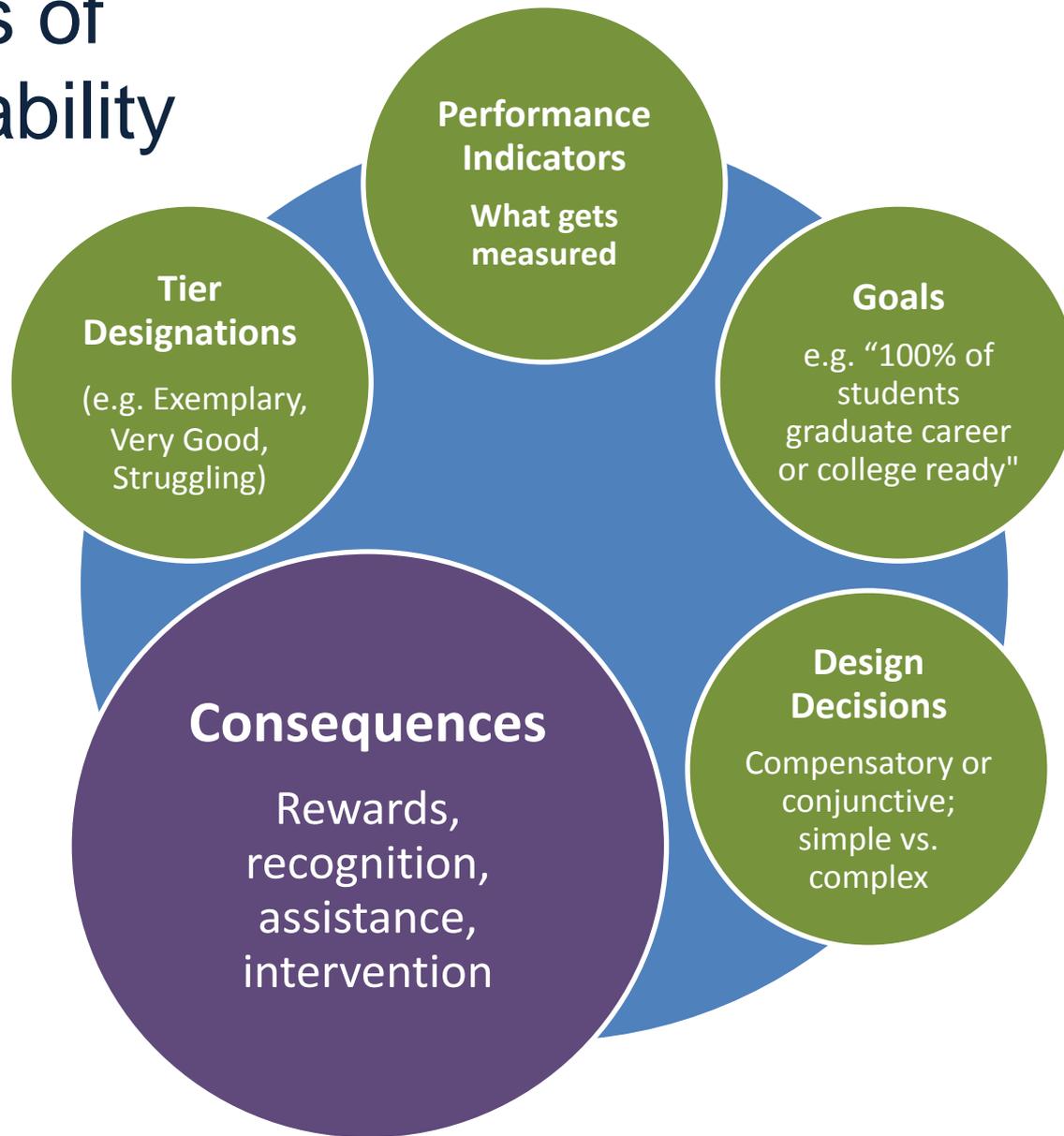
October 10, 2012

Objectives

AAW members will:

1. Understand the questions and options posed.
2. Provide input on each of the four questions and associated options.

Elements of Accountability



Key Questions:

Watch for this graphic:



Performance Indicators:

1. Gap closing options.
2. Career and college readiness options.
3. Improvement options.

Subjects and Weighting:

4. Weighting options.

Disaggregation:

5. Subgroup options.

Usability:

6. What to keep or change from current Index.

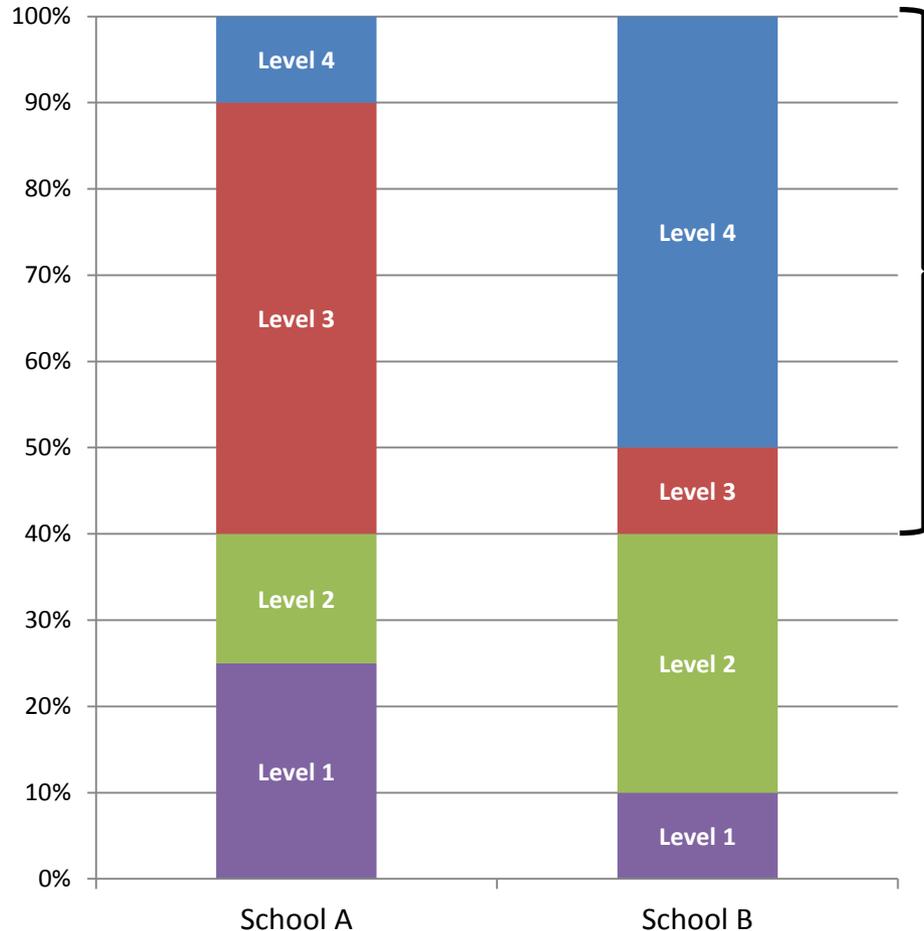
Current Index: Performance Indicators

School Year 2010-2011						
INDICATORS	OUTCOMES					Average
	Reading	Writing	Math	Science	Ext Grad Rate	
Achievement of non-low income students	7	7	5	4	5	5.60
Achievement of low income students	6	7	5	3	3	4.80
Achievement vs. peers	3	4	1	3	2	2.60
Improvement from the previous year	5	6	7	7	1	5.20
Index Scores	5.25	6.00	4.50	4.25	2.75	4.55 Good

- Non low income achievement compared to low income achievement
- Achievement vs. peers
 - Regression analysis to account for school demographic characteristics
 - USED will not approve including the peers indicator in our revised Index.
- School improvement from the previous year
 - Includes a learning Index which measures not just the % of students who are proficient, but also the % of students at each level.

Current: Includes a Learning Index

The percent of students meeting standard does not tell the whole story about student achievement:



60 percent of students met standard in both schools

Level 4: Advanced

Level 3: Proficient

Level 2: Basic

Level 1: Below Basic

Current: Learning Index Calculation

Scale of 1 – 4.

School A: 60% met standard	School B: 60% met standard
Level 4: 10%	Level 4: 50%
Level 3: 50%	Level 3: 10%
Level 2: 15%	Level 2: 30%
Level 1: 25%	Level 1: 10%
Learning Index= (1*0.25)+(2*0.15)+(3*0.50)+(4*0.10) .25 + .3 + 1.5 + .4 = 2.45	Learning Index= (1*0.10)+(2*0.30)+(3*0.10)+(4*0.50) .1 + .6 + .3 + 2.0 = 3.00

Current Index: Achievement Gap Matrix

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	4	3	1	5.00
Achievement of white and Asian students	7	7	7	4	7	7	6	3		6.12
Achievement Gap										1.12

- Measures **only** reading, math, and graduation rates – not writing and science.
- Reflects a trend towards closing or widening gaps, but does not mean that gaps are closed.
- Race/ethnicity only, not ELL or SWD.

Current Index: Closing Gaps

School Year 2010-2011						
INDICATORS	OUTCOMES					Average
	Reading	Writing	Math	Science	Ext Grad Rate	
Achievement of non-low income students	7	7	5	4	5	5.60
Achievement of low income students	6	7	5	3	3	4.80
Achievement vs. peers	3	4	1	3	2	2.60
Improvement from the previous year	5	6	7	7	1	5.20
Index Scores	5.25	6.00	4.50	4.25	2.75	4.55 Good

Income Gaps

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	4	3	1	5.00
Achievement of white and Asian students	7	7	7	4	7	7	6	3		6.12
Achievement Gap										1.12

Race/ethnicity Gaps

Current Index: Weighting of Tested Subjects

Equal weighting of all subjects regardless of testing frequency

INDICATORS	25%	25%	25%	25%	Ext Grad Rate	Average
	Reading	Writing	Math	Science		
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

Example is an elementary school with testing in grades 3 – 5 (Reading and Math in 3, 4, 5; Writing in 4, Science in 5).

Performance Indicators for Revised Index

Proficiency	Percent of students at standard; reading, writing, math, science
Growth	Percent of students with adequate growth: reading, math
Gap Closing	Question 1
Career and College Readiness	Question 2
Improvement	Question 3
Weighting of Tested Subjects	Question 4
Subgroups	Question 5
What to Keep/Change from current Index	Question 6

Q1: Gap Closing



Option	+/-
A. Growth Gaps	Growth is a leading indicator; and focusing on growth gaps instead of proficiency gaps may be more fair.
B. Proficiency Gaps	Proficiency is a lagging indicator; however it is the ultimate goal to close proficiency gaps.
C. BOTH Proficiency and Growth Gaps	May be too much complexity for the value it adds.
D. Other	

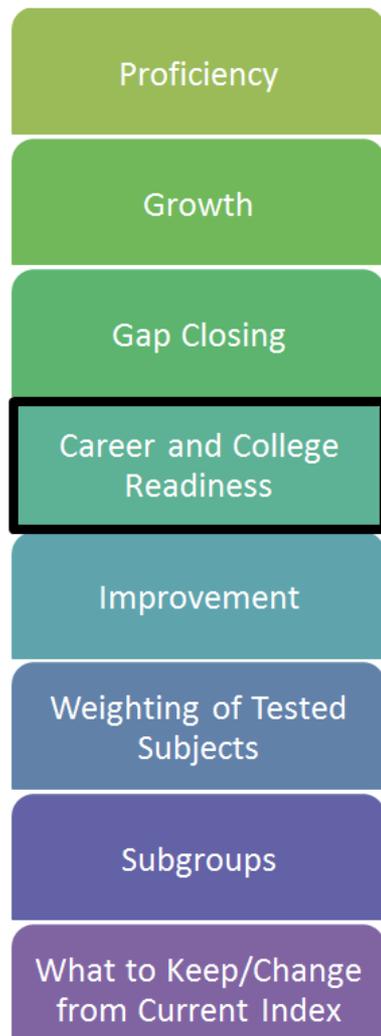
Q2: Career and College Readiness*



Options	+/-
A. High School Graduation Rates ONLY	Minimum requirement; sets graduation as the end goal.
B. High School Graduation Rates PLUS sub-indicators of career and/or college readiness	Better alignment with the statutory purpose of the K-12 system; more complex.
C. Other	

*also called Postsecondary and Workforce Readiness

Q2: Possible Sub-indicators for Career and College Readiness



- Dual credit participation and/or performance (Advanced Placement, International Baccalaureate, Running Start, Tech Prep, others)
- Course-taking data
- Dropout risk factors
- Industry Certification
- Apprenticeship programs
- SAT, ACT, WorkKeys, COMPASS
- 2- and 4-year college enrollment
- Employment data
- Post-secondary remediation
- College persistence
- Others

Q3: Improvement

- Proficiency
- Growth
- Gap Closing
- Career and College Readiness
- Improvement
- Weighting of Tested Subjects
- Subgroups
- What to Keep/Change from Current Index

Options	+/-
A. Improvement from prior year in % of students meeting standard	Easy to understand. Changing school boundaries and magnet programs make this a sometimes invalid measure.
B. Improvement from prior year in adequate growth	Fairer (leading versus lagging) but same challenges to validity as A.
C. Improvement from prior year in % of students meeting standard using Learning Index	More difficult to understand. Incentivizes improving all student outcomes, not just students on the verge of meeting standard. Same challenges to validity as A.
D. None of the above	
E. Other	

Q4: Weighting of Tested Subjects



Options	+/-
A. Equal weight for all tested subjects	Values science and writing regardless of testing frequency. Easier to understand by parents and community.
B. Weight subjects based on testing frequency	De-emphasizes science and writing in some grade configurations. More difficult to understand.
C. Other	

Reminder: Current Index Weighting

- Proficiency
- Growth
- Gap Closing
- Career and College Readiness
- Improvement
- Weighting of Tested Subjects**
- Subgroups
- What to Keep/Change from Current Index

Equal weighting of all subjects regardless of testing frequency:

INDICATORS	25%	25%	25%	25%	Ext Grad Rate	Average
	Reading	Writing	Math	Science		
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

Q4: Assessments by Grade Level

- Proficiency
- Growth
- Gap Closing
- Career and College Readiness
- Improvement
- Weighting of Tested Subjects**
- Subgroups
- What to Keep/Change from Current Index

Grade	Reading	Writing	Math	Science
3	MSP		MSP	
4	MSP	MSP	MSP	
5	MSP		MSP	MSP
6	MSP		MSP	
7	MSP	MSP	MSP	
8	MSP		MSP	MSP
High School	HSPE*	HSPE*	EOC 1 EOC 2	EOC

MSP=Measurement of Student Progress

HSPE=High School Proficiency Exam

EOC=End of Course Exam

EOCs required for graduation: Math EOC 1 for class of 2012-13;
Math EOC 2 and Science EOC for 2014-15

Q4: Tested Grades and Subjects – Weighted by Frequency

- Proficiency
- Growth
- Gap Closing
- Career and College Readiness
- Improvement
- Weighting of Tested Subjects**
- Subgroups
- What to Keep/Change from Current Index

Elementary

Grade	Reading	Writing	Math	Science
3	37.5%	12.5%	37.5%	12.5%
4				
5				

Junior High

7	33%	16.7%	33%	16.7%
8				

Middle School

6	37.5%	12.5%	37.5%	12.5%
7				
8				

Q4: Tested Grades and Subjects – Weighted by Frequency

- Proficiency
- Growth
- Gap Closing
- Career and College Readiness
- Improvement
- Weighting of Tested Subjects**
- Subgroups
- What to Keep/Change from Current Index

Current High School: 1 Reading HSPE, 1 Writing HSPE, 2 Math EOCs, 1 Science EOC

Grade	Reading	Writing	Math	Science
High School	20%	20%	40%	20%

...after implementation of additional Science EOC:

High School	16.7%	16.7%	33%	33%
-------------	-------	-------	-----	-----

Q5: Subgroups

- Proficiency
- Growth
- Gap Closing
- Career and College Readiness
- Improvement
- Weighting of Tested Subjects
- Subgroups**
- What to Keep/Change from Current Index

Options	+/-
A. Use current federal subgroups only.	Districts are accustomed to this already. Limited to the subgroups listed.
B. Use current subgroups PLUS add new subgroups – former ELL, ‘Catch-up Students’ or ‘lowest 25%’.	Stronger accountability for former ELLs and for struggling students; more complexity.
C. Create super subgroups for schools with low N size.	Makes gaps visible; may combine subgroups of students with very different needs.
D. Other	

Current federal subgroups:
All
American Indian
Asian
Pacific Islander
Black
Hispanic
White
Limited English
Special Education
Low Income
Two or More Races

Q6: What to Keep or Change from Current Index?

Proficiency

What works well in the current Index that we should preserve?

Growth

What limitations of the current Index do we want to address in the revised version?

Gap Closing

Career and College
Readiness

Ideas: tier labels, seven point scale, Learning Index, user interface

Improvement

Weighting of Tested
Subjects

Subgroups

What to Keep/Change
from Current Index

Questions?