Accountability for the Opportunity for an Adequate Education: Progress Report to the Joint Education Committee of the NH Legislature

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Overview of Presentation

- **Background**
  - The process
  - Review of statutory requirements
- **Very brief update of input system**
- **The performance-based system**
  - Consideration of possible indicators
  - A two-level system
  - Decisions made and decisions still to make
- **Timeline**
- **Questions, comments?**
Basic Premise

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- Accountability system must enable the state (NH DOE) to evaluate and document that all New Hampshire schools are providing students with “an opportunity to receive an adequate education”

- The law requires a dual system:
  - Input-based system
  - Performance-based system
The “AYP Task Force”, a standing committee that advises NHDOE on a range of accountability issues

- Broad district and school representation
- Led the design and development of the input system
- Now focused on examining the growth metrics for the performance-based system
- Generally meets at least monthly; working on adequacy issues since last April
- Supported by Deb Wiswell, Tim Kurtz (Assessment Director), Scott Marion & Damian Betebenner, Center for Assessment and Karen Laba, NE Comprehensive Center
The Process (continued)

The “Commissioner’s Task Force”, a legislatively-mandated (SB 180) committee focused on the development of the performance-based system

- A variety of stakeholders—categories of stakeholders legislatively mandated
- Generally meets at least monthly; working on adequacy issues since last October, 2009
- Supported by Deb Wiswell, Scott Marion, Center for Assessment, and Karen Laba, NE Comprehensive Center
A school may demonstrate, through the **input-based school accountability system**, that it provides the opportunity for an adequate education as set forth in RSA 193-E:2-a by establishing that it met the following school standards in effect as of the effective date of this section:

- (a) English/language arts and reading as set forth in Ed 306.37.
- (b) Mathematics as set forth in Ed 306.43.
- (c) Science as set forth in Ed 306.45.
- (d) Social studies as set forth in Ed 306.46.
- (e) Arts education as set forth in Ed 306.31.
- (f) World languages as set forth in Ed 306.48.
- (g) Health education as set forth in Ed 306.40.
- (h) Physical education as set forth in Ed 306.41.
- (i) Technology education, and information and communication technologies as set forth in Ed 306.42 and Ed 306.47.
- (j) School year as set forth in Ed 306.18.
- (k) Minimum credits required for a high school diploma as set forth in Ed 306.27(f) and (m).
Demonstration of Input System
Beginning with the 2011-2012 school year, a school may demonstrate by the end of the school year that it provides the opportunity for an adequate education through the performance-based school accountability system to be developed and implemented by the department, pursuant to RSA 193-E:3-c and RSA 193-E:3-d and designed to measure educational outcomes.
SB 180 Task Force must...

- (a) Define the performance-based accountability system to be used by schools that will ensure that the opportunity for an adequate education is maintained.
- (b) Identify performance criteria and measurements.
- (c) Establish performance goals and the relative weights assigned to those goals.
- (d) Establish the basis, taking into account the totality of the performance measurements, for determining whether the opportunity for an adequate education exists, which may include the assignment of a value for performance on each measurement.
- (e) Ensure the integrity, accuracy, and validity of the performance methodology as a means of establishing that a school provided the opportunity for an adequate education as defined in RSA 193-E:2-a.
• The task force shall develop a performance-based scoring system using only the best available data and indicators which are already provided to the department and/or performance measures that schools are already required to provide the department under other state or federal law.
... system may consider one or more of the following data and indicators:

(a) Performance on state tests and, upon the prior approval of the department, other assessments administered at the local level that are consistent with the state’s curriculum standards.

(b) Number and percentage of pupils participating in an advanced placement course.

(c) Number and percentage of graduating pupils going on to post-secondary education and military service.

(d) Attendance rates

• More....
Potential indicators (continued)

(e) Annual cumulative drop-out rates of high school pupils.
(f) School environment indicators, such as safe schools data.
(g) Expulsion and suspension rates, including in-school and out-of-school suspensions, which shall be reported for each school year.
(h) Number and percentage of classes taught by highly qualified teachers.
(i) Teacher and administrative turnover rates at the school and district levels.
Goals of the “Performance” System

- The Commissioner’s Task Force clarified the purposes and intended uses for the performance-based system:
  - Provide an additional way for schools to demonstrate that they provide the opportunity for an adequate education
    - Collect and report data to assist educators in improving student achievement
    - Identify desirable educational practices and outcomes to
    - Facilitate public reporting of school effectiveness to education stakeholders
In order to best serve the identified purposes, the task force recommends a two level system:

Level One
- A very limited set of state-defined common (across the state) indicators and metrics
- Applied consistently across all schools in the state
- Focused on unarguable outcomes, e.g., NECAP, graduation rate, postsecondary assessments, attendance

Level Two
- Locally determined goals, targets, and indicators
- Participation in Level Two will be optional
Level One: Indicators (K-8)

- **Inclusion Factors**
  - 95% participation rate;
  - average daily attendance
- **Status Measures**
  - weighted average index NECAP scores
- **Growth Measures**
  - Student growth percentiles
- **Gap Analyses**
  - Status and growth gaps
Level One: Indicators (HS)

- **Inclusion Factors**
  - 95% participation rate;
  - average daily attendance

- **Status Measures**
  - weighted average index NECAP scores

- **Gap Analyses**
  - Status gaps
  - Postsecondary gaps

- **Postsecondary Indicators**
  - Graduation rate
  - Dropout rate
Level 2: Locally-determined system

- A very limited set (e.g., 2-5) of district/school-determined goals, targets, and indicators
  - For example, “increase the % of students achieving their NWEA growth targets to 90% by 2015”

- The school results related to such goals and targets would count in the performance-based accountability system and would be applied to schools that did not demonstrate the “opportunity for an adequate education” through the input or Level 1 system.
Level 2

• Any school may participate in Level 2
• Schools that do not demonstrate adequacy in any other way may be directed to participate in Level 2 as part of intervention/support
• Goals, measures, and outcomes must be approved by NH DOE in more of a support rather than regulatory role
  ○ Local boards will have to approve the process and publish the results
  ○ NH DOE will create guidance and support materials to assist LEA’s in this process
• Task force is still considering how to incorporate Level 2 results into determinations of adequacy
Advantages of two-level system

- Level 1 will meet the statutory requirements on its own
  - Clear outcomes
  - Data already collected by the state
  - No additional burden on districts

- Level 2 creates incentives for the types of school improvement activities we would like to see in all schools
  - Optional—no unfunded mandate
  - Tied closely with school improvement activities
There are still some critical details to work out, but a strong framework is in place

- Gaps - between which groups?
- Growth - how do we factor it in?
- Synthesis - how do we combine the indicators?
Gaps and subgroup performance

- The Commissioner’s Task Force is committed to including specific measures of subgroup performance as part of the system.
  - It is hard to argue that a school is providing an opportunity for an adequate education if certain groups of students are not receiving this opportunity.

- The Task Force is exploring valid ways to incorporate the evaluation of both status and growth gaps into the Level 1 accountability system.
The Commissioner’s Task Force is committed to including measures of student growth over time into the Level 1 accountability system. For example, measuring the change in performance for the same, matched students from 4th grade to 5th grade.

The AYP Task Force has been leading this work and both groups recommend using “Student Growth Percentiles” as the growth model in the Performance-based Adequacy Accountability system.

The specifics of how these results will be included in the accountability system are not yet finalized.

The following slides provide a brief introduction to this growth model.
Measuring student growth in academic achievement across or even within years is gaining popularity in education for many good reasons:

- Students all start at different places and measuring change from where they start seems more fair to students and adults.
- “Status” (i.e., single point in time) results are very strongly related to non-school factors such as income and class.

Even though many people want to measure growth, doing so well is not as easy as it might seem.
What does it mean to say that a girl grew 2.5 inches from ages 5 to 6? Is that typical, a lot or not enough?

What does it mean to say that a student’s score increased by 10 points in math from 4th grade to 5th grade?

Would it help us to know that on average, girls grew 3 inches from 5 to 6 years of age and that 85% or so grew between 2 and 4 inches? What would we say about growth of 2.5 inches?

Similarly, would it help us to know that on average student scores increased 7 points from 4th to 5th grade?
To make these growth comparisons more meaningful, it is helpful to take into account where students start in order to judge their growth, for example:

- Consider that there are approximately a couple of hundred students (often more) at every NECAP score in 4th grade.
- We can then rank order these students by their 5th grade scores.
- Imagine a student who scored 432 in 4th grade and 545 in 5th grade.
- In this example, if this student grew at a higher rate than 70% of her peers, we would say that she had a student growth percentile of 70.
Of course, the reality is more complex than this little example. Further, we want to incorporate as many prior scores as possible to best estimate students’ score history.

Student growth percentiles were developed by Dr. Damian Betebenner at the Center for Assessment to help answer these questions about changes in student achievement.

We can then generate individual student reports like the one we developed for Colorado on the following slide...
Aggregating student growth percentiles

- Remember, this is a school accountability system
- We need to be able to take the individual student growth results and aggregate them to a school level
- We have found it most promising to use medians as the “average” school growth percentile
  - The median is the middle score in a distribution (the 50th percentile)
- We have also found it useful to consider the school’s achievement (status) in addition to growth
- The following bubble charts illustrate this...
**Growth and Achievement**

New Hampshire: 2009–10 NECAP Growth & Achievement
Reading Performance by School Poverty

- **Higher Achievement**
  - Lower Growth
  - Higher Growth

- **Lower Achievement**
  - Lower Growth
  - Higher Achievement

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**School Size**
- 50 Students
- 100 Students
- 250 Students
- 500 Students

**Percent Free/Reduced Lunch Students**
- Less than 20 percent
- 20 to 40 percent
- 40 to 60 percent
- 60 to 80 percent
- More than 80 percent

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**Fall 2010 Percent at/above Proficient**
- 0
- 10
- 20
- 30
- 40
- 50
- 60
- 70
- 80
- 90
- 100

**Fall 2010 Median Student Growth Percentile**
- 0
- 10
- 20
- 30
- 40
- 50
- 60
- 70
- 80
- 90
- 100

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**Graph Description**
- The graph depicts the relationship between student growth and achievement, categorized by school poverty levels.
- Each dot represents a school, with its position indicating the median student growth percentile and the percent of students at or above proficiency.
- Schools are color-coded by school size and the percentage of students receiving free or reduced lunch.

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**Legend**
- **Red Dot**: More than 80 percent
- **Pink Dot**: 60 to 80 percent
- **Orange Dot**: 40 to 60 percent
- **Red Dot**: 20 to 40 percent
- **Apricot Dot**: Less than 20 percent

Growth and Achievement

New Hampshire: 2009–10 NECAP Growth & Achievement

NECAP Math Performance by School Poverty
New Hampshire: 2009–10 NECAP Growth & Achievement
NECAP Math Performance by School Poverty

Growth and Achievement

Fall 2010 Percent at/above Proficient

Fall 2010 Median Student Growth Percentile

School Size
- 50 Students
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- 250 Students
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Percent Free/Reduced Lunch Students
- Less than 20 percent
- 20 to 40 percent
- 40 to 60 percent
- 60 to 80 percent
- More than 80 percent
We are well on track to meet both internal and external timelines

- **September 2010**: Initial performance system design produced
- **Sept-Dec, 2010**: Share and receive feedback from key constituents
- **March 2011**: Performance system design “finalized”
- **June 2011**: “beta” release of performance system
- **June 2012**: First implementation of Performance system