



**A PROPOSAL TO APPLY THE
FOLLOW THE CHILD GROWTH MODEL
TO
NEW HAMPSHIRE'S ACCOUNTABILITY SYSTEM**

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WASHINGTON, DC**

DATE: **ORIGINAL SUBMISSION: NOVEMBER 1, 2006
REVISED SUBMISSION FOR PEER REVIEW: MAY 1, 2007
CURRENT SUBMISSION: FEBRUARY 15, 2008**

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EXECUTIVE SUMMARY

The New Hampshire Department of Education, in response to Secretary Spellings' letter to Chief State School Officers December 7, 2007, is re-submitting a proposal to incorporate a growth model into adequate yearly progress (AYP) determinations on a pilot basis. The proposed growth model will be part of Commissioner Lyonel Tracy's larger Follow The Child Initiative, which involves growth targets for all students, interim testing, and remediation activities. Incorporation of the growth model into the existing accountability system will encourage schools to put individual students who have yet to reach proficiency on accelerated paths toward state achievement standards. In addition, the Follow The Child Growth Model will encourage schools to provide appropriate interventions to students at risk of falling below proficiency. If approved, the state will implement this addition to its accountability system for school and district AYP determinations based on 2007-2008 testing.

The Follow The Child Growth Model calculates growth targets for every student and tallies the number of students meeting these individual growth targets. If the student is being tested for the first time, proficiency is the student's growth target. Otherwise, student growth targets are based on the student's test score from the previous year. If the student was previously below proficient, his or her growth target is based on closing the distance to proficiency. The amount of required growth is dependent on how far below proficient the student previously scored. The "distances" students must make up each year are aggressive, in that considerably more than one year's growth is required each year for students below proficient; otherwise, the gaps would not close. However, those distances are consistent with the findings of research on the size of achievement gains that can be reasonably expected from remedial activity, i.e. tutoring, under optimal conditions. If a student was previously proficient, the growth target is designed to encourage a level that exceeds proficiency. The growth target is entered as part of each student's record in New Hampshire's student information system so that it can be compared to the student's current year performance for AYP decisions. The information system, which includes unique student identifiers, provides a means of tracking student test scores across time, schools, and districts.

The Follow The Child Growth Model supplements the existing AYP index model. Under this proposed accountability system, each subgroup will have two options for meeting AYP proficiency targets in reading and mathematics: through the index system (including safe harbor) or the growth model. Schools and districts will meet AYP proficiency requirements if each subgroup meets the growth annual measurable objective (growth AMO) or the status/index AMO in reading and mathematics. The growth AMOs will be set using the specified NCLB guidelines. The AMOs are set to increase over time until they reach 100% in 2013-14.

The proposed accountability system is consistent with the Core Principles identified in Secretary Spellings' letter. The growth model will encourage schools and districts to bring all students to proficiency and eliminate achievement gaps in reading and mathematics. The growth model

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requires low-achieving students to make accelerated progress toward proficiency and does not alter this expectation based on student characteristics. AYP decisions are made separately for reading and mathematics, based on student scores. The system holds schools and districts accountable for the growth of each student in tested grades as well as the growth of the students by subgroup. Annual assessments in reading and mathematics in each of grades 3 through 8 and high school, which have been administered since 2005, are included in the growth model. These assessments produce comparable results from year to year, are based on vertically articulated achievement standards and grade level expectations, and have been approved through the USED peer review process. The growth model makes use of New Hampshire's data system that tracks individual student progress across time and across schools and districts.

This proposal captures the spirit of No Child Left Behind and the urgency to move each child to academic proficiency. In New Hampshire's Follow The Child Growth Model proposal, schools are accountable for each child and will follow the progress of each child beyond the point at which proficiency is attained. Even now, in New Hampshire, the Follow The Child school districts are accountable for meeting the needs of each child. This means that each school needs to show improvement as long as it has even one child who does not meet the standard for proficiency.

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BACKGROUND

New Hampshire's proposed Follow The Child Growth Model reflects the spirit of the bi-partisan effort adopted in 2001 as the *No Child Left Behind Act* (NCLB). This proposal balances the absolutes of psychometric reporting with a personalized sensitivity for the uniqueness of each child. Educating the whole child by addressing the physical, social, personal and academic components and reporting tangible evidence of growth in each area is the charge of the Follow The Child Initiative. A personalized education that documents evidence of student performance is consistent with the spirit of NCLB. This proposal attempts to reconvene and reconnect that spirit. In the Follow The Child Initiative, schools are accountable for each child and will follow the progress of each child until proficiency is attained and beyond. Even now, in New Hampshire, the Follow The Child schools are accountable for addressing the proficiency needs of each child. This means that each school needs to show improvement as long as it has even one child who does not meet the standard for proficiency.

Many who continue to support the objectives of NCLB have suggested that the insensitive nature of the NCLB status model can be improved. For example, schools should be given credit for getting low performing students on track toward proficiency – e.g., credit for the improved performance of students that gets them closer to the proficient level. In November 2005, U.S. Secretary of Education Spellings released a letter inviting states to submit proposals to USED for incorporating growth models into their 2005-06 AYP determinations on a pilot basis. New Hampshire applauds her initiative and in response to that letter, is re-submitting a Follow The Child Growth Model Proposal. This proposed growth model is consistent with New Hampshire Commissioner Lyonel B. Tracy's Follow The Child Initiative and, in fact, is part of a larger program involving growth targets for already proficient students, interim testing, and remediation activities. New Hampshire educators believe that this proposal connects the annual assessment system to the classroom teachers' daily efforts as they work with their students to reach proficiency and beyond.

The assessment and accountability provisions of the NCLB are well known to state departments of education. In New Hampshire, adequate yearly progress (AYP) under NCLB is based on a status model in which the key statistic is an index reflecting the weighted average of students in a subgroup achieving each performance level for a particular year. Schools and districts receive full credit for each student that is proficient or better, and partial credit for students that are below proficient. Each subgroup is evaluated in terms of how the index compares with the interim target index (annual measurable objective or AMO) on the way toward the NCLB requirement of 100 percent proficient by 2013-14. New Hampshire proposes to integrate a growth model into its AYP accountability process. The proposed growth model evaluates the percentage of students in each subgroup meeting their growth targets. The growth targets are based on students reaching and maintaining proficiency. Each subgroup is evaluated in terms of the percentage of students meeting their targets on the way toward the goal of 100% on track to proficiency by 2013-14. The Follow The Child Growth Model rewards personalized learning that

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plots a track toward proficiency and the Follow The Child Initiative defines the necessary support systems for each child.

POLICY RATIONALE

Under its current accountability system, New Hampshire assigns overall ratings and interventions to schools and districts according to NCLB/AYP statutory requirements. The State places schools that do not make AYP for the first time on a watch list, and offers technical assistance to these schools to address the areas where they fell short of AYP standards. The State identifies schools and districts that have missed AYP two or more consecutive years in the same content area as In Need of Improvement and makes them a high priority for support.

Once schools and districts have met the 95% participation rate in each content area, they must also meet the other academic indicator: 90% attendance rate (or improvement) in grades 3-8 or 75% graduation rate (or improvement) in high school. If they meet the participation rate and the other academic indicator, then they are evaluated against the proficiency standards for each subgroup with 11 or more students. In New Hampshire, schools meet AYP proficiency standards when each subgroup meets annual measurable objectives (AMOs) in reading and mathematics, or meets the progress requirements under the 10% “safe harbor” rule. The index system gives each student full credit (100 points) for scoring proficient or higher and partial credit for students who score below proficient based on a sliding scale. The index for a subgroup is the average of the student index points in each content area: reading and math. This holds schools accountable for monitoring, assessing and reporting tangible evidence of student results based on Grade-Level Expectations (GLEs).

New Hampshire’s accountability system encourages schools and districts to improve student achievement and close achievement gaps by focusing resources on students who have yet to meet annual proficiency targets. The system also acknowledges the efforts teachers put into addressing the needs of those students scoring below proficient and rewards schools for positive movement toward proficiency. While this system is an improvement over the traditional percent proficient status model, it remains a status/improvement model and does not fully embrace New Hampshire’s Follow The Child Initiative. Full implementation of the Follow The Child model requires each child to be on track toward proficiency and that once proficiency is reached, students are monitored to ensure they are not at risk of becoming less than proficient. The growth model gives schools and districts an immediate incentive to identify students who are far below proficient and launch them on an accelerated path to proficiency, while compelling them to catch proficient students who are slipping. Incorporation of the growth model into New Hampshire’s AYP accountability system will lead to substantial educational improvements, while helping to shape effective education policy and practice in the years ahead.

The growth model will serve to reinforce the following actions New Hampshire is taking to meet the goal of all students reaching proficiency in reading and mathematics by 2013-14:

- Improving student achievement

New Hampshire has implemented the Follow The Child Initiative, designed to help schools foster student aspirations and promote student success through an emphasis on

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personalized learning and assessment. This initiative captures and expands on the spirit of NCLB by promoting personalized learning that plots a track toward proficiency and defines the necessary support systems for each child, personally, socially, physically, and academically.

As part of the Follow The Child Initiative, New Hampshire is using the *My Voice* student surveys, developed by the Quaglia Institute, to quantify the relationship of student aspirations to their personal, social, physical, and academic success.

A preK-16 Literacy Task Force has developed a Literacy Action Plan for the 21st Century for school and district leaders that will guide them in the implementation of comprehensive literacy programs that address the literacy learning needs of *all* students and connects regular education, special education, and the New Hampshire teacher preparation programs.

New Hampshire is part of the New England Comprehensive Assessment Program (NECAP), a tri-state effort with Rhode Island and Vermont that has developed rigorous grade level and grade span expectations in reading, writing, and mathematics. These vertically articulated standards form the basis for the NECAP Assessment, the only multi-state effort in the country.

The Commissioner's Leadership Advisory Council is comprised of forty outstanding leaders from across the state. These leaders represent all five regions of New Hampshire and regularly advise the Commissioner on how to best provide a personalized education for each student. These advisors come with multiple perspectives including the areas of business, higher education, non-profit community based organizations, schools (including teachers, principals, and superintendents), school boards, Career Technical Education, the New Hampshire Education Association, the American Federation of Teachers, and Parent Teacher Associations.

- Data collection and analysis

New Hampshire has implemented the Initiative for School Empowerment & Excellence, (i4see), a data system that accurately records student achievement and demographic data over time, using unique student identifiers. As part of the i4see Follow The Child Assistance Center, New Hampshire has contracted with Performance Pathways to provide schools and districts with their *Performance Tracker and Assessment Builder* software. This tool enables schools and districts to analyze state and local assessment data that is connected to our state standards and our Follow The Child Initiative. They can also track student growth (using the proposed FTC Growth Model targets) and create their own local assessments. Districts also have the option of adding curriculum mapping and lesson planning modules to the system. In addition to the aforementioned tools, the awarding of one of the USED Longitudinal Grants has allowed New Hampshire to begin the development of a data warehouse to support the many Department initiatives and systems.

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The New Hampshire Special Education Identification System (NHSEIS) is also being implemented. This improved data collection system has replaced the former Special Education Information (SPEDIS) System and will enable and facilitate the IEP process when fully implemented, as well as meet the need to maintain student data required for reporting purposes at the local, state and federal level.

In Career and Technical Education, a similar student data tracking system (CATE) exists that is being merged with i4see.

- New standards for school approval

New Hampshire has implemented new standards for school approval that require rigorous teaching and learning standards within a framework that offers opportunities and flexibility to local school districts and school boards. Within this framework, local school districts can design and create multiple learning opportunities with a focus on the assessment of defined competencies and real world learning.

- Closing achievement gaps

Thanks to the sustained spirit of NCLB, New Hampshire schools are attuned to the progress of every child. The culture of New Hampshire administrators, teachers, students, and community members is focused on providing and sustaining a personalized education for every child. Because of these efforts, New Hampshire has set an aggressive timeline for having all students achieve proficiency and close the achievement gap.

As part of the High School Redesign process, New Hampshire is committed to building a coherent PreK-16 plus education framework that will:

- (1) Close the learning gap between high performing and low performing school districts;
- (2) Increase high school graduation rates and decrease dropout rates;
- (3) Establish a Grade 11-14 dual high school/college system;
- (4) Create and align high school exit standards and college entrance standards;
- (5) Establish an aligned P-16 teacher training program within the university and community college setting to prepare teachers for redesigned high school instruction;
- (6) Provide high school redesign training to high school leaders by partnering with the New Hampshire Association for School Principals;
- (7) Improve middle and high school literacy rates through an extensive focus on adolescent literacy in addition to the goal of all children reading at grade level by the end of grade 3; and
- (8) Construct a personalized learning plan with every New Hampshire high school student.

- School support systems

New Hampshire has defined a statewide system of school support that matches key people in the New Hampshire Department of Education to schools and districts that need support. This support may address needs in data analyses, improved content knowledge,

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instructional strategies, and/or professional learning activities. School Improvement Coaches in reading and mathematics are available to work with schools and districts, as well as additional coaches who are experts in the administration of New Hampshire's alternate assessment and other special education issues.

New Hampshire, in collaboration with the New England Comprehensive Center, implemented the Habits of Professional Excellence (HOPE) improvement strategy in 2003. The initiative was based on school improvement research and the experiences gained through the Best Schools Leadership Institute and the Title 1 School-wide Congress. The HOPE strategy was offered as one component of the support system that New Hampshire's School Improvement Team is providing to assist schools/districts as they create improvement plans designed to incorporate scientifically based research strategies that have the greatest likelihood of improving achievement in the areas in which the school/district were identified. The School Improvement Team guides districts through root cause analysis and uses an authentic task-based design that provides significant dedicated time for facilitated team work plus plenary and workshop sessions that focus on the work being done by teams. To date, this initiative helped 7 of 15 Districts in Need of Improvement exit Improvement status. Last summer, a Follow The Child Leadership Institute extended the work of HOPE to include more teams and support the work being done in the areas of literacy, student support, data analysis and use, and high school redesign. Twenty two teams participated in the Institute, including one team made up of higher ed representatives from our New Hampshire teacher preparation programs. Each team developed an action plan that they are currently implementing. A follow-up session was held in January 2008 showcased four districts who shared successful practices for improving student achievement that included data analysis and leadership models.

- Improving teacher quality

New Hampshire, in cooperation with USED, developed a HOUSSSE (Highly Objective Uniform State Standard of Evaluation) plan as part of the Highly Qualified Teacher requirements that defines the quality of New Hampshire teacher preparation programs and the New Hampshire teacher recertification process. As part of this initiative, teachers can attain highly qualified status by documenting their teacher preparation, certification, professional development and recertification efforts.

- Empowering educators

The New Hampshire Department of Education is building strong working relationships with the New Hampshire School Administrators' Association, the New Hampshire Association of School Principals, the National Education Association, the American Federation of Teachers, the New Hampshire School Boards Association, New Hampshire Association for Supervision and Curriculum Development (NHASCD), and other organizations that support student learning.

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Supporting New Hampshire teachers is a priority because New Hampshire believes teachers are key to improving learning opportunities for all students across the state.

New Hampshire Education Association leadership has facilitated several forums to assist decision makers to establish a framework for the Follow The Child initiative. These forums specifically focus on advanced professional learning activities to support the teacher in the classroom. For the past two years the NEA-NH leadership has worked with the Commissioner to invite all teachers to become designated Follow The Child educators.

The Growth model will enhance these initiatives by: maintaining high expectations, affirming the work of effective schools, and by making use of longitudinal assessment data. New Hampshire is well-positioned to participate in the growth model pilot program because the state has implemented a rigorous assessment system, established a statewide data collection system which includes a unique student identifier for tracking students across schools and districts over time, and gained the support of New Hampshire educators in the pursuit of accountability and increased student achievement. New Hampshire schools have also already used the initial year of growth data, generated after last year's assessment data was released, to inform instruction and place students on accelerated paths to proficiency.

New Hampshire welcomes the opportunity to collaborate with the U.S. Department of Education in evaluating the effectiveness of the growth model pilot program in New Hampshire schools.

PROPOSED FOLLOW THE CHILD GROWTH MODEL

The challenge, when trying to add a growth component to a state's accountability system, is to preserve the intent and specific requirements of NCLB. New Hampshire proposes to do this by using both status (index model) and the Follow The Child Growth Model to determine if a school meets AYP proficiency requirements. New Hampshire will incorporate individual student growth targets, based on achieving and maintaining proficiency, into AYP calculations in a manner that supports the "Bright Lines" of NCLB and follows the intent of the 10% "safe harbor" rule. By including the growth model alongside the existing index model, New Hampshire will encourage schools to put individual students who have yet to reach proficiency on accelerated paths to meeting state achievement standards. It will also challenge students who are already proficient to maintain a high level of performance, while identifying students who are at risk of falling below proficiency.

AYP DETERMINATIONS

Under the proposed accountability system, schools will have two options for meeting AYP proficiency targets in reading and mathematics: through the index model (including safe harbor) or through the growth model.

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Index model: Each subgroup must meet or exceed the index targets for reading and mathematics by having an average index score at or above the respective AMOs for status.

Safe Harbor: Subgroups not meeting the index targets must reduce the percentage of students scoring below proficient by 10% from the previous year and increase the percentage of proficient students.

Growth model: Subgroups not meeting the index or safe harbor targets must meet or exceed the respective AMOs for growth by having a sufficient percentage of students meet or exceed their growth targets.

The growth model annual measurable objectives were set for the first time in 2006-07 in both reading and mathematics. Each starting point was based on the percentage of students meeting their growth targets in a public school at the 20th percentile of the State's total enrollment among all schools ranked by the percentage of students meeting their growth targets. These starting points will remain the same for 2007-2008 and then increase in equal increments annually in order to achieve an AMO of 100% of students on track to proficient in 2013-14.

To meet AYP through the growth model, subgroups must meet the growth AMOs in reading and mathematics using the percent of students meeting or exceeding their growth targets. A growth target is calculated for each student in New Hampshire. The growth model expects proficient students to maintain proficiency, students just below proficiency to achieve proficiency within one or two years, and sets students significantly below proficiency on an aggressive trajectory toward proficiency based on standard deviation units. For any student initially failing to achieve a reading or mathematics test score at or above the cut score for proficient, the growth target takes the student progressively closer to the proficient standard, with the proficiency cut score as the ultimate target. If the student is more than one standard deviation below proficient on the NECAP scale, the target is based on making up one third of the distance to proficiency. If a student is between one standard deviation and a half standard deviation below proficient, the target is based on making up one half of the distance to proficiency. And if a student is less than a half of a standard deviation below proficient, proficiency is the target. For students in their first test year in New Hampshire, or for students without a previous test score, proficiency is the target. By definition, if students meet their growth target each year, they will become proficient in a specified number of years.

If students meet or exceed their individual growth target, they are counted as "on target" to proficiency in any subgroup that applies. If students fail to meet their individual growth target, they are counted as not "on target" to becoming proficient in any subgroup in which they appear for AYP determinations.

ESTABLISHING GROWTH TARGETS

Student growth targets for reading and mathematics are based on the students' previous test scores in that subject and therefore vary from student to student and subject to subject. However, they can be categorized into three general categories: (1) students without a test score from the previous year, (2) students who scored proficient, (3) students who did not score proficient.

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No previous test score: If the student is being tested for the first time in New Hampshire, or if for some other reason, they do not have a previous test score, the target is proficient.

Previously scored proficient: If the student previously scored at the proficient level, the growth target reflects sustaining this level of performance. The actual target for a proficient student depends on how far above proficient the student previously scored. If students score less than one quarter of a standard deviation above proficient, their target is proficient. If students score between one quarter and 1¼ standard deviation above proficient, their target is their previous score minus one quarter of a standard deviation. If students score more than 1¼ standard deviation above proficient, their target is one standard deviation above proficient. These targets were derived after examining the effects of statistical regression.

Previously Scored below proficient: The specific amount of growth required by a low performing student is dependent on how far below proficient the student previously scored. The target for a student scoring more than one standard deviation below proficient is based on reducing the distance to proficiency by one third, while the target for a student scoring between one half and one standard deviation below proficient is based on reducing the distance to proficiency by one half. The target for a student scoring less than half a standard deviation below proficient is proficiency. The “distances” students must make up each year are aggressive, in that considerably more than a year’s growth is required each year for students below proficient; otherwise, the gaps would not be closed. However, those distances are consistent with the findings of research on achievement gains that can be expected from high quality remedial activity. (Cohen, Kulik and Kulick, 1982)

The percent of students meeting their growth targets is calculated for each subgroup in reading and mathematics and then compared to the growth AMO. If the percent of students meeting their growth targets meets or exceeds the AMO, the subgroup makes AYP.

SUMMARY

The Follow The Child growth model sets a very high standard. Schools and districts may make AYP under the growth model only under the following strict conditions: (1) the percent of students meeting their growth targets for each subgroup in reading meets the AMO; and (2) the percent of students meeting their growth targets for each subgroup in math meets the AMO. The proposed growth model will be applied to all grades at which NCLB testing is required: Grades 3 through 8 and Grade 11. The growth model includes all students, even those who do not have previous test scores in the state of New Hampshire. It does not allow the growth of proficient students to compensate for the growth of non-proficient students, nor does it assign additional credit for students who score at the advanced level. In addition, it does not allow students to continually meet their growth targets without becoming proficient. More detail on the proposed approach is provided in the following sections where we address the core principles identified in Secretary Spellings’ letter.

CORE PRINCIPLES -- NCLB ALIGNMENT ELEMENTS

Core Principle 1. 100% Proficiency by 2014 and Incorporating Decisions about Student Growth into School Accountability

1.1 How does the State accountability model hold schools accountable for universal proficiency by 2013-14?

New Hampshire proposes to use status (index), including safe harbor, and growth to hold schools accountable for 100% proficiency by 2013-14 for all districts, schools and subgroups in reading and mathematics. The State proposes to use a growth model that counts the number of students meeting student-specific growth targets to evaluate individual student academic progress towards meeting state standards. Student growth targets are based on students' previous scores on the state assessment. In order for a school to be classified as attaining yearly progress (AYP), all subgroups within a school must meet or exceed the participation, other academic, and proficiency indicators. Each subgroup within a school has two options for meeting the proficiency requirements: (1) status/index (including safe harbor) or (2) growth.

The addition of the growth model maintains the goal of 100% proficient or on track to proficiency by 2013-14 through the combination of the status/index annual measurable objectives and individual student growth targets centered on proficiency. Under the proposed Follow The Child Growth Model, **each student** is assigned a growth target centered around proficiency. In order to meet the 2013-14 goals, each subgroup must have 100% of its students scoring at least proficient or 100% of its students meeting their growth targets. This ensures that all students in a school are proficient or on track to proficiency by 2013-14.

The inclusion of the growth model alongside the existing index model in the AYP accountability system is intentional by design. The growth model is independent from the index system and has been designed to measure a different aspect of moving towards proficiency than the index system. The use of one model without the other would provide an incomplete picture of school performance and therefore incomplete accountability.

In the growth model the scores of proficient students do not compensate for the growth of non-proficient students. Each student must meet his or her target, whether they are proficient already or are substantially below proficient. The growth model also does not allow students to continually meet their growth targets without becoming proficient. In addition, students at or above proficiency must meet individual targets that are at or above proficiency. So, students above proficiency, who stay above proficiency but do not make meet their target, count against a school's growth total.

1.2 Has the state proposed technically and educationally sound criteria for "growth targets" for schools and subgroups?

1.2.1 What are the State's "growth targets" relative to the goal of 100% of students proficient by 2013-14?

The school and subgroup "growth targets" are called annual measurable objectives (AMO), which reflect the proportion of students who must meet or exceed their growth targets. A

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subgroup that meets or exceeds either the Index AMO or the Growth AMO is classified as meeting the proficiency requirements. A school is classified as meeting AYP if all subgroups meet the proficiency requirements in reading and math, the participation rate, and the additional academic indicator. After 2008, the AMOs will increase by equal amounts to 100% in 2013-14. This means that for a subgroup to meet AYP in 2013-14, all students in the subgroup must meet or exceed the status (including safe harbor) target or the growth target.

TABLE 1: INITIAL STATUS AND GROWTH AMOS

	Status AMO		Growth AMO	
	Reading	Math	Reading	Math
2005-2006	82	76		
2006-2007	82	76	57	53
2007-2008	86	82	57	53
2008-2009	86	82	64	61
2009-2010	91	88	71	69
2010-2011	91	88	78	77
2011-2012	95	94	85	85
2012-2013	95	94	92	93
2013-2014	100	100	100	100

It is worthwhile to note that the AMOs have changed since the previous submission and now increase in equal intervals annually except for the final year. New Hampshire’s original proposal in 2007 had the growth AMOs increase every two years too coincide with the status AMOs. However, since this year is actually the second year of our New Hampshire pilot, the Accountability Task Force made the decision to leave the targets as they were in 06-07 while they continue to review and analyze the data from the first two years of implementation. And, since we are now only 6 years from 2013-14, the growth increments will increase annually.

The proposed growth model functions in the same manner as a percent proficient model in that students who fail to meet their growth targets are counted as not on track to proficient, while students who meet or exceed their growth targets are counted as on track to proficiency. In order for a subgroup to make AYP, it has two options: (1) it can meet or exceed the index standard (including safe harbor), or (2) it can meet or exceed the growth standard. Under the proposed Follow The Child Growth Model, the goal is to have 100% of New Hampshire students in every subgroup, school, and district score at least proficient or meet their growth targets in both reading and mathematics by 2013-14.

- ***Please provide a rationale for the use of an index system for status AYP decisions in conjunction with the proposed growth model.***

The New Hampshire status/index system and the proposed growth model are not technically or philosophically equivalent. That is, they measure different aspects of student achievement in a school: status and growth. Under status/index models, a “good” school is determined using student achievement levels from a single point in time. An “improving” school is one where the school’s achievement level, based on different student cohorts, increases from one year to the

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next. In contrast, growth models evaluate schools according to how much students learn or “grow” beyond their level of achievement when they entered (Carlson, 2006).

Growth models focus on the movement of individual students along the achievement continuum across years, while the status/index model focuses on the scores of students at a single point in time. Under the status/index model, the previous achievement of the student is inconsequential, while under the growth model previous achievement is critical. In a status/index model, the amount of points students earn for their school is based on the performance level attained on the current year test, regardless of whether or not they scored in a higher performance level the previous year. In contrast, under the growth model, students **only earn credit for their school by improving** on their previous test score. Table 2 illustrates and summarizes how the growth model and index/status model proposed by New Hampshire look at student achievement from different perspectives.

TABLE 2: INDEX AND GROWTH COMPARISONS

Student	<i>Year 1 (Math)</i>				<i>Year 2 (Math)</i>			
	Score	Performance Level	Growth Target	Index Points Earned	Score	Performance Level	Index Points Earned	Growth Points Earned
<i>A</i>	331	Level 2a	435	60	431	Level 2a	60	0
<i>B</i>	331	Level 2a	435	60	435	Level 2a	60	100
<i>C</i>	428	Level 1b	532	40	531	Level 2a	60	0
<i>D</i>	428	Level 1b	532	40	534	Level 2a	60	100
<i>E</i>	445	Level 3	542	100	540	Level 3	100	0
<i>F</i>	445	Level 3	542	100	544	Level 3	100	100

The New Hampshire growth model rewards schools for significant growth which might take place within an achievement level, while the status/index model does not. While students who change achievement levels may meet their growth targets (Student *D*), it’s possible for students to meet their growth targets without changing achievement levels (Students *B* and *F*). Under the growth model, schools are rewarded for this change in performance while under the status/index model, they are not. The growth model encourages schools to focus on all students, not just the students that scored just below the performance level cuts. In contrast, the status/index model rewards schools for improvement that crosses achievement levels, regardless of the amount of growth. Students may improve performance by moving from Level 1 to Level 2, thereby earning more index points for their school, but the improvement may not represent significant growth (Student *C*). A one point improvement (if it falls at the cut point) is rewarded in the status/index system, but **not** in the growth system.

A valid accountability system should incorporate both status and growth. By combining the two measures, New Hampshire is increasing the validity of its accountability system.

1.2.2 Has the State adequately described the rules and procedures for establishing and calculating “growth targets”?

New Hampshire carefully considered how best to establish educationally and technically sound criteria for growth targets at the school and subgroup levels. There are no guidelines for starting points and AMOs for growth models. Several states proposed to add the percent of students making progress toward proficiency to the percent of students scoring proficient or above and then compare the new tally to existing AMOs. This system is not consistent with New Hampshire’s status/index model because the number of students on track to proficiency cannot simply be added to the index. In fact, simply adding the number of students meeting their growth targets to the existing index score would artificially inflate the school’s score because these students may have already earned index points for their school.

In the absence of guidelines, New Hampshire chose to generate starting points for the growth proposal by using the statutory process outlined in the NCLB law. The starting annual measurable objective was set for the first time in 2006-07 in both reading and mathematics based on the October, 2006 assessment data. Each starting point was based on the percentage of students meeting their growth targets in a public school at the 20th percentile of the State’s total enrollment among all schools ranked by the percentage of students meeting their growth targets. The growth AMOs are displayed in Table 2 on page 13.

Since the growth statistic is different from the status statistic, it is expected that the two models generate different starting points. As required by legislation, the starting points for the existing status model are defined by the performance of the “20th percentile” school using the method outlined in the previous paragraph. New Hampshire has set intermediate AMOs toward 100% proficiency by increasing in equal increments annually. The original intermediate growth AMOs were chosen following the same general rules as the status model – by applying equal increments every two years. To align the two AMO systems, New Hampshire chose to have growth AMOs increase the same year as status AMOs. However, now that the decision has been made to keep the same AMO in 2007 as 2006, the intermediate targets will increase annually.

Starting points are controlled by the lower tail of the distribution of school scores. The state’s status/index model starts out with percent of students proficient or above and then adds partial credit for students below proficient (based on a sliding scale). Since about 60% of the students statewide are proficient or better, one would expect indexes to be in the mid 80’s. In fact, the starting points under the state’s index model are 82 for reading and 76 for mathematics. The state’s proposed growth model is constructed differently. It is possible to think of it as follows: start with percent of students proficient or above, add the percent of students below proficient that meet their growth target, and finally subtract the percent of students at or above proficient that do not make their growth target. Since it is hard to make growth targets for both groups of students - those that score below proficient and those that score at or above proficient - one would expect current growth statistics in New Hampshire to start somewhere around 60. In fact, preliminary starting points for New Hampshire’s growth model are 57 for reading and 53 for mathematics. We do not consider these starting points to be high or low; rather, the two sets of numbers define the context for the current challenge - to leave no child behind.

1.3 Has the State proposed a technically and educationally sound method of making annual judgments about school performance using growth?

1.3.1 Has the state adequately described how annual accountability determinations will incorporate student growth?

Once schools have met the 95% participation rate and the additional academic indicator; they are eligible to meet the proficiency standards for each subgroup that has 11 or more students. Subgroup proficiency can be attained using the status (index), including safe harbor, or growth models. Proficiency for each subgroup is determined independently.

TABLE 3: EXAMPLES OF NEW HAMPSHIRE AYP DETERMINATIONS

Sub-Group	Met Participation Target	Met Performance Target	Safe Harbor		Overall Status AYP	Overall Growth AYP	Overall AYP
			10% Rule	Other Ind			
1	Yes	Yes	-	-	Yes	No	Yes
2	Yes	No	Yes	Yes	Yes	Yes	Yes
3	Yes	No	Yes	No	No	No	No
4	Yes	No	No	No	No	Yes	No
5	Yes	No	No	Yes	No	Yes	Yes
6	Yes	No	No	Yes	No	No	No

Subgroups meet AYP proficiency requirements under the growth model if the percentage of students meeting their growth targets in reading meets or exceeds the growth AMO for reading and if the percentage of students meeting their growth targets in mathematics meets or exceeds the growth AMO for mathematics. The growth AMOs were set for the first time in 2006-07 in each of reading and mathematics. They were set using the statutory process for setting annual measurable objectives and intermediate goals. Each starting point was based on the percentage of students meeting their growth targets in a public school at the 20th percentile of the State’s total enrollment among all schools, ranked by the percentage of students meeting their growth targets. These starting points will remain the same in 2007-08 and then increase in equal increments annually to achieve an objective of 100% in 2013-14.

The growth model will use all current rules approved under New Hampshire’s accountability workbook including: disaggregating by subgroup, counting only students with full academic year status, and applying a minimum subgroup size of 11 to assure statistical validity and reliability of AYP decisions based on the growth model. A confidence interval will not be used for the growth model, but will continue to be used for the index model. The proposed Follow The Child Growth Model carries a significant interpretation advantage compared to other models because the “percent of students meeting their growth targets” is easily understandable to educators and the general public.

New Hampshire will report its AYP results in two ways for each subgroup: status (which includes safe harbor) and growth. The inclusion of the growth model significantly adds to the validity of the accountability system because it reflects the reality of what it takes to move low performing students to significantly higher levels of achievement through remediation.

1.3.2 Has the State adequately described how it will create a unified AYP judgment considering growth and other measures of school performance at the subgroup, school, district, and state level?

A district will make AYP if each subgroup meets proficiency requirements of the index model (which includes safe harbor), or the growth model. Additionally all subgroups in a district must meet the 95% participation rate and the additional academic indicator (attendance or graduation rate). District subgroups are aggregated at two levels: (1) elementary/middle and (2) high school.

A school will make AYP if each subgroup meets the 95% participation rate, the additional academic indicator (attendance rate or graduation rate), and proficiency requirements of the index model (including safe harbor), **or** the growth model.

The State will report the results of the status model (including safe harbor) and the growth model for all schools and districts in a manner that is clear and understandable to the public (**Please refer to the sample reports in the Appendix**). The growth model results will be reported alongside the index model results as outlined in the approved accountability workbook to provide parents with opportunities to use the information to inform their educational decisions.

1.4 Does the State proposed growth model include a relationship between consequences and rate of student growth consistent with Section 1116 of ESEA? (School choice/interventions)

The Follow The Child model maintains the principles of the approved NCLB status model in how it holds schools accountable for student achievement in reading and mathematics. The incentives for schools to meet their AYP targets and the consequences for not making AYP are the same under both systems (status/index and growth). These consequences include parental notification, public school choice, supplementary education services, and other provisions to comply with Section 1116. Growth is simply an additional “target” to meet. The inclusion of growth targets for each student should make school personnel more informed and able to address the individual needs of the low-performing students. In addition, giving students their own growth target gives each student a personal goal to aspire to, and may make them take the system more seriously because they can see a purpose that relates directly to them.

New Hampshire’s Follow The Child model is designed to address the needs of each child in a proactive manner that targets mathematics and reading as areas of focus for the purpose of moving the child to proficiency and beyond. This effort must be embraced by the classroom teacher and delivered through research-based strategies for which formative assessments are identified to gauge the learning of the child toward proficiency. New Hampshire charges each school to provide these interventions even before the NCLB corrective action measures come into play. The Commissioner of Education expects New Hampshire educators to know the performance level of each student and, if they are below proficient, be able to explain what has been done to move those students toward proficiency.

NCLB provides incentives for school personnel to get students to the proficient level. By reporting the results of the growth model for all school subgroups, the State will also allow the

public to recognize schools and districts that are successfully helping non-proficient students grow, while catching those who are at-risk of falling below proficient. Follow The Child will help encourage local school districts and schools to provide the incentives for teachers and students to raise achievement levels even higher. Follow The Child districts, schools, and teachers are recognized annually at special events.

Core Principle 2: Establishing Appropriate Growth Targets at the Student Level

2.1 Has the State proposed a technically and educationally sound method of depicting annual student growth in relation to growth targets?

General Philosophy

Student background variables and school characteristics do not enter into the analyses for the proposed Follow The Child growth model. In fact, New Hampshire's very foundation of providing a quality education for each child demands that educators hold the same high standards of performance for each child, regardless of race, ethnicity, disability, socio-economic status, or any other school or background characteristics. The rules for establishing how long a student has to reach proficiency and for establishing student growth targets are the same for all students. These growth target scores are based solely on the "distance" a student's previous test score is from the standard (cut-score) for the proficient level.

The target for low performing students is dependent upon the distance between the student's previous test score and the proficient cut score. A student scoring one standard deviation unit or more below the proficient cut score will have to reduce his or her "distance" from proficiency by one-third. A second student, scoring one-half to one standard deviation unit below the cut score for proficient, will have to make up half the distance to proficient; and a third student, scoring less than one half of a standard deviation unit below the proficient cut score, will have to score proficient. Therefore, the number of years a student has to reach the proficient level and the yearly growth targets are dependent on the "distance" between the student's most recent test score and the proficient cut score.

With vertically moderated achievement levels, it is assumed if a student makes one year of progress after one year of instruction, his or her "distance" from proficiency would remain relatively unchanged. Therefore, using the above method to set growth targets will yield targets that, if met, are rigorous enough to close the achievement gap. A meta-analysis of research on effects of tutoring suggests that it is reasonable to expect improvement of one-third to one-half a standard deviation per year (beyond control group gains). A meta-analysis by Cohen, Kulik and Kulik (1982) found an average effect size for tutoring across 52 studies of .40. Research on tutoring continues: Vadasy, Sanders, and Peyton (2005) found large average effect sizes (.62 to 1.23) for various reading measures due to tutoring. Basing the determination of growth targets on the body of research on tutoring/remediation is the most defensible approach for establishing fair, but rigorous growth targets. Growth targets will be set for individual students, depending on how far they are from proficiency. The use of empirical evidence to create general rules for

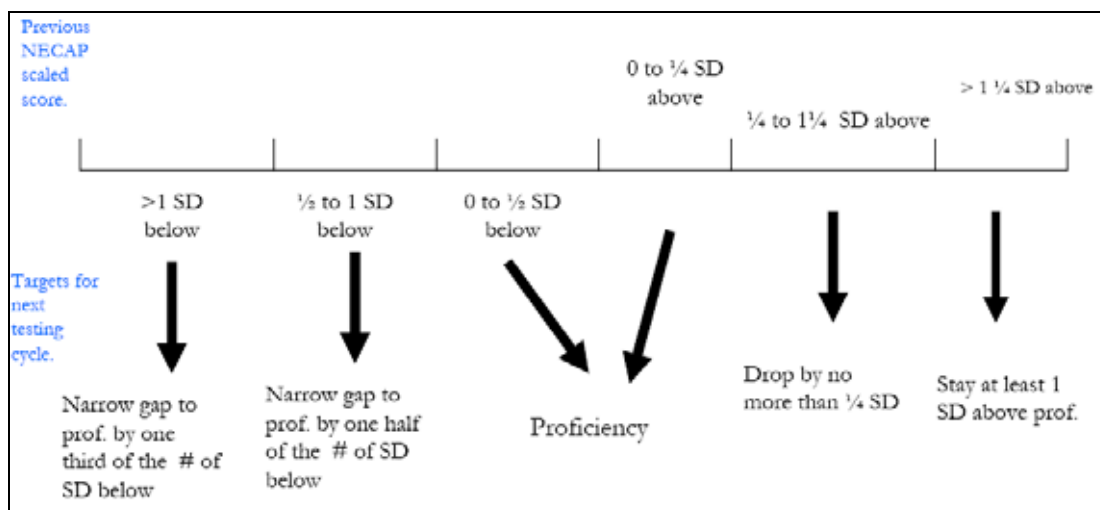
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establishing growth targets is the appropriate approach, and impresses upon educators the importance of accelerating learning in order to reduce the achievement gap.

A similar set of rules is used to set targets for proficient students. The growth target for proficient students is designed around sustaining performance. Similar to non-proficient students, the target for proficient students depends on how far from proficient the student previously scored. If the student scored less than one quarter of a standard deviation above proficient, their target is proficient. If the student scored between one quarter and one and one quarter standard deviation above proficient, their target is their score, minus one quarter of a standard deviation. If a student scored more than one and one quarter standard deviation above proficient, their target is one standard deviation above proficient. While some might question why the targets for proficient students is at or less than their current level of performance, we determined that it was only fair to schools to incorporate regression and test ceiling effects into these targets. It is important to note that the target for proficient students is never less than proficient.

Growth Target Calculations

Student growth targets are based on the distance between each student's previous score and proficient. To ensure comparability across grades, the distances are computed in standard deviation units. The standard deviations of the tests at the different grades that will be used for computing growth targets will remain the same through the years – they will be the standard deviations obtained in the base year testing – fall 2005.



Using scores from the previous year, students will be classified into one of five growth target groups: (1) more than one standard deviation below proficient, (2) between one and one half of a standard deviation below proficient, (3) between one half of a standard deviation below proficient and one quarter of a standard deviation above proficient, (4) between one quarter and one and one quarter standard deviation above proficient, and (5) more than one and one quarter standard deviation above proficient. The number and proportion of students in each growth category is displayed in Table 4 on the next page.

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TABLE 4: THE PROPORTION OF NH STUDENTS IN EACH GROWTH CATEGORY (NECAP 2005)

	Group	1	2	3	4	5
Math	N	>1SD Below	1SD – ½SD below	Proficient-½SD to Proficient + ¼SD	¼SD – 1¼SD above	>1¼SD above
Grade 3	14,243	9%	9%	35%	28%	19%
Grade 4	14,487	9%	10%	36%	28%	16%
Grade 5	14,956	9%	11%	35%	27%	17%
Grade 6	15,363	10%	13%	37%	28%	12%
Grade 7	15,561	12%	10%	41%	25%	11%
Grade 8	16,432	13%	11%	44%	22%	10%
Overall	91,042	11%	11%	38%	26%	14%
Reading	N	>1SD Below	1SD – ½SD below	Proficient-½SD to Proficient + ¼SD	¼SD – 1¼SD above	>1¼SD Above
Grade 3	14,243	7%	8%	36%	31%	18%
Grade 4	14,487	8%	9%	36%	29%	18%
Grade 5	14,956	8%	10%	39%	29%	15%
Grade 6	15,363	9%	10%	36%	29%	16%
Grade 7	15,561	9%	9%	39%	26%	17%
Grade 8	16,432	11%	9%	36%	27%	17%
Overall	91,042	9%	9%	37%	26%	14%

The growth targets are dependent on how far the student was from proficiency on the assessment from the previous year. Students in groups 3, 4, and 5, are assigned targets of proficiency, their score minus one quarter of a standard deviation, and one standard deviation above proficiency, respectively. Students in group 1 are assigned a target based on making up one third of the distance to proficiency while students in group 2 are assigned a target based on making up one half of the distance to proficiency. The different growth groups and the NECAP scaled score ranges to which they correspond, are displayed in Table 5.

TABLE 5: A SUMMARY OF GROWTH GROUPS BY NECAP SCALE SCORES

Group	1	2	3	4	5
Math	>1SD below	1SD – ½SD Below	Proficient-½SD to Proficient + ¼SD	¼SD – 1¼SD above	>1¼SD above
Grade 3	300-329	330-334	335-342	343-353	354-380
Grade 4	400-428	429-434	435-442	443-454	455-480
Grade 5	500-528	529-534	535-542	543-554	555-580
Grade 6	600-628	629-634	635-642	643-654	655-680
Grade 7	700-729	730-734	735-742	743-753	754-780
Reading	>1SD below	1SD – ½SD Below	Proficient-½SD to Proficient + ¼SD	¼SD – 1¼SD above	>1¼SD above
Grade 3	300-327	328-333	334-343	344-356	357-380
Grade 4	400-428	429-434	435-442	443-454	455-480
Grade 5	500-527	528-533	534-543	544-555	556-580
Grade 6	600-627	628-633	634-643	644-656	657-680
Grade 7	700-727	728-733	734-743	744-756	757-780

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The following information was needed to calculate the growth target for each student:

- The mean (M) and standard deviation (SD) of the 2005-2006 NECAP scores for the current grade (G1). Specific values can be found in Table 6 (M_{G1} & SD_{G1}).
- The mean (M) and standard deviation (SD) of the 2005-2006 NECAP scores for the following grade (G2). Specific values can be found in Table 6 (M_{G2} & SD_{G2}).
- The 2005-2006 z-cut scores for the current grade ($Z\text{-cut}_{G1}$, Table 6)
- The 2005-2006 z-cut scores for the following grade ($Z\text{-cut}_{G2}$, Table 6)

TABLE 6: NEW HAMPSHIRE'S 2005/06 NECAP BASELINES

Grade	Math				Reading			
	Mean	SD	Proficiency Cut Score	Proficiency Z-cut	Mean	SD	Proficiency Cut Score	Proficiency Z-cut
3	344.2	10.7	340	-0.39	346.0	12.9	340	-0.47
4	443.7	12.0	440	-0.31	444.1	11.8	440	-0.34
5	543.4	11.6	540	-0.29	544.3	12.1	540	-0.35
6	642.4	11.3	640	-0.21	644.7	12.9	640	-0.37
7	741.5	10.9	740	-0.13	744.5	13.0	740	-0.34
8	840.6	10.8	840	-0.05	843.6	12.8	840	-0.28

Sample Growth Target Calculations

For students scoring between $\frac{1}{2}$ of a standard deviation below proficiency and $\frac{1}{4}$ of a standard deviation above proficiency (Group 3) the targets are calculated as follows:

All students scoring between $\frac{1}{2}$ of a standard deviation below proficiency and $\frac{1}{4}$ of a standard deviation above proficiency are assigned a growth target of proficiency in the subsequent grade.

For example, Grade 5 students scoring between 535 and 542 in mathematics are assigned a Grade 6 mathematics target of 640 (proficiency). Grade 6 students scoring between 635 and 642 in mathematics are assigned a Grade 7 mathematics target of 740 (proficiency). Grade 3 students scoring between 334 and 343 in reading are assigned a Grade 4 reading target of 440 (proficiency).

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For students scoring between 1 and ½ of a standard deviation below proficiency (Group 2)
the targets are calculated as follows:

Description	Formula
Transfer the current year score to the z-scale	$Y1 z = (Y1 \text{ score} - M_{G1})/SD_{G1}$
Calculate the difference between the z score and the current grade proficiency	$Dif = Y1 z - Z\text{-cut}_{G1}$
Calculate distance student must make up	$Dist = \text{Absolute}(Dif)/2$
Calculate a standard score that is equal distance below proficiency on the year 2 Grade scale	$Y2 z = Z\text{-cut}_{G2} + Dif$
Add the make-up difference (1/2 Dif) to the year 2 z score	$Target = Y2 z + Dist$
Transfer the target to the year 2 (Grade specific) scaled score metric	$Target SS = (Target * SD_{G2}) + M_{G2}$

For example, the target for a student who scored 531 in mathematics would be

$$Y1z = (531 - 543.4)/11.6 = -1.07$$

$$Dif = -1.07 - (-0.29) = -.78$$

$$Dist = \text{Absolute}(-0.78)/2 = 0.39$$

$$Y2z = -0.21 + -0.78 = -0.99$$

$$Target = -0.99 + 0.39 = -0.60$$

$$Target SS = -0.60 * 11.3 + 642.4 = 636$$

Similarly, the target for a student who scored 430 in reading would be

$$Y1z = (430 - 444.1)/11.8 = -1.19$$

$$Dif = -1.19 - (-0.34) = -0.85$$

$$Dist = \text{Absolute}(-0.85)/2 = 0.43$$

$$Y2z = -0.35 + -0.85 = -1.2$$

$$Target = -1.2 + 0.43 = -0.77$$

$$Target SS = -0.77 * 12.1 + 544.3 = 535$$

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For students scoring more than one standard deviation below proficiency (Group 1) the targets are calculated as follows:

Description	Formula
1. Transfer the current year score to the z-scale	$Y1 z = (Y1 \text{ score} - M_{G1})/SD_{G1}$
2. Calculate the difference between the current grade proficiency and the z score	$Dif = Y1 z - Z\text{-cut}_{G1}$
3. Calculate distance student must make up this year	$Dist = \text{Absolute} (Dif)/3$
4. Calculate a standard score that is equal distance below proficiency on the year 2 Grade scale	$Y2 z = Z\text{-cut}_{G2} + Dif$
5. Add the make-up difference (1/3 Dif) to the year 2 z score	$Target = Y2 z + Dist$
6. Transfer the target to the year 2 (Grade specific) scaled score metric	$Target SS = (Target * SD_{G2}) + M_{G2}$

For example, the target for a student who scored 324 in mathematics would be

$$Y1z = (324 - 344.2)/10.7 = -1.89$$

$$Dif = -1.89 - (-0.39) = -1.50$$

$$Dist = \text{Absolute} (-1.50)/3 = 0.50$$

$$Y2z = -0.31 + -1.50 = -1.81$$

$$Target = -1.81 + 0.50 = -1.31$$

$$Target SS = -1.31 * 12.0 + 443.7 = 428$$

Similarly, the target for a student who scored 620 in reading would be

$$Y1z = (620 - 644.7)/12.9 = -1.91$$

$$Dif = -1.91 - (-0.37) = -1.54$$

$$Dist = \text{Absolute} (-1.54)/3 = 0.51$$

$$Y2z = -0.34 + -1.54 = -1.88$$

$$Target = -1.88 + 0.51 = -1.37$$

$$Target SS = -1.37 * 13.0 + 744.5 = 727$$

For students scoring between ¼ and 1¼ of a standard deviation above proficiency (Group 4) the targets are calculated as follows:

Description	Formula
Transfer the current year score to the z-scale	$Y1 z = (Y1 \text{ score} - M_{G1})/SD_{G1}$
Subtract ¼ of a standard deviation	$Y2 z = Y1 z - 0.25$
Transfer the target to the year 2 (Grade specific) scaled score metric	$\text{Target SS} = (\text{Target} * SD_{G2}) + M_{G2}$

*If the target SS is less than the proficiency cut, then the target becomes proficiency.

For example, the target for a student who scored 748 in mathematics would be

$$Y1z = (748 - 741.5)/10.9 = 0.60$$

$$Y2z = 0.60 - 0.25 = 0.35$$

$$\text{Target SS} = 0.35 * 10.8 + 840.6 = 844$$

Similarly, the target for a student who scored 350 in reading would be

$$Y1z = (350 - 346.0)/12.9 = 0.31$$

$$Y2z = 0.31 - 0.25 = 0.06$$

$$\text{Target SS} = 0.06 * 11.8 + 444.1 = 445$$

For students scoring more than 1¼ of a standard deviation above proficiency (Group 5) the targets are calculated as follows:

All students scoring more than 1¼ of a standard deviation above proficiency are assigned a growth target one standard deviation above proficiency in the subsequent grade.

For example, grade 4 students scoring between 455 and 480 in mathematics are assigned a grade 5 mathematics target of 552 (one standard deviation above proficiency). Grade 5 students scoring between 556 and 580 in reading are assigned a grade 6 reading target of 653 (one standard deviation above proficiency). Grade 7 students scoring between 757 and 780 in reading are assigned a grade 8 reading target of 853 (one standard deviation above proficiency).

High Standards for all Students

The model expects that each student (even those who are already proficient) will make progress. Students below proficiency are expected to make more than a year’s progress every year until attaining proficiency. By expecting students with the greatest need to make the most progress, the proposed model will help school personnel focus their energies *on closing the achievement gap for non-proficient students* and meet the goals of NCLB. Under New Hampshire’s Follow The Child Growth Model, if a non-proficient student meets his/her growth target, they have “closed the distance” to proficiency. Once s/he scores within ½ of a standard deviation of proficiency, proficiency becomes his/her growth target. Therefore, in order for the student to repeatedly meet his/her growth target, they must achieve proficiency or higher. These criteria set

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a short timeframe for students to attain proficiency. It is also important to note that the Follow The Child Growth Model goes beyond the NCLB goal of 100% proficient by requiring proficient students to meet growth targets that are greater than proficiency. Proficient students are assigned growth targets based on ensuring they are not at risk of falling below proficiency. As with non-proficient students, the growth target for proficient students depends on how far from proficient the student previously scored. Students scoring farther from proficient will be expected to maintain a level of performance above and beyond proficient while students who scored just above proficient will be expected to maintain proficiency.

Summary of Growth Targets (for students following a typical grade to grade progression)

The growth targets for students following a typical grade progression (e.g. those who move from Grade 3 to Grade 4 or Grade 6 to Grade 7) in math and reading are displayed in Tables 7 and 8, respectively. The growth target for every student that follows a sequential grade sequence can be found in these two tables. These tables will be used to communicate efficiently and transparently with educators and parents so they can help students meet these ambitious targets.

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TABLE 7: MATH GROWTH TARGETS

Grades 3 to 4		Grades 4 to 5		Grades 5 to 6		Grades 6 to 7		Grades 7 to 8		Grades 8 to 11	
Score	Target	Score	Target	Score	Target	Score	Target	Score	Target	Score	Target
300	417	400	514	500	614	600	714	700	813	800	1140
301	417	401	515	501	615	601	715	701	814	801	1140
302	417	402	516	502	615	602	716	702	815	802	1140
303	417	403	516	503	616	603	716	703	815	803	1140
304	417	404	517	504	616	604	717	704	816	804	1140
305	417	405	517	505	617	605	718	705	817	805	1140
306	417	406	518	506	618	606	718	706	817	806	1140
307	417	407	519	507	618	607	719	707	818	807	1140
308	417	408	519	508	619	608	719	708	819	808	1140
309	417	409	520	509	620	609	720	709	819	809	1140
310	418	410	521	510	620	610	721	710	820	810	1140
311	418	411	521	511	621	611	721	711	821	811	1140
312	419	412	522	512	622	612	722	712	821	812	1140
313	420	413	523	513	622	613	723	713	822	813	1140
314	421	414	523	514	623	614	723	714	823	814	1140
315	421	415	524	515	624	615	724	715	823	815	1140
316	422	416	525	516	624	616	725	716	824	816	1140
317	423	417	525	517	625	617	725	717	825	817	1140
318	424	418	526	518	626	618	726	718	825	818	1140
319	424	419	526	519	626	619	727	719	826	819	1140
320	425	420	527	520	627	620	727	720	827	820	1140
321	426	421	528	521	628	621	728	721	827	821	1140
322	427	422	528	522	628	622	728	722	828	822	1140
323	427	423	529	523	629	623	729	723	829	823	1140
324	428	424	530	524	630	624	730	724	829	824	1140
325	429	425	530	525	630	625	730	725	830	825	1140
326	430	426	531	526	631	626	731	726	831	826	1140
327	430	427	532	527	632	627	732	727	831	827	1140
328	431	428	532	528	632	628	732	728	832	828	1140
329	432	429	535	529	635	629	735	729	833	829	1140
330	434	430	535	530	635	630	735	730	835	830	1140
331	435	431	536	531	636	631	736	731	836	831	1140
332	436	432	536	532	636	632	736	732	836	832	1140
333	436	433	537	533	637	633	737	733	837	833	1140
334	437	434	537	534	637	634	737	734	837	834	1140
335	440	435	540	535	640	635	740	735	840	835	1140
336	440	436	540	536	640	636	740	736	840	836	1140
337	440	437	540	537	640	637	740	737	840	837	1140
338	440	438	540	538	640	638	740	738	840	838	1140
339	440	439	540	539	640	639	740	739	840	839	1140

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Grades 3 to 4		Grades 4 to 5		Grades 5 to 6		Grades 6 to 7		Grades 7 to 8		Grades 8 to 11	
Score	Target	Score	Target	Score	Target	Score	Target	Score	Target	Score	Target
340	440	440	540	540	640	640	740	740	840	840	1140
341	440	441	540	541	640	641	740	741	840	841	1140
342	440	442	540	542	640	642	740	742	840	842	1140
343	440	443	540	543	640	643	740	743	840	843	1140
344	440	444	541	544	640	644	740	744	840	844	1140
345	442	445	542	545	641	645	741	745	841	845	1140
346	443	446	543	546	642	646	742	746	842	846	1140
347	444	447	544	547	643	647	743	747	843	847	1140
348	445	448	545	548	644	648	744	748	844	848	1140
349	446	449	546	549	645	649	745	749	845	849	1140
350	447	450	547	550	646	650	746	750	846	850	1140
351	448	451	548	551	647	651	747	751	847	851	1140
352	449	452	549	552	648	652	748	752	848	852	1140
353	450	453	550	553	649	653	749	753	849	853	1140
354	452	454	550	554	650	654	750	754	851	854	1140
355	452	455	552	555	651	655	751	755	851	855	1140
356	452	456	552	556	651	656	751	756	851	856	1140
357	452	457	552	557	651	657	751	757	851	857	1140
358	452	458	552	558	651	658	751	758	851	858	1140
359	452	459	552	559	651	659	751	759	851	859	1140
360	452	460	552	560	651	660	751	760	851	860	1140
361	452	461	552	561	651	661	751	761	851	861	1140
362	452	462	552	562	651	662	751	762	851	862	1140
363	452	463	552	563	651	663	751	763	851	863	1140
364	452	464	552	564	651	664	751	764	851	864	1140
365	452	465	552	565	651	665	751	765	851	865	1140
366	452	466	552	566	651	666	751	766	851	866	1140
367	452	467	552	567	651	667	751	767	851	867	1140
368	452	468	552	568	651	668	751	768	851	868	1140
369	452	469	552	569	651	669	751	769	851	869	1140
370	452	470	552	570	651	670	751	770	851	870	1140
371	452	471	552	571	651	671	751	771	851	871	1140
372	452	472	552	572	651	672	751	772	851	872	1140
373	452	473	552	573	651	673	751	773	851	873	1140
374	452	474	552	574	651	674	751	774	851	874	1140
375	452	475	552	575	651	675	751	775	851	875	1140
376	452	476	552	576	651	676	751	776	851	876	1140
377	452	477	552	577	651	677	751	777	851	877	1140
378	452	478	552	578	651	678	751	778	851	878	1140
379	452	479	552	579	651	679	751	779	851	879	1140
380	452	480	552	580	651	680	751	780	851	880	1140

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TABLE 8: READING GROWTH TARGETS

Grades 3 to 4		Grades 4 to 5		Grades 5 to 6		Grades 6 to 7		Grades 7 to 8		Grades 8 to 11	
Score	Target	Score	Target	Score	Target	Score	Target	Score	Target	Score	Target
300	416	400	513	500	612	600	713	700	814	800	1140
301	416	401	514	501	612	601	714	701	814	801	1140
302	417	402	514	502	613	602	714	702	815	802	1140
303	417	403	515	503	614	603	715	703	816	803	1140
304	418	404	516	504	614	604	716	704	816	804	1140
305	419	405	516	505	615	605	716	705	817	805	1140
306	419	406	517	506	616	606	717	706	818	806	1140
307	420	407	518	507	617	607	718	707	818	807	1140
308	420	408	518	508	617	608	718	708	819	808	1140
309	421	409	519	509	618	609	719	709	820	809	1140
310	422	410	520	510	619	610	720	710	820	810	1140
311	422	411	520	511	619	611	721	711	821	811	1140
312	423	412	521	512	620	612	721	712	822	812	1140
313	424	413	522	513	621	613	722	713	822	813	1140
314	424	414	522	514	622	614	723	714	823	814	1140
315	425	415	523	515	622	615	723	715	824	815	1140
316	425	416	524	516	623	616	724	716	824	816	1140
317	426	417	524	517	624	617	725	717	825	817	1140
318	427	418	525	518	624	618	725	718	826	818	1140
319	427	419	526	519	625	619	726	719	826	819	1140
320	428	420	526	520	626	620	727	720	827	820	1140
321	428	421	527	521	627	621	727	721	828	821	1140
322	429	422	528	522	627	622	728	722	828	822	1140
323	430	423	528	523	628	623	729	723	829	823	1140
324	430	424	529	524	629	624	729	724	829	824	1140
325	431	425	530	525	629	625	730	725	830	825	1140
326	431	426	530	526	630	626	731	726	831	826	1140
327	432	427	531	527	631	627	731	727	831	827	1140
328	435	428	532	528	634	628	734	728	834	828	1140
329	435	429	534	529	634	629	734	729	835	829	1140
330	435	430	535	530	635	630	735	730	835	830	1140
331	436	431	535	531	635	631	735	731	836	831	1140
332	436	432	536	532	636	632	736	732	836	832	1140
333	437	433	536	533	636	633	736	733	837	833	1140
334	440	434	537	534	640	634	740	734	840	834	1140
335	440	435	540	535	640	635	740	735	840	835	1140
336	440	436	540	536	640	636	740	736	840	836	1140
337	440	437	540	537	640	637	740	737	840	837	1140
338	440	438	540	538	640	638	740	738	840	838	1140
339	440	439	540	539	640	639	740	739	840	839	1140

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Grades 3 to 4		Grades 4 to 5		Grades 5 to 6		Grades 6 to 7		Grades 7 to 8		Grades 8 to 11	
Score	Target	Score	Target	Score	Target	Score	Target	Score	Target	Score	Target
340	440	440	540	540	640	640	740	740	840	840	1140
341	440	441	540	541	640	641	740	741	840	841	1140
342	440	442	540	542	640	642	740	742	840	842	1140
343	440	443	540	543	640	643	740	743	840	843	1140
344	440	444	541	544	641	644	741	744	840	844	1140
345	440	445	542	545	642	645	742	745	841	845	1140
346	441	446	543	546	643	646	743	746	842	846	1140
347	442	447	544	547	644	647	744	747	843	847	1140
348	443	448	545	548	645	648	745	748	844	848	1140
349	444	449	546	549	647	649	746	749	845	849	1140
350	445	450	547	550	648	650	747	750	846	850	1140
351	446	451	548	551	649	651	748	751	847	851	1140
352	447	452	549	552	650	652	749	752	848	852	1140
353	447	453	550	553	651	653	750	753	849	853	1140
354	448	454	551	554	652	654	751	754	850	854	1140
355	449	455	552	555	653	655	752	755	851	855	1140
356	450	456	552	556	653	656	753	756	852	856	1140
357	452	457	552	557	653	657	753	757	853	857	1140
358	452	458	552	558	653	658	753	758	853	858	1140
359	452	459	552	559	653	659	753	759	853	859	1140
360	452	460	552	560	653	660	753	760	853	860	1140
361	452	461	552	561	653	661	753	761	853	861	1140
362	452	462	552	562	653	662	753	762	853	862	1140
363	452	463	552	563	653	663	753	763	853	863	1140
364	452	464	552	564	653	664	753	764	853	864	1140
365	452	465	552	565	653	665	753	765	853	865	1140
366	452	466	552	566	653	666	753	766	853	866	1140
367	452	467	552	567	653	667	753	767	853	867	1140
368	452	468	552	568	653	668	753	768	853	868	1140
369	452	469	552	569	653	669	753	769	853	869	1140
370	452	470	552	570	653	670	753	770	853	870	1140
371	452	471	552	571	653	671	753	771	853	871	1140
372	452	472	552	572	653	672	753	772	853	872	1140
373	452	473	552	573	653	673	753	773	853	873	1140
374	452	474	552	574	653	674	753	774	853	874	1140
375	452	475	552	575	653	675	753	775	853	875	1140
376	452	476	552	576	653	676	753	776	853	876	1140
377	452	477	552	577	653	677	753	777	853	877	1140
378	452	478	552	578	653	678	753	778	853	878	1140
379	452	479	552	579	653	679	753	779	853	879	1140
380	452	480	552	580	653	680	753	780	853	880	1140

Summary of Growth Targets (for students following a non-typical grade to grade progression)

An identical set of growth target calculations are performed when a student follows a non-typical grade progression, with the exception that the target is transferred to the appropriate grade-specific scaled score metric. For example, if a student is retained in Grade 4, his/her target will be calculated in the Grade 4 metric. If a student skips a grade, perhaps moving from grade 4 to grade 6, his/her target will be calculated in the grade 6 metric. In both cases, the formulas used to determine the target will remain the same. If the student scores one standard deviation unit or more below proficient he/she will have to reduce his or her “distance” from proficiency by one-third. If he/she scores one-half to one standard deviation unit below proficient he/she will have to make up half the distance to proficient. If he/she scores less than one half of a standard deviation below proficient he/she will have to score proficient. Similarly, if a student scores less than one quarter of a standard deviation above proficient, he/she must score proficient. If a student scores between one quarter and one and a quarter standard deviations above proficient, his/her target is their score minus one quarter of a standard deviation. If a student scores more than one and a quarter standard deviation above proficient, their target is one standard deviation above proficient.

If a student is being tested for the first time; in grade 11, becomes eligible for the alternate assessment, or if for some reason, a previous test score is not available, the target for the student is proficient. This ensures that all tested students have growth targets, allowing all students (not just those with two test scores) to be included in the growth model.

Growth Target Calculations from Year to Year

To understand a state's growth model, it is necessary to understand what happens to student growth expectations over time. A critical feature of New Hampshire's proposal is that student targets are always based on the student's previous year's score (or lack thereof). If a student does not have a score from the previous year, the target is always proficient. If a student has a score from the previous year, the formulae listed previously are used to determine acceptable achievement on this year's test. So, for example, if a student scored 324 in math (at grade 3) last year, then his or her math target for this year in fourth grade is 428.

Some students will meet their growth target and some will not. Very few will hit it exactly, but the student's target for next year depends on their score this year, not on their target. To set the stage, if the student meets the target for 4th grade math exactly, he/she would have to score 428. In this case, his/her target for 5th grade math would be 532. Most students will not hit their target exactly - either by exceeding it, or by failing to meet it. If this student scores 439 in fourth grade math (just below proficiency) this year, then his/her target for 5th grade math next year is proficiency (540). In contrast, if the student fails to meet his/her target by scoring 419 in fourth grade math (this year), then his/her target for 5th grade math (next year) is 526. In neither case is the student's 5th grade math target dependant on his/her 4th grade math *target*, but on the 4th grade *score*. Table 9 summarizes a sample of student growth target calculations and decisions across three years. Essentially, the amount of required growth at each grade is within ranges demonstrated by empirical research.

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TABLE 9: SAMPLE STUDENT CALCULATIONS FOR MATHEMATICS ACROSS 3 YEARS

Student	Previous Score	Current Target	Current Score	Meets Target	Next Target	Next Score	Meets Target
A	429	535	535	Yes	640	640	Yes
B	639	740	739	No	840	842	Yes
C	516	624	630	Yes	735	736	Yes
D	329	432	435	Yes	540	541	Yes
E	523	629	620	No	727	726	No
F	451	548	547	No	643	640	Yes
G	357	452	455	Yes	552	554	Yes
H	Missing	Proficiency	540	Yes	640	629	No
I	635	740	743	Yes	840	839	No
J	724	829	827	No	1140	1129	No
K	Alternate	Proficiency	Proficiency	Yes	Proficiency	722	No

Growth Target Validity

New Hampshire’s Follow The Child Growth Model relies on a standard approach to determining growth targets across grades. However, this assumes that the expectations for performance gains should be the same across grades. It could be that at a particular grade, closing a gap between initial performance and proficiency is much more challenging for any number of reasons: sophistication of material, developmental level of students at that age, etc. Thus, it is proposed that the appropriateness of growth targets be monitored over time. One way to accomplish this is to look at the percentages of students reaching their growth targets (one-third, one-half, and two-thirds of the way toward proficient) to see if they are consistent across the grades. After a few years, it may be decided that for a particular grade, some departure from equal growth intervals would be desirable. In that case, adjustments may need to be made.

The New Hampshire proposed model does not involve any prediction and therefore, no prediction error is involved in the growth determinations. This is a significant advantage of the proposed New Hampshire growth model compared with other models. The student targets, in the New Hampshire model, are not predicted scores; rather they are specific score targets that students must reach in order to be declared “on track.”

Core Principle 3. Accountability for Reading and Mathematics Separately

3.1 Has the State proposed a technically and educationally sound method of holding schools accountable for student growth separately in reading and mathematics?

Two growth targets are calculated for each student: (1) one in reading and (2) one in mathematics. The determination of growth targets are subject-specific in that previous reading scores are used to calculate reading targets and previous mathematics scores are used to calculate mathematics targets.

As with the currently approved accountability system in New Hampshire, schools and districts are held accountable for the percentage of students in all subgroups meeting their growth targets in reading and in mathematics, for all subgroups. All accountability decisions, including growth targets, will appear on AYP reports separately for reading and mathematics.

Core Principle 4. Does the State’s growth model proposal address the inclusion of all students, subgroups, and schools appropriately?

The existing AYP inclusion rules remain unchanged by the addition of a growth model. In New Hampshire, rules determining which schools get credit for the test results of a student who has changed schools have already been established and approved. These same rules will apply for the growth model, because all students (even if they have not previously been tested in New Hampshire) will have a growth target. For example, in order to establish growth targets, it does not matter if a student moves anywhere within the state of New Hampshire. Our unique student identifier system enables us to track all students. For reporting purposes, the decision was made to include (on school reports) all students currently in a school as well as those assigned to the school the previous year. For accountability purposes, only students attending for a full academic year (FAY) are included in growth totals. Although growth targets will be calculated, assigned, and reported for all students enrolled in a school the previous year for reporting purposes, students must meet the full academic year (FAY) requirements to be included in the accountability system (for index and growth). The targets are reported for all students, because in order to help their current students reach their targets, teachers need to see the targets.

4.1.1 Does the State’s Growth model address the inclusion of all students appropriately?

One of the major strengths of the proposed New Hampshire Follow The Child Growth Model is that all students are included. The proposed model applies to every student taking the state accountability test. This includes:

- Students taking the general assessment without accommodations.
- Students taking the general assessment with standard (comparable) accommodations.
- Students who participate in general assessment, but use one or more non-standard accommodations for some portion of the test (called modifications) are also included in the growth model as follows. No performance credit is given to a student for any test session or items that were administered under non-standard (construct modified) testing conditions. Students earn performance credit *only* for those portions of the test completed under *standard* test conditions. Students who receive test modifications are counted as participating, however, the student’s performance score is substantially reduced by the amount of performance credit lost on all test sessions where modifications were used.
- The growth model includes limited English proficient (LEP) students. In the absence of any prior score, the default growth target for the second year LEP students who take the reading test will be the proficient level. In subsequent years, their target will be based on their previous score.

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- Students who take New Hampshire’s alternate assessment are also included in the growth model. Proficiency on the alternate assessment will be used as the target for students taking the alternate assessment. New Hampshire chose not to use ‘movement from one proficiency level to the next’ as a growth target because New Hampshire students who take the NH-Alt are assessed against alternate achievement standards. Scores on the NH-Alt are most heavily weighted on two factors: student progress in academic content beyond baseline, and Quality of Connections and Access to the curriculum. It is the position of the NHDoe that all students who participate in the alternate assessment program should be able to reach proficiency given the appropriate program and instruction. For this reason, proficiency is always the target.
- Students taking the general assessment, who previously took the alternate assessment, have a growth target of proficiency. In this situation, as noted above, there is no prior general assessment test score. Therefore the default initial target will be proficiency. In subsequent years, the target will be based on the previous general assessment score.
- Students who are retained are included in the model. Targets for retained students are based on the NECAP test taken by the student in the retained grade. For example, if a student is retained in grade 5, the student’s growth target will be in relation to the grade 5 NECAP test.
- Students with approved medical exemptions are included. If a student received an approved medical exemption the previous year, the target is proficiency.

The State does not impute missing data to establish student growth targets. For each student, the expected performance in any year depends on whether the student had a score the previous year or not. For students who do not have a score the previous year, the expected performance is proficient or better. For students who have a score the previous year, the expected performance this year is determined by how far below or above proficiency the student was last year. This means that the expected performance

- for a grade 3 student, is proficient or above,
- for all students moving to the state, is proficient or above,
- for a student new to the state, is proficient or above,
- for a student who is missing assessment data from the prior year, is proficient or above,
- for a student who is unmatched, is proficient or above,
- for a student being tested for the first time, is proficient or above,
- for all grade 11 students, is proficient or above.

If for some reason a student does not have a test score from the previous year then proficiency is the default target for that student. In all of the above cases, these students will be classified as not meeting their growth targets if they score below proficient the following year. If the students score above proficient they will be classified as meeting their growth target. In subsequent years, their target would be based on the previous assessment score.

4.1.2 Does the State’s growth model address the inclusion of all subgroups appropriately?

Each subgroup with 11 or more students are included in the growth model.

4.1.3 Does the state’s growth model address the inclusion of all schools appropriately?

- All schools with 11 or more students are included in the growth model
- Schools that do not have 11 students are held accountable through New Hampshire’s small school accountability policies.
-

Core Principle 5. State Assessment System and Methodology

5.1 Has the State designed and implemented a Statewide assessment system that measures all students annually in grades 3-8 and one high school grade in reading and mathematics in accordance with NCLB requirements for 2005-06, and have the annual assessments been in place since the 2004-05 school year?

5.1.1 Provide a summary description of the Statewide assessment system.

New Hampshire is one of the three state participants in the New England Common Assessment Program (NECAP) along with Vermont and Rhode Island. Reading and mathematics NECAP assessments were first administered in Grades 3 through 8 in the fall of 2005. As of October 2007, New Hampshire administered its third complete cycle of NECAP testing in grades 3-8, and the first operational high school NECAP in grade 11. For a number of reasons, the NECAP assessments were not vertically scaled, but achievement standards have been vertically articulated across grades. Most importantly, for creating valid growth inferences, the NECAP states wrote grade level expectations (GLEs) for the explicit purpose of articulating important knowledge and skills across grade levels. These high-quality GLEs are the reason why growth interpretations in New Hampshire will be more valid when compared to systems without this level of attention to content standards. At each grade level, the NECAP test scores are converted to an eighty-point scale, differing across grades only in the hundreds place. The third grade scale ranges from 300 to 380, the fourth grade scale ranges from 400 to 480, and so on. The third grade cut score for the proficient level is 340, and the corresponding cut scores at the other grades are 440, 540, etc. The State produces state, district, school, and individual student reports for each of these assessments. (More information can be found in the NECAP Technical Manual)

5.1.2 Has the State submitted its Statewide assessment system for NCLB Peer Review and if so, was it approved for 2005-06?

New Hampshire submitted its statewide assessment system for NCLB Peer Review in May 2006 and received the classification “Approval Pending.” The peer review indicated that New Hampshire’s standards and assessment system administered in the 2005-06 school year had one fundamental component that did not meet the statutory and regulatory requirements, specifically, the link between the alternate assessment and grade level content standards. Additional information was submitted showing the linkage, but New Hampshire remains in Approval Pending status and is working with the USED to establish a compliance agreement to revise the NH-Alt.

The proposed growth model is not influenced by the characteristics of the alternate assessment, in the sense that additional growth targets are not created for students taking this assessment. More specifically, proficiency is the target for all students taking the alternate assessment.

5.2 How will the State report individual student growth to parents?

The growth model is being used for school accountability and will be reported to parents and the public in a manner consistent with the existing accountability reports. The percentage of students meeting their growth targets will be reported alongside index scores. In addition, whenever a student score is included in such reports, a target score will also be included. (Report shells from the current New Hampshire Growth Pilot can be found in the Appendix.)

New Hampshire provides accountability reports to every school and district via a secure website. Parents and the public have access to the proportion of students meeting their growth targets in each subgroup for all schools and districts in the State of New Hampshire via a public website. New Hampshire also makes a printable version available for distribution to parents. A *Growth Model Explained* document outlines the general principles of the growth model and how it is used to hold schools accountable.

Individual student growth targets, while available to schools, will not be published for parents or the public at large. Information on student targets will be made available to parents through their child's classroom teacher. As part of the Follow The Child Initiative, New Hampshire teachers are encouraged to discuss the growth targets and individual student results with both students (when age appropriate) and parents during parent/student/teacher conferences. The State makes every effort to impress upon schools and districts the importance of sharing this data with parents and students in multiple formats in order to make the information accessible to all. Since this is the second year of our New Hampshire Growth Model Pilot, the Growth Target Tables are now posted on the DOE website, so when parents receive their Student Assessment Reports in January of each year, they can determine the target for the following year using the student's scaled score.

In addition, in an effort to impress upon schools and districts the importance of using this data, New Hampshire provides intensive training to educators to assist them in how to use the data to improve instruction and identify students in need of extra assistance to meet state standards.

5.3 Does the Statewide assessment system produce comparable information on each student as s/he moves from one grade level to the next?

Comparability from year to year is accomplished by standard test equating procedures involving the use of overlapping items across consecutive years. Comparability from grade to grade in NECAP is accomplished through the use of vertically moderated standards and the z-score metric. These two components along with the articulated GLEs allow the system to produce comparable information for every student as they progress through each grade level. The vertically articulated proficiency scaled scores (x40) make the information more readily understandable to teachers, parents, and the general public.

5.3.1 Does the State provide evidence that the achievement score scales have been equated appropriately to represent growth accurately between grades 3-8 and high school? If appropriate, how does the state adjust scaling to compensate for any grades that might be omitted in the testing sequence? Did the state provide technical and statistical information to document the procedures and results? Is this information current?

Since the scaled scores at different grades have slightly different standard deviations (i.e., more variability in scores at one grade than at another), we use standard score units to determine target test scores. Scaled scores are linked from grade to grade using a time-locked modified z-scale specifically designed for growth calculations. Student scaled scores are converted to z-scores through a linear transformation using the test means and standard deviations. The means and standard deviations of the tests at the different grades that are used for computing growth targets will remain the same through the years – they are the standard deviations obtained in the base year testing – fall 2005. (see Table 6, p. 21)

5.3.3 How has the state determined that the cut-scores that define the various achievement levels have been aligned across the grade levels? What procedures were used and what were the results?

In general, student longitudinal growth can be measured in several ways, including a vertical scale, vertically moderated standards, z-score approach, and multilevel modeling. Each of these approaches has strengths and weaknesses. New Hampshire’s Follow The Child Growth Model makes use of four techniques that support the use of individual student scale score comparisons from grade to grade:

- (1) Proficiency has been vertically articulated across grades so that it reflects a vertically moderated standard;
- (2) Measurement of student growth is based on a standardized z-score metric;
- (3) Student growth targets are based on “distance to proficiency”; and
- (4) For communication purposes, the growth targets are converted to NECAP scale scores, which hold an established meaning for New Hampshire educators, parents, and the public.

Vertically moderated standards

The NECAP performance levels are aligned with scaled scores and have been vertically articulated to establish a coherent concept of proficiency across grades that reflect an emphasis on *what the student is prepared to do* (a reflection of fall testing). Successful attainment of the knowledge and skills contained in the GLE at one grade level is intended to prepare students to participate in instructional activities aligned with the GLE at the next grade level.

This means that the grade 3 proficiency cut score (340) holds the same relative meaning for grade 4 preparation as the grade 4 proficiency cut score (440) holds for grade 5 preparation. The meaning of proficiency on the Grade 3 NECAP is parallel to scoring proficient on the Grade 4 NECAP, Grade 5 NECAP, Grade 6 NECAP, Grade 7 NECAP, Grade 8 NECAP and Grade 11 NECAP in terms of what the student is prepared to do in that grade. The fact that proficiency is vertically moderated across grades ensures the NECAP system produces comparable information for every student as they progress through each grade level. The vertically articulated proficiency

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scaled scores (x40) make the information more readily understandable to teachers, parents, and the general public.

There are two critical components in creating such standards: clearly articulated grade level expectations (content standards for each grade which exhibit the appropriate increasingly sophisticated content for successive grades) and standard-setting procedures that yield a coherent set of cut scores for proficiency levels across grades such that students do not fluctuate between two proficiency levels as they progress through the grades simply because of the way cut scores were set.

As described in *Establishing Academic Achievement Standards for the New England Common Assessment Program*, (DePascale, C. A., 2006), the NECAP states (Vermont, Rhode Island, and New Hampshire) combined their resources to employ a systematic process to create grade level expectations that are second to none in terms of clearly articulated content progressions from one grade to the next.

...The fall administration of the NECAP tests enabled the states to develop a concept of proficiency that reflects an emphasis on *what the student is prepared to do* rather than *what the student has done* and promote a coherent set of achievement standards across grades. The GLEs are written as “beginning of current year/end of previous year” standards. In the development of the GLEs, particular attention was paid to ensuring continuity and a logical consistency of standards across grades. Successful attainment of the knowledge and skills contained in the GLE at one grade level is intended to prepare students to participate in instructional activities aligned with the GLE at the next grade level.

Consequently, the concept of proficiency adopted for NECAP, corresponds with the fall test administration, and makes use of the design and nature of the GLE. The NECAP achievement levels define proficiency in terms of a student’s preparation to participate successfully (i.e., attain proficiency) in instructional activities aligned with the GLE at their grade level. Essential components of the achievement level descriptions are:

- The achievement level descriptions are based on the premise that the GLE have been well constructed and reflect a logical, developmental consistency across grade levels.
- The descriptions are based on the assumption that all students enrolled in the current grade level can attain proficiency. A critical variable across students performing at different achievement levels is the amount and type of supports that students will require to meet grade level expectations.
- Evaluation of performance is based on mastery of the GLE at the previous grade level and preparation for the current grade level (because of fall testing). There is no expectation that students performing at the highest achievement level within a grade level will be required to demonstrate knowledge and skills contained in the GLE at higher grade levels. (p. 3-4)

As further outlined on page 6 and 7 of *Establishing Academic Achievement Standards for the New England Common Assessment Program*, (DePascale, C. A., 2006)

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...Prior to the standard setting panel meetings in January 2006, discussion and descriptions of proficiency were centered on the GLE and general achievement level descriptions rather than performance on the NECAP tests.

At the standard setting panel meetings, however, the purpose was to identify specific cut scores based on test performance. Therefore, the focus shifted to applying the general achievement level descriptions and content area descriptions to generate grade level descriptions that included specific descriptions of the content knowledge and skills that students performing at each achievement level would be expected to demonstrate on each NECAP content area/grade level test.

As described in *NECAP Standard Setting Report: January 5-6 & 9-10, 2006*, after reviewing the NECAP test items and achievement level descriptions, tables of panelists were directed to develop

...definitions of borderline students, i.e., students who are ‘just able enough’ to be categorized into each achievement level. After the table level discussions were completed, the tables shared their discussions as a whole group and came to consensus as to the knowledge, skills, and abilities that characterized the borderline student at each level. Bulleted lists of characteristics for each level were generated, based on the whole group discussion, and were posted in the room for panelists to refer to throughout the [standard setting] process. (p. 6)

Vertically articulated cut scores were established using a combination of two tried-and-true standard-setting methods: contrasting groups using teacher judgments and modified bookmark. A complete summary of the standard setting-process can be found in the *NECAP Standard Setting Report: January 5-6 & 9-10, 2006*. The resulting performance level cut scores and the percentage of New Hampshire students proficient or above on the 2005 NECAP are shown in Tables 10 and 11, respectively.

TABLE 10: PERFORMANCE LEVEL CUT SCORES

Math	Level 1	Level 2	Level 3	Level 4
Grade 3	300-331	332-339	340-352	353-380
Grade 4	400-430	431-439	440-454	455-480
Grade 5	500-532	533-539	540-553	554-580
Grade 6	600-632	633-639	640-652	653-680
Grade 7	700-733	734-739	740-751	752-780
Grade 8	800-833	834-839	840-851	852-880
Reading	Level 1	Level 2	Level 3	Level 4
Grade 3	300-330	331-339	340-356	357-380
Grade 4	400-430	431-439	440-455	456-480
Grade 5	500-529	530-539	540-555	556-580
Grade 6	600-628	629-639	640-658	659-680
Grade 7	700-728	729-739	740-759	760-780
Grade 8	800-827	828-839	840-858	859-880

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TABLE 11: PERCENTAGES OF STUDENTS PROFICIENT OR ABOVE IN 2005

Grade	3	4	5	6	7	8	Overall
Math	68%	65%	63%	61%	59%	56%	62%
Reading	71%	69%	67%	65%	66%	62%	66%

The technical quality of the NECAP assessments and assessment system is verified by the NECAP technical advisors and currently documented in a comprehensive technical manual completed in October 2006. It can be found at:

<http://www.ed.state.nh.us/education/doe/organization/curriculum/NECAP/2006%20Results/Fall2006TechnicalManual.htm>

Standardized z-scores

While vertically moderated standards ensure that a score of 340 is parallel in meaning to 440, they do not ensure that a score of 328 is parallel in meaning to 428. When the assessments across grades do not share a common scale, it is possible to generate a common scale, such as a z-scale or a transformation of a z-scale for each grade that allows comparison across grades. The z-score scales are “frozen” at a reference point in time, using the 2005 NECAP scores, against which the growth is then calculated. For example, if a student were at a z-score of -0.4 in grade 4 in 2005, and Proficient were equivalent to a z-score of -0.2 in grade 5, then to show growth, a student would need to score to -0.5 in Grade 5, to make up $\frac{1}{2}$ of the distance to proficiency. North Carolina’s approved “modified z-score/change scale” is an example of this common z-score scale approach.

Three strengths of the z-score approach are that it can be applied to any set of assessments whether they have a common (vertical) scale or not; z-scores’ properties are familiar to many who have worked with NCEs (normal curve equivalents); and z-scores can be transformed into scales that facilitate interpretive focus.

Emphasis on distance to proficiency

To ensure the growth targets are consistent with the criterion-referenced philosophy of the NECAP, the vertically articulated proficiency cuts have been used to center the growth targets. While the proficiency cuts have the same scale score from grade to grade, they do not have the same standardized z-score. For example, the mathematics proficiency cut in grade 3 falls at -0.39 while the grade 4 cut falls at -0.31. To account for this subtle variation, the distance from proficiency is calculated for the current year score and then transformed to reflect the proficiency cut at the following grade. This means that the distance to proficiency is held constant from grade to grade. If a student falls 0.65 points below proficiency in grade 3 on the z-scale, their grade 4 target is based on reducing the distance between 0.65 z-scale points below grade 4 proficiency and grade 4 proficiency. That is, growth targets are based on closing the gap to a proficiency standard that has been designed to hold the same meaning from grade to grade. The growth targets are criterion- instead of norm-based, thereby maintaining the vertical articulation, despite the fact that z-scores (traditionally norm-based) are used. This approach, allows New

Hampshire to measure growth between grades, using scaled scores that are not “equal distance” in terms of the numeration, but are equal distance to proficiency.

Growth targets reported in a scaled score metric

Reporting the growth targets in the scaled scores metric make the information more readily understandable to teachers, parents, and the general public. The scaled scores from year to year cannot be compared from year to year without the use of the standardized z-score metric. However the reported scaled score targets can be interpreted as scores that reflect closing one third or one half of the distance to proficiency for students that are more than one standard deviation below proficiency or between one and one half of a standard deviation below proficiency, respectively.

As a final note, New Hampshire’s growth model is not based on a vertical scale, nor should it be. The NECAP system chose (based on the advice of the NECAP Technical Advisory Committee, [listed at the end of the proposal]) not to use a vertical scale, largely for substantive reasons, as the content in the upper grades is so different from the lower grades, that putting the tests on a single scale violates the core assumption of unidimensionality. New Hampshire’s vertically articulated z-score approach reflects a high quality method that allows for appropriate and useful interpretations for policy driven growth in school accountability systems, namely the NCLB growth model pilot.

5.4 Is the Statewide assessment system stable in its design? (How long & anticipated changes)

The first operational administration of NECAP in grades 3-8 was in the fall of 2005. No changes in the assessment system or design for grades 3-8 were made for the fall 2006 or the 2007 administration; nor are any changes anticipated. (See 2006-2007 or 2007-2008 Equating Studies and Independent Evaluation)

The first operational NECAP high school testing (at grade 11) took place in October 2007.

Core Principle 6. Tracking Student Progress

6.1 Has the State designed and implemented a technically and educationally sound system for accurately matching student data from one year to the next?

New Hampshire’s data system, called the Initiative for School Empowerment and Excellence, (4see), tracks student growth over time and across schools and districts. It accomplishes this through the use of individual student identification numbers. The unique individual student IDs were used for the first time during the NECAP administration in the fall of 2005. Provided to the assessment contractor prior to test administration, these numbers were pre-printed on labels that were affixed to the student response documents. This permitted the linkage of test data to other information about the students and allowed for merging the constructed-response scores with students’ background, demographic, and multiple-choice data. Thus, the student ID numbers

needed for the implementation of a growth model in New Hampshire are in place. During its first year of use, the student information system required expected amounts of clean-up work to handle cases of students with no or multiple identification numbers. A unique student identifier has been assigned to 100% of the publicly funded student records.

6.1.1 Does the State utilize a student identification number system or does it use an alternative method for matching student assessment information across two or more years? If a numeric system is not used, what is the process for matching students?

New Hampshire uses unique State Assigned Student Identifiers (SASID), to track students from year to year. The data system checks that the SASID is matched to the same date of birth from year to year. Additionally, the system ensures that a student is in the expected school and grade from one year to the next. The data system uses a combination of promotion code and grade to make sure the student is in the anticipated grade. The state ensures that every student in the school at the end of one year is in the school system the following year, unless they have withdrawn from, or graduated from, the New Hampshire public school system.

6.1.2 Is the system proposed by the State capable of keeping track of students as they move between schools or school districts over time? What evidence did the State provide to ensure that match rates are sufficiently high and also not significantly different by subgroup?

New Hampshire's system is specifically designed to keep track of students as they move between schools and school districts over time. It relies on exit codes entered by the school and ensures that every student is accounted for from year to year. The quality of the data is ensured because these student counts are used for school funding and a school's funding is contingent on the students actually being identified and counted.

Table 12 outlines the percent of students tracked in the state across two years by subgroup. The first column displays the number of students enrolled in Grades 4 through 11 as of October, 2006. Of these students, the number and percent of students enrolled in 2005 are depicted in columns two and three. The final set of columns help to explain why the remaining students enrolled as of October 2006 were not enrolled in 2005. About one third of the students entered the state after testing in the 05/06 school year, while the remaining two thirds were new to New Hampshire in the 06/07 school year. Proficiency would be the 2006 NECAP target for all of these students. It is clear from these numbers that New Hampshire has the capability of tracking students and their test scores across years and that the numbers do not vary significantly across subgroups.

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TABLE 12: STUDENT TRACKING RATES BY SUBGROUP

Ethnicity	Fall 06	Fall 2006 Students Enrolled in 2005		Unmatched Students			
	Enrollment	Number	%	New in 05/06		New in 06/07	
				N	%	N	%
White	102,582	98,771	96%	1,373	1%	2,438	2%
American Indian/Alaskan Native	490	461	94%	3	1%	26	5%
Asian	2,202	2,005	91%	69	3%	128	6%
Black	2,069	1,841	89%	93	4%	135	7%
Hispanic	3,332	2,967	89%	150	5%	215	6%
Native Hawaiian or Other Pacific Islander	26	23	88%	0	0%	3	12%
Total	110,701	106,068	96%	1,688	2%	2,945	3%

6.1.3 What quality assurance procedures are used to maintain accuracy of the student matching system?

To ensure the accuracy for the student level data there are a series of processes in place:

- When schools and/or districts electronically submit their data, the system automatically initiates a ‘batch level’ verification. A set of rules are invoked to verify the accuracy. For example the student ID is verified to be valid and tied to the correct person. Information, such as grade, is verified to ensure it is an appropriate grade given the age of the student. Also, if the student was in 3rd grade last year and promoted, then the grade is validated to ensure it is now grade 4. These are just a couple of examples of many verification rules. These checks are initiated automatically, and schools must review the specific records in error and correct data as required. The school/district then re-verifies the data until there are no ‘batch level’ errors.
- ‘District level’ verification is performed by the school district when all the schools in a district have verified their submissions. Similar to the ‘batch level’, a set of rules are invoked automatically and the district reviews the specific records in error and makes modifications as required. For example; if a student withdraws from one school to attend another school in the same district, the State verifies that the student arrived in the receiving school; or that two schools do not claim the same child for the same period of time. There are also district rules that identify trend changes from year to year. Again these are just a couple of examples of many rules.
- Additionally there are a series of reports summarizing the data schools submit. For example, a report is produced that provides the number of students by gender and race for each grade in the school; or a count of students who are homeless, as well as many other reports. Some of these reports must be confirmed by the school district. This provides the

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opportunity for the right person in the school or district (e.g. homeless coordinator) to review his/her information. These reports provide an additional level of verification.

- Once all the districts in the state have certified their data, state level reports are produced that identify data anomalies. Schools are required to address all of these anomalies until they are all resolved. For example one report identifies all children who were in a given school last year and unexpectedly did not return this year. If the student graduated or moved out of state, for example, we do not expect him/her to return. If, however, the student was enrolled last year and did not re-enroll, then a data anomaly will appear on this report and the school must track down the student. This enables us to follow every child and ensure that the system accounts for every child. Again this is one example of the many state reports that ensure there are no data anomalies across the state.
- Finally, the state also creates comparison reports from year to year and performs many other verification checks to ensure that the data is accurate and that the above processes were not violated.

6.1.4 What studies have been conducted to demonstrate the percentage of students who can be “matched” between two academic years?

TABLE 13: MATCH RATES OF PROFICIENT AND NON-PROFICIENT STUDENTS

Subject	Proficiency	Tested in 2005	Expected to be tested in 2006	Tested in 2006		Legitimate Leavers		Unexplained	
Math	Proficient	58,756	49,134	47,569	97%	1,050	2%	515	1%
	Not Proficient	36,224	28,717	27,489	96%	736	2%	492	2%
	Total	94,800	77,851	75,058	96%	1,786	2%	1,007	
Reading	Proficient	62,930	52,378	50,686	97%	1,123	2%	569	1%
	Not Proficient	31,822	25,421	24,329	96%	653	2%	439	2%
	Total	94,752	77,779	75,015		1,776		1,008	

Table 13 outlines the match rates of proficient versus non-proficient students on the 2005 and 2006 NECAP assessments. The “Tested in 2005” column outlines the number of students with a proficiency score on the 2005 NECAP tests. The “Expected to be tested in 2006” reflects the students that were tested in 2005 that are expected to be tested in 2006. This column excludes students who were in the 8th grade in 2005, because such students are not expected to take a NECAP assessment in 2006. The “Tested in 2006” column reflects the number of students tested in 2005 and in 2006. The proportion reflects the number of students tested in 2006 divided by the number of students expected to be tested in 2006. Over 96% of the students that were expected to be tested in 2006 were tested. Of the remaining (3% to 4%) students with 2005 scores that were expected to be tested in 2006, but were not, approximately 2% are considered legitimate leavers (e.g. transferred to another state, transferred to a private school, home schooled, dropped out, deceased, institutionalized), while the other 1% to 2% cannot be explained, but are likely a result of circumstances such as unexcused absences, medical absences, and errors in record keeping.

6.1.5 Does the state student data system include information indicating the demographic characteristics (e.g., ethnic/race category), disability status, and socio-economic status (e.g., participation in free/reduced price lunch)?

Yes, the i4see system collects demographic and socio-economic status for each student. Additionally, the system links to other systems such as the special education system to track disability status, the career and technical education data system (CATE), and the English Language Learners (ELL) database.

6.1.6 How does the proposed State growth accountability model adjust for student data that are missing because of the inability to match a student across time or because a student moves out of a school, district, or the State before completing the testing sequence?

In New Hampshire, rules determining which schools get credit for the test results of a student who has changed schools have already been established and approved. These same rules will apply for the growth model, because all students (even if they have not previously been tested in New Hampshire) will have a growth target. For example, in order to establish growth targets, it does not matter if a student moves anywhere within the state of New Hampshire. Our unique student identifier system enables us to track all students.

If a previous score cannot be found for the student, proficiency is used as his or her target. If the student does not meet the full academic year (FAY) requirement, they will be included in the participation tabulation, but will not be included in the proficiency component of the accountability system.

6.2 Does the State data infrastructure have the capacity to implement the proposed growth model?

Yes, the i4see system is able to track students, demographics and scores from year to year.

6.2.1 What is the State's capability with regard to a data warehouse system for entering, storing, and retrieving and analyzing the large number of records that will be accumulated over time?

The data infrastructure in New Hampshire has the capacity to implement the proposed growth model. i4see has immense capabilities for entering, storing, retrieving and analyzing large numbers of records that are accumulated over time. In order to manage the high volume of data, New Hampshire uses a combination of internal data tools and commercial software. The state has developed its own data mart to analyze and review data.

6.2.2 What experience does the State have in analyzing longitudinal data on student performance?

New Hampshire has adequate experience analyzing longitudinal data on student performance. The State has been tracking all students at the aggregate level and special education students at

the student level since 1993. Schools and districts have been analyzing student level data since 1993. The newly implemented *Performance Tracker* software has increased exponentially the number and variety of longitudinal reports and analyses that schools, districts, and the state can produce.

6.2.3 How does the proposed growth model take into account or otherwise adjust for decreasing student match rates of three or more years? How will this affect the school accountability criteria?

The growth model will not be affected by the decreasing student match rates of three or more years because if a previous score for the student cannot be found, the student will be assigned a target of proficient. This ensures that all students are included in the growth model and the accountability system. Further, this growth model establishes and holds schools accountable for meeting annual growth targets even though some students may have up to three years to reach this criterion.

Core Principle 7. The accountability model must include student participation rates in the state assessment system and student achievement on an additional academic indicator. The Department expects that the calculation of participation rates will continue to be based on all students enrolled during the testing window, not only those students who were enrolled in the school or district for a “full academic year.”

The growth model only comes into play after subgroups have been evaluated using the status/index AMO for performance. For a public school and LEA to make AYP, each student subgroup must meet or exceed the AMO for each content area (using either growth or status), must have at least a 95% participation rate in the statewide assessments, and must meet the requirements for the additional academic indicator (90% attendance rate or 75% graduation rate, or improvement). The participation rates will continue to be based on the percentage of students enrolled on the first day of testing who participate in the assessment, not only those who were enrolled in the school or district for a “full academic year” (FAY). (See AYP Summary Report and AYP Explained Document in Appendix)

7.1 Has the State designed and implemented a Statewide accountability system that incorporates the rate of participation as one of the criteria?

A school or district failing to meet the 95% participation rate does not make AYP, regardless of performance.

7.1.1 How do the participation rates enter into and affect the growth model proposed by the state?

Schools must meet the 95% participation rate in order to be evaluated on proficiency. This is true for both status and growth. This rate is based on the percentage of students enrolled on the first day of testing who participate in the assessment.

7.1.2 Does the calculation of a State’s participation rate change as a result of the implementation of a growth model?

No, the calculation of the participation rate is not affected as a result of the implementation of a growth model.

7.2 Does the proposed State growth accountability model incorporate the additional academic indicator?

A school or district failing to meet the additional academic indicator (90% attendance or 75% graduation rate or improvement) does not make AYP regardless of performance.

7.2.1 What are the “additional academic indicators” used by the State in its accountability model? What are the specific data elements that will be used and for which grade levels will they apply?

The additional academic indicators used by the State in its accountability model have not changed. New Hampshire uses attendance rate as the additional academic indicator for grades 3 through 8 and graduation rate for high school. Whole schools and whole districts must have an attendance rate of 90% or better or show improvement over the previous year, based on Average Daily Membership, at grades 3-8. High schools must have a graduation rate of 75% or better or have shown improvement over the previous year in order to make AYP.

7.2.2 How are the data from the additional academic indicators incorporated into accountability determinations under the proposed growth model?

The manner in which data from the additional academic indicators are incorporated into the accountability determinations has not changed. A school must meet the requirements for the additional academic indicator in addition to meeting its status or growth targets in order to make AYP.

CONCLUSION

New Hampshire’s Follow The Child initiative complements, and adds validity to, the No Child Left Behind Act of 2001. In addition, Follow The Child is as much a call for a renewed unity of purpose as it is a model for implementation. Follow The Child calls for a re-uniting of the bi-partisan spirit that originally drove the most revolutionary reform of education ever experienced in America.

With the new leadership’s insistence on maintaining high standards of student performance, coupled with flexible strategies for implementation of NCLB, we see the potential of moving from a *Nation at Risk* to a *Nation of Promise*.

Follow The Child in New Hampshire is already beginning to fulfill that vision.

OTHER FEATURES OF THE NEW HAMPSHIRE PROGRAM

Technical Advisory Committee (TAC)

As mentioned previously, the NECAP TAC (the combined TACs from the three states) reviews all psychometric techniques and practices used in the NECAP assessment program, either approving or recommending improvements to them. The individual state TACS address issues pertaining to the states' accountability systems. Once approval to move ahead with the growth model is obtained, the New Hampshire TAC will be involved in a review of every step, decision rule, and other details associated with the implementation of the model. Members of the three state TACs are listed below.

New Hampshire

Richard Hill, Center for Assessment
Scott Marion, Center for Assessment
Charles Pugh, Moultonborough Sch. Dist.
Rachel Quenemoen, NCEO

Stanley Rabinowitz, WestEd
Christine Rath, Concord School District
Steve Sireci, University of Massachusetts
Carina Wong, Consultant

Rhode Island

Bill Erpenbach, WJE Consulting
Richard Hill, Center for Assessment
Joseph Ryan, Arizona State Univ.

Jon Mickelson, Providence School District
Lauress Wise, HumRRO

Vermont

Dale Carlson, Consultant
Lizanne DeStefano, Univ. of Illinois – UC
Jonathan Dings, Boulder Valley SD
Brian Gong, Center for Assessment

Bill Mathis, Rutland NE Supervisory Union
Bob McNamara, Washington West SU
Bob Stanton, Lamoille South SU
Phoebe Winter, Consultant

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New Hampshire Follow The Child Accountability Task Force

In addition to the Technical Assistance Committee, New Hampshire has convened a group of school and district administrators, special educators, and assessment directors; university professors; assessment consultants; and members of the Department of Education Curriculum and Instruction and Adult Education Divisions to review and make recommendations to New Hampshire's Accountability System. They are listed below.

Paul Bousquet, Superintendent Gorham, NH	Dr. Thomas Brennan, Superintendent New London, NH
Jean Briggs, Federal Projects Dover, NH	Keith Burke, Superintendent Peterborough, NH
Diane Lurvey, Special Education Assn.	Virginia Clifford, NHDOE Program Support
Maria Dreyer, Special Education Director Prospect Mt. HS, Alton, NH	Heather Cummings, Curriculum Director Belmont, NH
Tammy Davis, Superintendent Tilton, NH	Chris Demers, Assessment Director Concord, NH
Patrick Connors, Principal Epsom, NH	Karen Laba, Facilitator, WestEd
Gaye Fedorchak, NHDOE, Alternative Assessment	Sallie Fellows, NHDOE, Information Services
Dorothy Fair, NHDOE, Title I	Scott Fletcher, Department Chair, Education, University of New Hampshire
Jerry Frew, Assistant Superintendent Exeter, NH	Gail Paludi, Principal, SAU 41
Brian Gong, National Center for the Improvement of Educational Assessment	Scott Marion, National Center for the Improvement of Educational Assessment
Mary Heath, NH Deputy Commissioner	Gary Guzouskas, NHDOE School Improvement
Chris Harper, Assistant Headmaster Pinkerton Academy	Virginia Irwin, NHDOE, Curriculum & Instruction
Stuart Kahl, President, Measured Progress	Tim Kurtz, NHDOE, Assessment Director
Kathleen McCabe, Assistant Superintendent Wolfeboro, NH	Chip McGee, Assessment Director & Assistant Superintendent, Bedford, NH

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Brian Cochrane, Assessment Director
Nashua, NH

Michael Schwartz, SASID & i4see Administrator,
NHDOE

Steve Zadavec, Assistant Superintendent
Portsmouth, NH

Charles Pugh, Assessment Director,
Moultonborough, NH

Santina Thibedeau, NHDOE Special
Education Administrator

Deb Wiswell, NHDOE, Accountability
Administrator

Mary Lane, NHDOE, Special Education
Consultant

Steve Bos, NHDOE, Career and Technical
Education

Shannan Douglas, Measured Progress

Merry Fortier, NHDOE, School Improvement

Mike Fournier, Principal, Bedford, NH

Carol Angowski, NHDOE Bureau of Accountability

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APPENDIX DOCUMENTS

APPENDIX A

NH ADEQUATE YEARLY PROGRESS DISTRICT STATUS REPORTS

APPENDIX B

2007 ADEQUATE YEARLY PROGRESS STATUS REPORTS EXPLAINED

APPENDIX C

NH FOLLOW THE CHILD STATE GROWTH TARGET REPORT (PILOT) 2007
(BASED ON 2005 AND 2006 ASSESSMENT DATA)

APPENDIX D

DESCRIPTION OF THE FOLLOW THE CHILD GROWTH TARGET REPORTS

APPENDIX E

NH FOLLOW THE CHILD SCHOOL GROWTH TARGET ROSTER (PILOT) 2007

NECAP TECHNICAL MANUAL 2006-2007, EQUATING STUDY AND INDEPENDENT EVALUATION
(DELIVERED TO THE USED UNDER SEPARATE COVER IN MAY 2007)

ALSO AVAILABLE ONLINE AT:

[HTTP://WWW.ED.STATE.NH.US/EDUCATION/DOE/ORGANIZATION/CURRICULUM/NECAP/2006%20RESULTS/FALL2006TECHNICALMANUAL.HTM](http://www.ed.state.nh.us/education/doe/organization/curriculum/NECAP/2006%20RESULTS/FALL2006TECHNICALMANUAL.HTM)

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