

**PEER REVIEW GUIDANCE FOR THE
NCLB Growth Model Pilot Applications**

U. S. Department of Education
Based on Guidance Distributed on
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ALASKA RESPONSE
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Guidance on Seven Core Principles

Core Principle 1: 100% Proficiency by 2014 and Incorporating Decisions about Student Growth into School¹ Accountability

“The accountability model must ensure that all students are proficient by 2013-14 and set annual goals to ensure that the achievement gap is closing for all groups of students.” (Secretary Spellings’ letter, 11/21/05)

Introductory note: The purpose of the growth model pilot is to explore alternative approaches that meet the accountability goals of NCLB. The intention is not to lower the expectations for student performance. Hence, a State’s accountability model incorporating student growth must ensure that all students are proficient by 2013-14, consistent with the NCLB statute and regulations. Annual measurable objectives for school performance on student growth measures must also ensure that the achievement gap is closing for all groups of students.

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

1.1 Peer Review Probe Questions	State Response
<p>1.1.1 Does the State use growth alone to hold schools accountable for 100% proficiency by 2013-14? If not, does the State propose a sound method of incorporating its growth model into an overall accountability model that gets students to 100% proficiency by 2013-14? What combination of status, safe harbor, and growth is proposed?</p> <p>Indicate which of the four options listed below is proposed to determine whether a school makes adequate yearly progress (AYP) and for identifying schools that are in need of improvement, and explain how they are combined to determine AYP:</p> <ol style="list-style-type: none"> 1. Growth alone 2. Status and growth 3. Status, safe harbor, and growth 4. Safe harbor and growth <p>The Department is planning to evaluate the use of growth</p>	<p>1.1.1 The state will use status and growth to hold schools accountable to 100% proficiency by 2013-14. The model proposed in this application will require the state to run the currently approved model of adequate yearly progress, and then run ALL schools through a growth calculation to determine which students are on track to be proficient. To calculate the growth determination, the state will determine which students are on track to be proficient within three additional years for those in grade 4-6, three additional years in grade 7, two additional years in grade 8, and one additional year in grade 9. Students in grade 10 will be evaluated based on status as are students in grade 3. Those students in grades 4-9 who are on track to become proficient will be combined with the status proficient group to measure relative to the Annual Measurable objective. The Alaska growth model proposal maintains the current AMO and the intervals for reaching 100% proficiency by 2014; therefore, Alaska will continue to hold schools and districts accountable for 100% proficient by 2013-14 under both the status check and the growth check. If a school makes AYP under status or under growth then the school will meet AYP.</p> <p>This year Alaska identified 38.8% of schools as not meeting the required</p>

¹ The State may propose to apply the use of student growth measures to determine AYP for LEAs. If it does so, the same provisions for evidence shall apply to LEAs as apply to schools, unless specifically mentioned otherwise and peer reviewers should evaluate the soundness of the proposal for LEAs as well as schools.

models. Once implemented, States participating in the growth model pilot project will be expected to provide data showing how the model compares to the current AYP status and safe harbor approaches.

- What are the grade levels and content areas for which the State proposes to measure growth (e.g., from 2005-06 to 2006-07 in reading and mathematics for grade levels 3-8)?
- If the State does not propose to implement its Growth model in all grade levels 3-8 and high school and for both subjects, where are the gaps in Growth Model decisions and what are the implications of those gaps for school accountability?

AMO. Alaska currently requires 71.48% of students to be proficient in language arts and 57.61% in mathematics.

After the status check is done, the growth determination is made and combined with status to complete the status and growth determination. Therefore, Alaska will first use status and then status with growth. Alaska will only use improvement within safe harbor if a school does not meet the status component, and will not use safe harbor when completing the growth calculation.

The Alaska growth proposal counts toward the AMO those students who are proficient and those who are on track to be proficient within three additional years in grades 4-6, two additional years in grade 7, three additional years in grade 8, and one additional year in grade 9. To determine if a student is on track to be proficient, the student's test results for grades 4-9 will be compared to the results of that same student when he/she was in grades 3-9. Alaska tests students in all grade levels between third and tenth grade, allowing this model to work for all grade level schools that are currently assessed under NCLB for adequate yearly progress. The content area assessments used for this evaluation will be those currently used for adequate yearly progress determinations: mathematics and reading/writing (language arts). The Alaska approved Accountability Workbook clearly defines that the reading and writing assessment are given equal value when combined into the language arts score for a student. Students in grades 4-6 who are in the LEA or state for the first year, who made a 25% gain from the previous year, and who are on track to be proficient within three additional years will be considered proficient. Once a student has been in the system for a third year they will have to demonstrate a one-third gain, one half gain the next year, and, finally, they will be required to be proficient by the fourth year, but no later than grade 10. In Grade 10, as in grade 3, students will be evaluated based on status alone. As a result, all schools will be measured based on 100% meeting the AMO by 2014.

For the growth model component of this proposal, a student is on track if (1) he/she is not already proficient, and (2) his/her score in the second year is at least as high as the score the previous year plus one-fourth of the gap the first year the student is considered for growth, one-third of the gap the second year, and one-half the gap the third year between the score the previous year and 300 (proficient). This example is true for all students in grades 4-6. A student in grade 7 or higher new to the LEA has until ninth grade to demonstrate they are

on track to become proficient. A student in grade 10 is evaluated based on status alone. Therefore, the State of Alaska indicates students who are not proficient as proficient if they have made more than a year's growth, based on an evaluation of the assessment results in the current year relative to the previous year, demonstrating the student will be proficient within no more than four years for grades 3-6, three years for grade 7, two years for grade 8, and one year for grade 9. Students who are retained or for other reasons do not have a score from a grade level in the current year higher than the previous year, or have missing records from the previous year are evaluated based on status alone.

Alaska uses a 100-600 scale for all content areas and all grade levels, with 300 being proficient in all cases. An example of a student considered to be on track to become proficient, if they are in fourth grade, or new to the state or LEA, follows:

1. A student last year in fourth grade had a score of 260.
2. $(300-260)/4=10$
3. If a student has 270 at the end of fifth grade, he/she is on track to become proficient.

This example changes each year the student is considered as a student on track to become proficient by changing the mathematical calculation in step two. The second year the calculation will be $(300-X^*)/3$, third year the calculation will be $(300-X^*)/2$, and the fourth year the student will receive an evaluation solely based on the score received. This model is adjusted for students in grades 7 or higher as they must be proficient within four years in the LEA and no later than grade 10. A student who is new to the state or new to the LEA who is not proficient will have four years from entering the LEA to become proficient and may demonstrate being on track to proficient using the system outlined.

*X=Student Scale Score

The cut scores that have been established for each performance level on the state assessments, which were established in a coherent manner as outlined later in the proposal and in the technical report, are attached as evidence.

Evidence: AMO Trajectory

1.2 Has the State proposed technically and educationally sound criteria for “growth targets”² for schools and subgroups?

1.2 Peer Review Probe Questions	State Response
<p>1.2.1 What are the State’s “growth targets” relative to the goal of 100% of students proficient by 2013-14? Examine carefully what the growth targets are and what the implications are for school accountability and student achievement.</p> <ul style="list-style-type: none"> ➤ The State should note if its definition of proficiency includes “on track to be proficient” or a related growth concept. For example, a State may propose that a student who is not proficient in the current grade must be on track to proficiency within three years or by the end of the grade span (e.g., elementary). ➤ A growth model that only expects “one year of progress for one year of instruction” will not suffice, as it would not be rigorous enough to close the achievement gap as the law requires. <p>1.2.2 Has the State adequately described the rules and procedures for establishing and calculating “growth targets”?</p>	<p>1.2.1 and 1.2.2</p> <p>The growth target under this growth proposal for meeting the Annual Measurable Objective relative to the goal of 100% of students proficient by 2013-14 does not change. The growth component of the Alaska proposal includes those students who are on track to become proficient with those students who are proficient when measuring the school results relative to the AMO. The proposal includes all schools and all subgroups that are currently incorporated into AYP for Alaska. Besides school-as-a-whole, Alaska includes the following subgroups: African-American, Alaska Native/American Indian, Asian/Pacific Islander, Caucasian, Hispanic, Multi-ethnic, Low SES, SWD and LEP.</p> <p>This proposal raises the expectations within the school system. Schools that are not meeting adequate yearly progress will find it challenging to identify interventions that allow students to demonstrate they are on track to become proficient. Schools will rise to the challenge and support students who are not proficient in more aggressive manners than they are encouraged to do under the current status-only model. Measuring student growth, in addition to measuring status, is a valid methodology to measure if we are closing the achievement gap between subgroups by measuring the gains taking place. A status-only method does not recognize schools where individual student achievement is improving – a very important issue to Alaska policymakers.</p>

² “Growth target” denotes the level of performance required in order to meet AYP. The State may propose different “growth targets” for reading/language arts and mathematics, different grade spans, etc. This document uses the term “growth target” to try to minimize confusion with “expected growth,” “projected growth,” “growth expectations,” and other terms used in value-added and other student longitudinal growth approaches that denote an empirically derived student performance score not necessarily related to the NCLB policy goals of proficiency.

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

1.3 Peer Review Probe Questions	State Response
<p>1.3.1 Has the State adequately described how annual accountability determinations will incorporate student growth?</p> <p>A. Has the State adequately described and provided a rationale for how Annual Measurable Objectives (AMOs) or other criteria for growth would be determined? Has the State provided a table giving the values for the AMOs from the first year the growth model will be applied (e.g., 2005-06) through 2013-14 that includes rigorous increases in school performance throughout that time? Does the model set reasonable, challenging, and continuously improving annual expectations for student growth?</p> <p>➤ “Growth models that rely on substantial increases in the growth rates of students or schools in the last few years are not acceptable, but the Department is open to models that set a point in time as the goal (e.g., end of grade in a particular school; within four years). In setting these standards, the State should demonstrate how accountability is distributed among all the grades and not postponed to this point in time. The Department is concerned that if the State’s Growth Model allows attainment of the proficiency standard by individual students to be delayed or is tied to standards that are not considerably more rigorous with each consecutive grade, then it becomes too easy to minimize or delay the importance of accelerated growth” (Secretary Spellings’ letter, 11/21/05).</p>	<p>1.3.1 A.</p> <p>Alaska is incorporating a growth model within adequate yearly progress, providing accountability for schools and LEAs based on status and growth of individual student performance relative to previous-year performance. Alaska is proposing to USDE to include growth within the performance calculations of adequate yearly progress for all schools after calculating the current status model, and intends to implement this system when making adequate yearly progress calculations in the summer of 2007.</p> <p>The Alaska growth component of this proposal will include with the proficient students in the areas of mathematics and reading/writing (language arts) those students who demonstrate sufficient growth to convince the state that the student is on track to be proficient within three additional years from the point of the growth calculation where two data points are available. Students in grades 4-6 will have to be on track to proficiency within four additional years, grade 7 three additional years, grade 8 two additional years, and in grade 9 by the following year, therefore assuring that all students are proficient before they graduate from high school. LEAs in Alaska are K-12 school systems; therefore, under this model the LEA is fully responsible for students even if they move from one building in fifth grade to another in 6th grade. Further, forty-two percent of schools within the State of Alaska are K-12 schools and, therefore, this is not only holding the LEA accountable, but also the site level for these schools. The proposed methodology of calculating the currently approved status model and a growth component supports two types of effective schools: those that have a large percentage of students proficient and those that have a large percentage of students on track to becoming proficient in the established time frame. Additionally, this system is inherently fair for all schools, yet holds all schools accountable for student proficiency and moving students toward proficiency.</p>

B. For any proposed confidence intervals or other statistical methods to be applied to the decision about meeting the AMO for growth, has the State clearly described the rationale for the use of the specific statistical method (including minimum group size and any multi-year averaging), and the procedures for applying the method?

The growth model will be part of the calculation in determining if all schools are meeting the AMO or if students who are proficient are declining in performance such that they will potentially become not proficient. The growth calculation follows the currently approved status calculation that will continue to be used for all schools. Students who are proficient and on track to be proficient within the required timeframe, are included in the percentage of students to meet the required Annual Measurable Objective when using the growth calculation. Participation rate and the other indicators will continue to be calculated as described in the U.S. Department of Education-approved Accountability Workbook. Safe harbor will only be used when calculating the status check and will not be used in calculating the growth check.

1.3.1 B

The confidence interval in the U. S. Department of Education-approved Accountability Workbook will continue to be applied to the status check only. Alaska will reduce the confidence interval when calculating performance with the inclusion of the few students who are on track to be proficient. Most students will continue to be evaluated based on status in this proposal, with a few added to the proficient population based on being on track to become proficient within the required time frame. A 68% confidence interval will be used when Alaska computes the growth check in which the on track students are included with the proficient population. Alaska is evaluating all schools at the “school as a whole” level regardless of size; therefore, accountability is extended to all schools. The confidence interval makes the system fair based on the measurement issues inherent in measuring performance in schools with varied sizes. The model being proposed includes the calculation of all students, including those that only status is available in the determination because the student does not have a previous year score and those where individual growth is considered. This model includes a status check and a growth check (which combines the small group of on track to become proficient students with the proficient students) when measuring performance relative to the AMO. Measurement error occurs when individual growth is considered; therefore a confidence interval is justified and appropriate when calculating adequate yearly progress. If approximately 13% of the students are on track to become proficient, the

number of students evaluated based on student to student performance is small compared to the remaining population of approximately 77% that will be evaluated based on status, and evaluated relative to a different group of students.

In the growth component of the model Alaska is proposing, the vast majority of students are evaluated on whether or not they are proficient (a status judgment). A substantial majority of the students are proficient, and growth comes into play only if a student is not already proficient, and as stated above. School scores will be changed only by adding the number of students who are not proficient but making sufficient growth to those who are already proficient. As a result, the impact of this growth model on school scores will be relatively small for most schools when compared to the current system. Because the proposal is to run the current system and then run the growth model we will find the growth model will have negligible, if any, impact on AYP determinations. Still the model will provide valuable information to schools, students, and families. The impact of adding in the counts of these students when completing the growth calculation will have a relatively small impact on the amount of error in the judgments, and, therefore, a confidence interval is essential. Additionally, the error associated with individual test scores remains an issue even when comparing the same student one year relative to the previous year.

Two important points must be made in response: first, establishing a need for a confidence interval and, second, establishing that the confidence interval Alaska proposed is reasonable.

In growth models concerns about measurement error, equating error, estimation error, and sampling error must be addressed to avoid uncertainty about whether a school would show the required growth if the same conditions were applied to another group of students in another year. Further justification for the concern of each of these types of error is addressed below.

Measurement error: Because students' performance at any one time is not exact, we do not measure the students' exact performance correctly. For example, if a student took the test twice, it is likely the student would

answer some of the same questions differently (i.e., get some of the questions incorrect that s/he answered correctly previously, and vice versa). Note that measurement error is higher for growth because it involves at least two measurements.

Equating error: The equating error is due to not having perfectly comparable measurements from one year to the next. Although we do our best to equate from year to year, there will be some amount of error.

Estimation error: The estimation error shows how much the growth trajectory (slope) estimated for the student differs from the actual observations. If the observations all lie on a line, then the estimation error is very small. Of course, for most students, their true scores (corrected for measurement error and equating error) are not necessarily consistent. So the fit between the model and the student performance has some error.

Sampling error: sampling error reflects differences between students or cohorts of students, rather than the measurement of an individual student. Sampling error occurs when we try to generalize from the performance of one cohort what the performance of another cohort would be. Sampling error is important in the Alaska Growth Model because “growth” scores really aren’t that alone—they are status scores with additional students counting positively for the school if they show considerable growth from one year to the next.

The Alaska AYP growth score is simply the status score with a few “bonus points” for students who are on track. Therefore, it is clear that the sampling error issues that apply to status scores apply to the growth scores. There may be some small reduction in the sampling error as some of the students included in the growth score counted positively because they were tracked from year to year; nonetheless, the vast majority of students who count positively for the school’s growth score were counted that way because they were already proficient (which means they counted positively for the school in the status score).

We are using 99 percent confidence intervals for status, as approved in the Alaska Accountability Workbook, and we know that the sampling error for growth scores (because of their direct relationship to status

C. For future evaluation purposes, does the State’s proposal provide evidence of the validity and reliability of the proposed growth model, including impact of use/non-use of the growth model on validity and reliability of overall school accountability judgments?

scores) will be much the same. However, it will be reduced somewhat because some of the students’ positive results for schools will be achieved by tracking the same students from year to year. Thus, we decided to employ a more conservative measure for the confidence intervals.

The approved minimum group size for adequate yearly progress, as outlined in the USDE-approved Accountability Workbook, is 25 for all ethnic and special population (SES, LEP and SWD) subgroups. Alaska evaluates at the school and district as a whole regardless of size, which is another reason a confidence interval is necessary when completing the AYP calculations.

Currently Alaska is approved to use uniform averaging among years for participation only. This proposal does not introduce any changes to uniform averaging.

1.3.1 C.

Alaska will be able to report and analyze information regarding the number of students within a school who are proficient, on track to become proficient, and below proficient. Alaska will report the overall number of students who are proficient, yet who’s scored declined from their previous years scale score in mathematics or language arts, and therefore, are at risk of becoming not proficient. The reporting of students proficient, but declining toward not proficient, will assist in the evaluation of the growth model, but, more importantly, will assist schools in designing improvement plans and notifying parents about school performance. A school that has students who are proficient, but declining, will be required to address the issue in their school improvement planning.

This information will be used to evaluate the effectiveness of the growth model and to determine the reliability of the calculations in determining growth toward proficiency over time. While the calculation is based on the current year relative to the previous year, with the implementation of the data warehouse and business analytics Alaska will increase the

<p>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, LEA, and state level?</p> <p>A. Has the State proposed a sound method for how the overall AYP judgment (met/not met) for the school will be made, incorporating judgment of student growth?</p> <p>B. Has the State proposed a sound method for how the overall AYP judgment for the school will incorporate growth in subgroup performance?</p> <p>➤ Are the method and criteria for determining subgroup performance on growth the same as for students in the school as a whole?</p> <p>C. Has the State proposed categories for understanding student achievement at the school level and reports for growth performance and AYP judgments that are clear and understandable to the public?</p>	<p>capacity to analyze and measure the validity of the growth model system. The Alaska Department of Education & Early Development will present validity and reliability evidence to the State’s National Technical Advisory Committee each year. The model Alaska is proposing, which includes the currently approved status model, with the addition of a growth model calculation, will provide information to evaluate the effectiveness of growth relative to the current status model.</p> <p>1.3.2 Adequate yearly progress for schools and districts is based on:</p> <ul style="list-style-type: none"> • Calculating if the school and each subgroup meet the 95% participation rate, or meet 95% when the current year and the previous one or two consecutive years meet 95%. • Calculating the number of students proficient. • Calculating the number of not proficient students. • Measure the proficient population against the AMO to see if the school and all groups meet. • Calculating if the school meets, or has made progress from the previous year, the “Other” indicator of graduation rate, or attendance if the school does not have grade 12. • Measuring if the school or any subgroup meets safe harbor if it did not meet the AMO, but only if the school and subgroups meet participation rate and the “Other” indicator. If a subgroup meets the AMO when using safe harbor then determine if the subgroup meets the “Other” indicator. • Reporting out the status judgment of AYP determinations. <p>Then run growth for all schools by:</p> <ul style="list-style-type: none"> • Calculating the number of students on track to become proficient within: <ul style="list-style-type: none"> ○ four years for grades 4-6, three years for grade 7, two years for grade 8, one year for grade 9 the first year the student is considered for growth; ○ three years (or fewer for grade 7 and higher) the second year the student is considered for growth, and; ○ Two years (or fewer for grade 7 and higher) the third year the student is considered for growth,
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- Including the proficient and the on track to become proficient groups together to measure relative to the AMO in reading/writing (language arts) and the AMO in mathematics.
- Calculating if the school meets, or has made progress from the previous year, the meeting of the “Other” indicator of graduation rate, or attendance, if the school does not have 12th grade.

If the school meets the status check or the growth check, the school meets adequate yearly progress.

Adequate yearly progress is determined for the school as a whole regardless of the size of the school, and the minimum subgroup only applies to the subgroups.

Information about school performance will be essential for school improvement planning purposes. If a school meets adequate yearly progress, the reason for meeting will be made public so that schools can plan and the public can have knowledge about school performance. Schools that have many students proficient versus schools that have many students on track to become proficient may have different approaches for school improvement planning. The same information regarding proficient versus on track to become proficient will be necessary at the subgroup level to enhance planning and report AYP judgments that are clear and understandable to the public.

1.4 Does the State proposed growth model include a relationship between consequences and rate of student growth consistent with Section 1116 of ESEA?

1.4 Peer Review Probe Questions	State Response
<p>1.4.1 Has the State clearly described consequences the State/LEA will apply to schools? Do the consequences meaningfully reflect the results of student growth?</p> <ul style="list-style-type: none"> ➤ The proposed interventions must comply with the Section 1116 requirements for public school choice, supplemental educational services, and so on. ➤ If proposed, the State should explain how it plans to focus its school intervention efforts by incorporating the results from a growth model. For instance, a State should be prepared to explain how a school that does not meet either traditional AYP goals or growth-based accountability goals might be subject to more rigorous intervention efforts than schools not making AYP on only one accountability measure. 	<p>1.4.1</p> <p>Alaska has defined consequences that apply to schools, and these consequences will be more meaningful because student growth results will be provided. The intervention Alaska applies to schools is in compliance with Section 1116 regarding public school choice, supplemental education services, and so on. All of the consequences required by Section 1116 have been adopted by the Alaska State Board of Education & Early Development into state regulation, and, therefore, are law for all public schools in Alaska, including charter schools. A summary of the consequences outlined in state regulations are attached.</p> <p>When schools know the performance of their students based on status and growth, better school interventions can be designed. A school demonstrating significant growth with all or some students will be in a significantly improved position for designing school improvement plans with appropriate interventions for all students. Measuring growth and status is good for students and good for the schools that serve those students.</p> <p>The state will have the opportunity to focus school improvement funding with the measures of growth and add validity to the system when trying to identify schools that are doing a good job with students. To focus funds on schools with low growth and low status will assist students in becoming proficient or moving to be on track to become proficient. The state has recently adopted regulations that allow for a desk audit and an instruction audit after two consecutive years of not meeting adequate yearly progress. The information on the status and the growth calculation will be included in the desk audit to determine if on-site instruction is necessary to develop interventions and corrective actions required to improve student achievement. A copy of the regulations is attached.</p> <p><i>Evidence: Consequences & District Audit Regulations</i></p>

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

“The accountability model must establish high expectations for low-achieving students, while not setting expectations for annual achievement based upon student demographic characteristics or school characteristics.” (Secretary Spellings’ letter, 11/21/05)

Introductory note: A State may, in its growth model, use student longitudinal data to adjust for the fact that students who score below proficiency may still be making substantial growth from year to year. As part of including student growth in its AYP accountability model, a State must establish how it would determine whether the growth achieved by a student is adequate. Expectations for growth must not be based on student demographics or school characteristics.

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

2.1 Peer Review Probe Questions	State Response
<p>2.1.1 Has the State adequately described a sound method of determining student growth over time?</p> <p>A. Is the State’s proposed method of measuring student growth valid and reliable?</p> <ul style="list-style-type: none"> ➤ Are the “pre-“ and “post-“ test scores appropriately defined and adequately measured? ➤ If the State will not use a single score for pre- and/or post-test scores (e.g., using an aggregation of multiple scores from multiple years), does the State adequately explain and justify how the scores would be combined, what the weights are for each score, and how and whether the scores are/are not comparable across students and across time? ➤ Information about the availability and technical quality of proposed data will be considered in Core Principle 5. The probes associated with Principle 2 are focused on how the change in achievement is measured and valued. <p>B. Has the State established sound criteria for growth targets at the student level, and provided an adequate rationale?</p> <ul style="list-style-type: none"> ➤ If the State is assigning a value determination at the student level annually with regard to each student’s growth, has it used a sound process and assigned specific 	<p>2.1.1</p> <p>Validity exists when the right schools are being identified for school improvement and are making adequate yearly progress and when the wrong schools are not being identified. Schools where students are demonstrating proficiency based on the status check or growth toward proficiency within a reasonable timeframe should be considered good schools. Further, a school that meets both the status check and the growth check is a good school because they are not only meeting the current AMO, but will likely meet the AMO as it increases should they maintain the individual student growth targets. Good schools that are doing what is necessary to increase student achievement should be identified as meeting adequate yearly progress. The Alaska growth model being proposed will create a system with greater validity for measuring school performance.</p> <p>The Alaska proposal has greater validity than the current single method status check for determining adequate yearly progress, and, therefore, will have greater credibility within the state. This information will be valuable in school and LEA improvement planning, as appropriate consequences can be developed when schools know if they have students on track to proficiency or not on track to proficiency.</p> <p>The achievement levels for the Alaska Standards Based Assessments</p>

values for those growth targets? For example, if a State has four performance categories, would movement between each category be weighted equally or would some categories be weighted more heavily than others?

- If the State would only calculate “difference” or “change” scores for each student, and then aggregating to the subgroup and/or school levels, then the State should clearly give its rationale in this section.

- Would the model ensure that student growth expectations are not set or moderated based on student demographics or school characteristics? The model must have the same proficiency expectations for all students, while setting individual growth expectations for students to enable them to meet grade level standards.
 - If the State proposes a regression or multivariate/multi-level model, the independent variables may not include race/ethnicity, socio-economic status, school AYP status, or any other non-academic covariate.
 - Does the model establish growth targets in relation to achievement standards and not in relation to “typical” growth patterns or previous improvement, unless there is evidence and a clear rationale that those factors are related to the overall goal of achieving proficiency for all students?
 - Would gains of high performing students compensate for lack of growth among other students?

- Does the State have a plan for periodically evaluating the appropriateness of the student-level growth targets criteria?

were designed in a manner that provides coherence from grade 3 through grade 10, based on vertically aligned content standards and achievement standards. The achievement standards were established through a process called standards validation that linked performance from the old assessment program to the new program and provided for measurement across grades to be coherent. The 2006 technical report web site for the Standards Based Assessment is provided below as evidence, if needed. The pertinent pages of the technical report and the agenda for the committee meeting where the standards were established are included in the appendix of the report.

The full technical report can be seen at:

<http://www.eed.state.ak.us/tls/assessment/techreports.html>

Alaska’s proposal is based on movement that shows students will be on track to become proficient within four or fewer years depending on the number of years the student has been within the LEA. The performance of students who are on track to become proficient within four or fewer years will fall in a proficiency level below proficient (below proficient), with an associated proficiency level descriptor that describes the content the student knows and needs to know to become proficient. This information, along with what is available in any descriptor about what a proficient student knows, provides instructional information to support the required annual growth necessary to be considered on track.

A point that should be established is that a vertical scale is neither a necessary nor sufficient condition for a growth model. In his presentation at the 2006 MARCES conference, Hill et al. (2006) cited Henry Braun’s observation at the 2005 conference that growth models really are nothing more than a statement of conditional status:

“Any progress score is doing nothing more than answering the question, ‘How are you doing this year (status), given how you were doing last year (conditional status)?’ While it is not necessary to view progress this way to measure it, it is a position that can help one resolve knotty questions; for example, why a growth model could be used when the tests across two years aren’t on the same scale—or for that matter, even measure different constructs. Braun’s conception of the problem allows

one to create valuable designs in these environments. Prior information about a student or a school is valuable so long as it correlates with the current information. Tests do not need to be scaled across grade levels or be based on the same content standards for them to measure progress effectively, so long as there is a statistical relationship that can be established between the prior and the current information. While we would, of course, clearly desire to have prior information that is connected as possible to the progress scores, it is not an ‘all or nothing’ issue: accountability designs can be considerably improved by incorporating prior information that is well correlated with post-test scores, even if there is not a direct connection between the two scores.” (page 258-9)

Vertical scales also are not a sufficient condition to create a growth model. As DePascale (2006) has noted:

“In the context of our discussion of student growth, vertical scales describe growth relative to the construct (or relative to self). Considered by itself, a 50-point gain from 300 on the third grade test to the fourth grade test tells us that the student’s achievement has increased, but provides no information about the student’s performance relative to other students and no information about the student’s performance relative to a standard. In short, we know that the student has gained 50 points in mathematics achievement, but what does that mean? How can scores of 300 and 350 or a gain of 50 points be interpreted? What information do they provide and is it the information that people want to know?” (page 7)

There is much debate in the literature about whether vertical scales should even be developed. While there is considerable inherent logic to a vertical scale, there are serious technical questions about whether they have real meaning once they have been constructed. Normative gains on scaled scores vary from grade to grade, often in unpredictable ways, but with a general trend that students in higher grades make smaller gains than students in lower grades. The relationship among the points in the scale also change as teaching practices change (particularly if the test is

carefully aligned to grade-specific standards, as we desire state tests to do), meaning that scales established at the beginning of a testing program may change considerably in the course of a few years.

An attractive alternative to the technical problems with vertical scales has been the creation of vertically-moderated standards. Beginning with the Lissitz and Huynh (2003) article on this topic, many states re-examined the standards they had set earlier and modified them so that they had more coherence from grade to grade. The goal was to create a system of assessments and standards so that the meaning of the term “Proficient” could be interpreted consistently from grade to grade. Such an approach has the advantage of providing consistent interpretation across years, even when standards change from grade to grade and when teaching practices improve and align more directly with states’ published content standards.

For these reasons, Alaska chose to not create a vertical scale for its state assessments, but to re-examine the standards it had set and ensure that they were consistent from grade to grade. This new system of vertically aligned assessment and standards (without a vertical scale) provide the information Alaska needs for its growth model.

References:

DePascale, C. (2006). *Measuring Growth with the MCAS Tests: A consideration of vertical scales and standards*. Available at http://www.nciea.org/cgi-bin/pubspage.cgi?sortby=pub_date

Hill, R, Gong, B., Marion, S., DePascale, C., Dunn, J. and Simpson, M.A. (2006) Using Value Tables to Explicitly Value Student Growth. In R. W. Lissitz (Ed.), *Longitudinal and value-added modeling of student performance* (pp. 255-283). Maple Grove, MN: JAM Press.

The Alaska proposal is not based on student demographics or school characteristics. The expectation for proficiency and growth toward proficiency is the same for all students. Growth is based on performance on the academic achievement standards in one year relative to the

	<p>previous school year.</p> <p>The growth model proposed by Alaska does not assign school or LEA credit for students scoring above proficient. This model involves the performance of three groups of students: those that are proficient, those that are on track to become proficient and those who are not on track to become proficient. The proficient students and the students on track to become proficient are included in the percentage of students measured against the AMO. The overall number of proficient students within a school that have a scored that declined toward becoming not proficient will be reported to the school and public, and the school will use this information in their school improvement planning. Under the Alaska proposal gains of high-performing students will not compensate for lack of growth among other students.</p> <p>The state will conduct ongoing analysis of the adequate yearly progress calculations and track students over time to evaluate if students meet the proficiency level within the predicted timeframe. If students are meeting proficiency within a shorter or longer timeframe, further analysis may be necessary. Little evidence currently exists to tell us if three or four years is too long, or if three or four years is not long enough for a student to reach proficiency; however, Alaska will research these issues and willingly adjust the model based on the results of the research. Alaska will work with the state's National Technical Advisory Committee to evaluate the appropriateness of the growth model.</p> <p><i>Evidence: Technical Report – Section of Chapter 8, and Standards Setting agenda</i></p>
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Core Principle 3: Accountability for Reading/Language Arts and Mathematics Separately

“The accountability model must produce separate accountability decisions about student achievement in reading/language arts and in mathematics.”
(Secretary Spellings’ letter, 11/21/05)

Introductory note: The NCLB statute specifies that a State’s accountability system must produce separate accountability decisions about student achievement in reading/language arts and mathematics. This must also be true for school accountability decisions based on measures of student growth.

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

3.1 Peer Reviewer Probe Questions	State Response
<p>3.1.1 Are there any considerations in addition to the evidence presented for Core Principle 1?</p> <ul style="list-style-type: none">➤ The growth model proposal must include separate decisions for reading/language arts and mathematics, and maintain validity and reliability, minimize measurement error, and support empirical integrity in the accountability system. How does the model achieve these specifications, especially in small schools or schools with high mobility?➤ Does the model include assessments for other content areas (e.g., covariance matrices to estimate student performance or projected performance in a content area)? If so, the State should demonstrate that achievement on those other assessments does not compensate for failure to achieve proficiency in reading/language arts or mathematics.	<p>3.1.1 The Alaska proposal will measure student performance in reading/writing (language arts) and mathematics separately for both status and growth.</p> <p>This system provides a level playing field for all students and schools. Typically a school that has a greater percentage of students proficient will have fewer on track to be proficient, while a school with fewer students proficient will have a greater number of students on track to become proficient. Further, this makes clear that schools with students who are not proficient and not on track to become proficient are different and should be designated differently within adequate yearly progress. The utilization of growth in adequate yearly progress designations will increase validity and will create, over time, reliable decisions based on status and growth of student achievement.</p>

Core Principle 4: Inclusion of All Students

“The accountability model must ensure that all students in the tested grades are included in the assessment and accountability system. Schools and LEAs must be held accountable for the performance of student subgroups. The accountability model, applied statewide, must include all schools and LEAs.” (Secretary Spellings’ letter, 11/21/05)

Introductory note: The State’s growth model should hold schools accountable for their students by including all students, consistent with NCLB requirements (e.g., “full academic year” (FAY), and minimum group size requirements). In addition, the State’s model must include all schools and LEAs.

4.1 Does the State’s growth model proposal address the inclusion of all students, subgroups and schools appropriately?

4.1 Peer Review Probe Questions	State Response
<p>4.1.1 Does the State’s growth model address the inclusion of all students appropriately?</p> <p>A. Ideally, every student will have a pre- and a post-score, and a school will be clearly accountable for all students’ achievement even when applying the “full academic year” parameters. However, there will be situations in which this is not the case. Are the State’s proposed rules for determining how to include student achievement results (when data are missing) in the growth model technically and educationally sound?</p> <ul style="list-style-type: none">➤ For example, if a State proposes to “impute” missing data, it should provide a rationale and evidence that its proposed imputation procedures are valid. A State proposing such a growth model must address how many students would be excluded from its calculations of growth because they lack a score, and provide an acceptable explanation of how these exclusions would not yield invalid or misleading judgments about school performance.➤ Does the State have an appropriate proposal for including students who participate with alternate assessments and/or alternate/modified achievement standards (in one or more years for calculating growth)?	<p>4.1.1</p> <p>All students in grades 3-10 at all schools are held accountable in Alaska when adequate yearly progress is determined under the USDE Accountability Workbook. The Alaska proposal for growth does not change this. Additionally, Alaska implemented a new criterion-referenced assessment system in 2005 and 2006; therefore, in 2007 Alaska will have multiple years of data at every grade level, necessary data to demonstrate growth.</p> <p>Proficient students will be included in the model when the state reports on each school, the number of students who were proficient in both years but demonstrated a score which declined from one year to the next. This will assist each school in analyzing their proficient population to assure that they too improve in their performance.</p> <p>Students who do not have a test record from a lower grade level the previous year, as a result of attending school in another state, a private school, or another situation, will be evaluated based on status only. Missing data from the previous year may also occur when a student is retained or is in a situation within his/her grade level progress that causes the student to not have a test record from the prior grade level, in which case the student will be evaluated based only on his/her status score. No invalid or misleading judgments would occur, as the status results of those students will be evaluated for making adequate yearly progress</p>

<p>➤ Does the State’s definition of FAY include students appropriately when applied in the growth model context? For example, a State that defines FAY as “participating in the assessment in the same school the previous year” will need to modify that definition for its growth proposal to include students who cross school boundaries over time.</p> <p>➤ What does the State propose to do to measure academic growth for students in grade three or the initial grade tested?</p> <p>➤ How does the State propose to distinguish between growth for a student who moves from one grade level to another and growth for a student who is retained in a grade level for two years or is promoted at mid-year?</p> <p>B. What other strategies will the State use to include, in its NCLB accountability system, students who might be excluded from the growth model calculations?</p> <p>4.1.2 Does the State’s growth model address the inclusion of all subgroups appropriately?</p> <p>A. States must ensure that student subgroups are neither</p>	<p>designations.</p> <p>Under this proposal the alternate (which is taken by less than 1% of the population) will continue to be calculated into adequate yearly progress in the growth model using the current methodology of proficient or not proficient determinations. However, at a future date, when we have completed the redesign of the Alaska alternate, the state may propose to include growth calculations of the alternate.</p> <p>Alaska does not have an alternate assessment for limited English proficient students. They will be fully included as they take the regular assessment with or without accommodations.</p> <p>Full academic year will continue to be applied as outlined in the USDE approved Accountability Workbook. Students are considered full academic year if they have attended the same school from October 1 to the first day of testing, which takes place the first week in April.</p> <p>Students in third and tenth grade will not be measured based on growth. Nonetheless , they will continue to be measured based on performance as is currently done in the accountability system when calculating the status check, and will be included as either proficient or not proficient when we calculate growth.</p> <p>The Alaska proposal does not change anything regarding full academic year as outlined in the U.S. Department of Education approved Accountability Workbook for Alaska. All students who are full academic year in the current year in a school or district will continue to be included in the AYP calculation regardless of the full academic year status of those students in the previous year. Those that have a test record from the previous year will have the addition of the growth analysis and those that do not have a previous test record will be included based on status score.</p> <p>4.1.2 The Alaska proposal to include growth does not change how subgroups are included. Subgroup performance is important in Alaska, and recognizing differences in performance and working to close the</p>
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systematically nor inadvertently excluded from participation in the growth model; the model cannot eliminate or minimize the contribution of each subgroup. Are the State's proposed rules for determining how to include subgroup accountability in the growth model technically and educationally sound?

- Has the State adequately addressed implications of its proposed growth model for subgroup inclusion in addition to that in Core Principle 1? (For example, has it addressed "minimum group-size" requirements for subgroups?)
- Does the State have an appropriate proposal for including students who change subgroup classification over the time period when growth is calculated (e.g., LEP to non-LEP)?
- If applicable, how does the State proposal address the needs of students displaced by Hurricanes Katrina and Rita? For example, how does the proposal interact with State plans, if any, to develop a separate subgroup of displaced students, consistent with the Secretary's guidance of Sept. 29, 2005.

achievement gap are a priority. Minimum group sizes will be 25 based on an approved amendment to the U. S. Department of Education-approved Accountability Workbook. If students change subgroups, it has no effect under this proposal as they are included in all subgroups they belong to on the date of the first day of testing. This is the current system outlined in the USDE-approved Accountability Workbook and adopted into state regulation.

Overall Alaska receives 5.5% new students each year for grades 1-12. To determine this we looked at the 123,396 students in grades 1-12 in 2005 and found that 6,812 were not enrolled the previous school year. The percentage of students new to the state is fewer for the higher grade levels than the lower grade levels. For grades 1-3, 6.3% are new, for grades 4-6, 5.4% are new, and for grades 7-12, 5.2% are new.

Attached to this document is another document titled "Fall 2005 - New students* entering public schools" which outlines the number of students who are new to the school system by subgroup overall and by designated grade spans.

The number of students who leave the state is significantly fewer than the numbers arriving in the state. Overall, 3.9% of students left the state, and for the lower grades those numbers are as small as 3.0% and 2.7% as depicted on the attached document titled "Fall 2005 – Students leaving* the state's education system."

A significant point to remember with the Alaska proposal, however, is that if we don't have a match for a student test record for this year compared to the previous year then we evaluate the student on status and not growth. Therefore, if a student does not have a test record from the previous year he/she is evaluated on status and is not excluded from the system.

The percent of transfers between districts is only 4.1% in grades 1-12. For those that stayed within a district, the percent of transfers is 72.3% for grades 4-10. The statistics are presented in the attachment titled "Percent of District Transfers." Given that a very small percent of all students will be on track to become proficient, the impact on the growth model should

<p>4.1.3 Does the State’s growth model address the inclusion of all schools appropriately?</p> <p>A. Does the State provide an adequate plan and rationale for how the system will be applied to all schools consistently across the State to yield an AYP determination each year? Has the State adequately described and provided a rationale for any proposed exceptions?</p> <ul style="list-style-type: none"> ➤ The State may propose to apply the growth model only to schools with adequate assessment data. If that is the case, it should propose how other schools, such as K-2 schools, single-grade schools, and high schools, will be held accountable (e.g., through continuing its approved statutory AYP/safe harbor accountability system for those schools). ➤ The State should propose how it will deal with common conditions that would preclude the calculation of a growth score (e.g., school boundary changes, school closings, new schools, grade reconfiguration). ➤ How would the model ensure that all schools are accountable for student achievement, even when the number of tested students in the school is small or constantly changing? 	<p>be very small.</p> <p>All unmatched students count in either the “percent of new students” or “percent of students leaving” files that are provided. Students that did not match either left or were new and not enrolled in the previous school year.</p> <p>The file titled “Student match rate 05 to 06” provides the match rates by subgroup comparing Fall 2005 students in Grades 1-11 to Fall 2006 students in Grades 1-12.</p> <p><i>Evidence: Percent of District Transfers, Percent of New Students, Percent of Students Leaving, Student match rate 05 to 06.</i></p> <p>4.1.3</p> <p>All schools will be included in the adequate yearly progress designations as outlined in the U. S. Department of Education-approved Accountability Workbook. Schools that do not have students in a tested grade are currently given a designation based on what school the students will attend when they advance to a tested grade. This will continue under the Alaska proposal. Because Alaska tests students in grades 3-10, sufficient assessment data is available to incorporate high schools into the growth model for determining adequate yearly progress.</p> <p>School configuration changes will continue to be handled as they are in the current system of adequate yearly progress designations. If the school’s population changes, but the students were tested within the state the previous year and have a test record, and the student is not proficient, then growth for full academic year students will be calculated. If the student does not have a test record from the previous year, then only status will be calculated.</p>
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Core Principle 5: State Assessment System and Methodology

“The State's NCLB assessment system, the basis for the accountability model, must include annual assessments in each of grades three through eight and high school in both reading/language arts and mathematics, must have been operational for more than one year, and must receive approval through the NCLB peer review process for the 2005-06 school year. The assessment system must also produce comparable results from grade to grade and year to year.” (Secretary Spellings’ letter, 11/21/05)

Introductory note: NCLB requires a student assessment system that produces timely and accurate information. Under the statutory scheme, decisions about AYP are based on the “academic status” of students compared to a target—the State’s annual measurable objectives – or the change in the percentage of students who are not proficient. All States have submitted accountability plans that fit within this structure. Measuring student depends upon the quality of the State’s assessment system. An assessment system that is adequate for the “status” or “safe harbor” model might not be adequate for a growth model.

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/language arts 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 Peer Review Probe Questions	State Response
<p>5.1.1 Provide a summary description of the Statewide assessment system with regard to the above criteria.</p> <ul style="list-style-type: none">➤ For both 2004-05 and 2005-06, did the State implement an assessment system that measures State adopted content standards in reading/language arts and mathematics?➤ Did the State produce individual student, school, and LEA test results for both years?	<p>5.1.1</p> <p>During the past three years Alaska has designed a system of standards and assessments that serves as a foundation and an accountability system that includes individual student growth calculations. The Alaska Grade Level Expectations, with vertical coherence from grade to grade, were adopted into state regulation. The Alaska Grade Level Expectations created coherence between grades 3-10 for reading/writing (language arts) and mathematics. In 2005, Alaska implemented the new Standards Based Assessments and adopted academic achievement standards with coherence from grade to grade as outlined in the technical report that was submitted to U. S. Department of Education for peer review of the Alaska assessment system. Alaska intentionally built the foundations of a growth model into the statewide assessment system that was peer reviewed under NCLB and is prepared to implement this model. The fact that Alaska meets the principles required is not coincidental. We have intentionally worked to build a growth model for many years.</p> <p>Alaska implemented the new Standards Based Assessments in grades 3-9</p>

<p>5.1.2 Has the State submitted its Statewide assessment system for NCLB Peer Review and, if so, was it approved for 2005-06?</p> <ul style="list-style-type: none"> ➤ If it was not fully approved, what are the deficiencies and to what extent will they affect the State’s ability to measure growth in each subject? ➤ If the State has not yet received approval of its assessment system, when does the State plan to submit evidence of compliance with the NCLB standards and assessment requirements? <p>5.2 How will the State report individual student growth to parents?</p> <p>5.2 Peer Review Probe Questions</p> <p>5.2.1 How will an individual student’s academic status be reported to his or her parents in any given year? What information will be provided about academic growth to parents? Will the student’s status compared to the State’s academic achievement standards also be reported?</p> <p>5.3 Does the Statewide assessment system produce comparable information on each student as he/she moves from one grade level to the next?</p>	<p>in April 2005, and in April 2006 Alaska administered the new assessment in grades 3-10, allowing growth calculations to be made in all the affected grades of 4-10 in reading, writing and mathematics.</p> <p>5.1.2 Evidence provided for the NCLB assessment peer review regarding the standards was found acceptable by reviewers who indicated “Alaska has done a good job with their content standards. The standards appear rigorous.” Alaska designed the standards by looking at the vertical achievement expectations over time between grades 3-10, building an assessment system to support increasing achievement over time within the same constructs. The academic achievement standards were established in a vertically moderated methodology, outlined in the technical report and summarized in the attachment. The full technical report can be found online at: http://www.eed.state.ak.us/tls/assessment/techreports.html. The Alaska system clearly provides comparable results from year to year and grade to grade.</p> <ul style="list-style-type: none"> • The Alaska assessment system was peer reviewed and received full approval. <p><i>Evidence: AK Full Approval</i></p> <p>5.2 and 5.2.1 Individual student reports based on status will continue to be provided to parents. The growth determination is one that is simple, and school teachers and principals will be able to explain it to parents. However, the results of growth do not change individual student reports. The results of growth change school accountability and the results of school accountability will continue to be accessible to the public.</p> <p>5.3 and 5.3.1 Alaska is able to use the assessments results, which were vertically aligned, to measure student performance in the current year relative to the</p>
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5.3 Peer Review Probe Questions

The State assessment system – that is the achievement levels and content expectations – needs to make sense from one grade to the next, and even within achievement levels for it to support a growth model. These probes will help the peers understand the assessment system’s capability for use in growth models.

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 (e.g., grade 9)?

Did the State provide technical and statistical information to document the procedures and results? Is this information current?

5.3.2 If the State uses a variety of end-of-course tests to count as the high school level NCLB test, how would the State ensure that comparable results are obtained across tests? [Note: This question is only relevant for States proposing a growth model for high schools and that use different end-of-course tests for AYP.]

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?

5.3.4 Has the State used any “smoothing techniques” to make the achievement levels comparable and, if so, what were the procedures?

previous year. Because of the individual student identification system, and the ability to measure improvement using a scale that was established to determine individual student growth in one year relative to the previous year, Alaska will be able to produce comparable information on each student as he/she moves from one grade level to the next.

Alaska implemented in April 2005 a new Standards Based Assessment system based on vertically coherent grade level expectations (academic content standards) that assesses similar, but progressively more complex, content each year. This assessment system, designed over the last three years to meet No Child Left Behind and build a foundation for a growth model, was peer reviewed for NCLB assessment in November 2005. In the peer review, the reviews of the standards indicated, “Alaska has done a good job with their content standards. The standards appear rigorous, including DOK analyses.” The achievement standards and cut scores were established through a technically and legally sound process that created the necessary vertical alignment between grade levels in terms of reporting strands and achievement expectations.

5.3.2 Not Applicable

5.3.3 and 5.3.4

The peers previously reviewed the process of establishing and adopting into state regulation the cut-scores that define achievement levels which are aligned across grade levels. These procedures were again used in the process of setting the grade 10 Standards Based Assessments, working from the standards that were established in 2005 for grades 3-9. This process worked particularly well since the impact data from the 2006 tenth grade test was the same students that were used in 2005 to set standards for the ninth grade test. When establishing the standards for the tenth grade, suggested cut points were provided that were based on the impacts from the ninth grade to ensure coherence. The process for setting

<p>5.4 Is the Statewide assessment system stable in its design?</p> <p>5.4 Peer Review Probe Questions</p> <p>5.4.1 To what extent has the Statewide assessment system been stable in its overall design during at least the 2004-05 and 2005-06 academic terms with regard to grades assessed, content assessed, assessment instruments, and scoring procedures?</p> <p>5.4.2 What changes in the Statewide assessment system’s overall design does the State anticipate for the next two academic years with regard to grades assessed, content assessed, assessment instruments, scoring procedures, and achievement level cut-scores?</p> <ul style="list-style-type: none"> ➤ What impact will these changes have on the State’s proposed growth model? How does the State plan to address the assessment design changes and maintain the consistency of the proposed growth model? 	<p>the achievement standards is outlined in the technical report, which was previously provided to the peers, and remains available on the state web site. This process clearly included vertical considerations regarding the cut score for proficiency. That process of establishing the achievement standards involved educators making judgments about what students should know and do at different grade levels, but within the same content reporting strands for each grade level. The committees worked across grade levels and were provided opportunities to revisit grade levels in the process. In some cases, the assessment is more difficult to pass as the grades progress, but in those cases educators felt the content was essential for a proficient student and schools needed to become more effective teaching the content assessed within those items. The state used this process as a methodology, along with application of a smoothing technique, to make sure achievement levels were comparable, yet defined various achievement levels across the grade levels in an educationally appropriate manner.</p> <p><i>Evidence: Technical Report – Section of Chapter 8</i></p> <p>5.4 and 5.4.1</p> <p>The assessment program was implemented in 2005 and was again administered in 2006 providing two years of stable data with regard to grades assessed, content areas assessed, the assessment design and tool and the scoring procedures, which are outlined in the full technical report for the Standards Based Assessment. In 2007 Alaska will have three years of stable data to begin using for technically sound individual student growth calculations.</p> <p>5.4.2</p> <p>Alaska does not anticipate any changes within the assessment system in the next two academic years, other than the addition of science at grades fourth, eighth and tenth. Science will not be used within the growth calculation of adequate yearly progress in Alaska. Alaska is strengthening the alternate assessment to provide better information regarding student performance relative to the standards. Alaska has a multi-year contract with Data Recognition Corporation to design and score the assessment using standard accepted scoring procedures. Alaska is in the fourth year of a six-year contract with Data Recognition</p>
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Core Principle 6: Tracking Student Progress

“The accountability model and related State data system must track student progress.” (Secretary Spellings’ letter, 11/21/05)

Introductory note: NCLB established the goal of having all students reach “proficiency” in reading/language arts and mathematics by 2013-14. To reach this goal, it is necessary to monitor students’ progress as they move from grade level to grade level. Status models take a snapshot of a school’s or subgroup’s level of achievement to see if the school or subgroup has met the established proficiency target. Implicit in any system of growth measurement is the necessity of being able to track individual students over time. This section facilitates Peer Reviewers’ efforts to review a State proposal with regard to the State’s data system and the proposed methods for 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?

6.1 Peer Review Probe Questions	State Response
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?	6.1.1 – 6.1.6 Alaska has a unique ten-digit student identification system that was first used in 2001, and required for all students in the state in 2002. The identifier is used for multiple purposes, including tracking assessment data and to receive state foundation funding aid for each LEA. The state reconciles the data regularly to assure students do not have duplicate identification numbers within the system and has a staff member who has as part of his/her responsibility the reconciling of the student identification system. The technical requirements and documentation of the system can be viewed on the states website at: http://www.eed.state.ak.us/oasis/home.html
6.1.2 Is the system proposed by the State capable of keeping track of students as they move between schools or school LEAs over time? What evidence will the State provide to ensure that match rates are sufficiently high and also not significantly different by subgroup?	Once an LEA has a student ID for a student, it uses that ID for all student-level files submitted to the Alaska Department of Education & Early Development. Alaska collects a detailed Participation File containing information regarding students who participate in the assessments. This information includes all the necessary demographic data to track students and can be linked to previous data collections. The Participation File is used by our assessment contractor to match to assessment data and populate the data warehouse used by LEAs for analysis of results. Because the system has been required for use by all
6.1.3 What quality assurance procedures are used to maintain accuracy of the student matching system?	
6.1.4 What studies have been conducted to demonstrate the percentage of students who can be “matched” between two academic years? Three years or more years?	
6.1.5 Does the State student data system include information indicating demographic characteristics (e.g., ethnic/race category), disability status, and socio-economic status (e.g., participation in	

<p>free/reduced price lunch)?</p> <p>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, LEA, or the State before completing the testing sequence?</p> <p>6.2 Does the State data infrastructure have the capacity to implement the proposed growth model?</p> <p>6.2 Peer Review Probe Questions</p> <p>6.2.1 What is the State’s capability with regard to a data warehouse system for entering, storing, retrieving, and analyzing the large number of records that will be accumulated over time?</p> <p>6.2.2 What experience does the State have in analyzing longitudinal data on student performance?</p> <p>6.2.3 How does the proposed growth model take into account or otherwise adjust for decreasing student match rates over three or more years? How will this affect the school accountability criteria?</p>	<p>LEAs since 2002, the data collection is very detailed and provides an excellent mechanism for tracking students. LEAs regularly submit files of students who they suspect may have dropped out of school. The state is able to run those files against the system to determine if they have enrolled in another school within the state. The state currently has the capacity to track individual student progress within a school and throughout the state for multiple years. In addition, the state has the data system capacity to measure individual student growth.</p> <p>6.2 – 6.2.3</p> <p>The individual student identification system provides the state the ability to examine student results this year relative to how students performed in the previous school year and determine the gap between performance and the universal scale score proficiency level of 300 on the 100-600 scale. All students are assessed on the standards in grades 3-10, allowing the state to determine growth from previous year in grades 4-10. Students in third grade and those who do not have a test record from the previous year for the preceding grade level will be evaluated on status only.</p> <p>Alaska has the ability to determine growth in student learning this year relative to last year’s performance and will further enhance the efficiency in determining growth as a result of the state’s receipt of a longitudinal data system grant from the Institute of Education Sciences. Alaska’s data warehouse will not only make the calculations the state conducts to determine adequate yearly progress more efficient, but it will extend to each local education agency the ability to frequently and easily use the data warehouse for examining data within its schools.</p> <p>Alaska has a student population of 133,288. The number of students per grade level ranges from 9,564 to 11,405. The number of students in Alaska allows the state to conduct edit checks until we are confident that we have a 100% match rate. We look for nonexistent numbers, wrong numbers, and inconsistencies in names and birth dates. We correct erroneous data by using information available from previous data submissions and by working directly with each Local Education Agency (LEA).</p> <p>We receive multiple data submissions each year from LEAs in which</p>
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they are required to use the state student identification number and other data elements related to individual students. These submissions include: Fall OASIS, which provides information for state foundational funding; Participation Rate, which is used to determine information regarding full academic year and other AYP accountability information; Summer OASIS, which provides information on individual student data to determine attendance and graduation rate; and assessment data collections (including pre-code files). When the state receives any student level file we run the edit checks listed below.

- 1) Check for valid AKSID.
 - A) If missing, we run the student through ID system to
 - i) correct the existing number; or
 - ii) issue a new number for the initial entry student (after contacting district for clarification).
 - B) If the number is valid, we run first name, last name, middle name, and birth date against the ID system to check for match
 - i) if a four point match is met we accept the record; or
 - ii) if there is less than a four point match, the record is flagged and checked manually.
- 2) Check for duplicate AKSID Numbers.
 - A) If a duplicate is found (same student, multiple records), we confirm with districts, or accept it if it's valid for that data collection.
 - B) If duplicate records are flagged and logic is not accepted, records are checked manually to search for corrections.

When the check on AKSID numbers is complete and all of the AKSID numbers are deemed valid, we run the checks listed here to see if any students have a valid, but incorrect number.

- 1) Same AKSID, Different Last Name
- 2) Same AKSID, Different First Name
- 3) Same AKSID, Different Date Of Birth
- 4) Check AKSID against Previous Bad Number Field (we store

these as a reference in case districts have previously used bad numbers)

When the AKSID number checks are complete, we run the district, school, and demographic edit checks listed here.

- 1) Invalid School Number
- 2) Missing Gender Code
- 3) Missing Race/Ethnicity Code
- 4) Missing codes for Disability, LEP, ED, and Migrant

When this is complete, we check trends to see whether or not individual demographic matches should be conducted. For example, if a school reports 25 disabled students in grades 3-5 in the fall but only report 15 students on the first day of testing, matches are performed on the two data files. The match lists are sent to the district offices to be reviewed and responses are required to explain the differences.

We also run additional ad-hoc queries in the Student ID records to find inconsistencies. These checks are listed below:

- 1) incomplete names (Johnath = Johnathan; Elizab=Elizabeth)
- 2) traditional names by gender (i.e., Robert=F; Mary=M)
- 3) duplicates missed by the duplication logic when students were entered into the system (e.g., transposed numbers in the date of birth, transposed first and last names, and valid but incorrect dates of birth)
- 4) grade counts against age ranges in OASIS to find invalid birth dates or invalid grades
- 5) spelling variations for names that may be the same but are stored differently (e.g., Van der Fleet, Vander Fleet, Van DerFleet)

The student ID System uses a “four point check” to check for duplicates upon initial entry into the State ID System. The FirstName, LastName, DateOfBirth, and GenderID fields are used to perform duplicate checking and are required as input fields. Any records not duplicating on all four fields will allow for the generation of a new number. Users are prompted with a list of potential duplicates that require manual acceptance or

	<p>rejection upon both the manual entry and batch process entry procedures.</p> <p>Further, Alaska recently received a longitudinal data system grant from the Institute of Education Sciences to build a system that will be further enhanced and efficient.</p> <p>Alaska will measure the achievement of students who are included in adequate yearly progress by examining test records in the current year relative to the previous year. Students who tested within the State of Alaska in both years, regardless of where they tested, will be included in the growth calculation. Those students who only have a test record from the current year will be evaluated based on status alone.</p>
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CORE PRINCIPLE #7: Participation Rates and Additional Academic Indicator

The accountability model must include student participation rates in the State's assessment system and student achievement on an additional academic indicator. (Secretary Spellings' letter, 11/21/05)

Introductory Note: In determining AYP, a State must include, in addition to academic achievement, (1) participation rates on the State's assessment, and (2) "at least one other academic indicator, as determined by the State for all public elementary school students" and graduation rate for public high schools, and may include other academic indicators such as "decreases in grade-to-grade retention rates." For purposes of developing a growth model, these requirements must be addressed in a State's proposal.

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

7.1 Peer Review Probe Questions	State Response
<p>7.1.1 How do the participation rates enter into and affect the growth model proposed by the State?</p> <p>7.1.2 Does the calculation of a State's participation rate change as a result of the implementation of a growth model?</p>	<p>7.1.1 – 7.1.2</p> <p>Participation requirements currently outlined in the USDE approved Accountability Workbook will continue to be used within the Alaska proposal, assuring 95% student participation, or 95% of the average of the current and the previous one or two consecutive years.</p> <p>Alaska tests all students in grades 3-10 in reading, writing and mathematics, and has been testing students in all those grades for several years. The state has developed custom criterion-referenced assessments for each grade level and content area. The state reports to the public and provides to each LEA and school, the performance of students by all required subgroups. The information provided to each LEA is in an electronic format that allows for analysis of subgroup performance by standard and, therefore, meets focus on accountability for all students. In the consensus report from the NCLB assessment peer review the reviewers noted that:</p> <p style="padding-left: 40px;">“Alaska has done an excellent job with their reporting. Training is comprehensive for LEA test coordinators and the state’s interpretive guides are thorough.”</p> <p>Alaska has a 97.6% participation rate in the assessments and the results are reported to the public by all required subgroups. Alaska is on the right path.</p>

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

7.2 Peer Review Probe Questions

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

7.2 – 7.2.2

The additional academic indicator will continue to be implemented as outlined in the USDE-approved Accountability Workbook. Alaska uses the graduation rate for any school that includes grade 12 and attendance rate for all other schools. The other indicator is calculated when the state determines if the school meets under status or growth as it is currently done when determining AYP status of schools.