Summary

The legislation requires the state department of education to implement a state data management system for collecting and reporting student assessment data and identifies the duties and responsibilities of the state department of education and the school districts in implementing the data management system. The legislation instructs the state board of education to adopt a mixed-effects statistical model to diagnostically calculate students’ annual academic growth over the periods between the administration of the statewide assessments, based on the students’ assessment scores. The legislation describes the requirements for the statistical model and instructs the department to convene a technical advisory panel of experts on the measurement of longitudinal growth to assist in creation of the statistical model. The department is required to calculate what constitutes sufficient academic growth for each student for each school year. The legislation next requires the department to provide to each school district and each charter school an academic growth information report for each student enrolled in the school district or charter school, and requires the school district or charter school to adopt a policy for using the information in the report and communicating the information in the report to students and their parents. Finally, the legislation authorizes the state board of education to adopt rules for implementing the act.

Model Legislation

Section 1. {Short title} This act shall be known and may be cited as the "Longitudinal Student Growth Act".

Section 2. {Legislative declaration}

(1) The general assembly hereby finds that to, enable the department and school districts to analyze students’ academic growth longitudinally, it is necessary to establish the following components in statute and in rule:

(a) A statewide testing system that is capable of supporting longitudinal growth analysis of students’ scores;

(b) A state data management system that includes the use of unique student identifiers, that is capable of tracking students’ scores longitudinally, and that is linked to students’ academic records;

(c) A longitudinal growth methodology or model to apply in measuring individual students’ progress toward achieving proficiency on state standards;

(d) A mechanism for interpreting students’ performance on
assessments and communicating and disseminating this information for use by school districts and individual schools in assisting students in improving their performance.

Section 3. {Definitions} As used in this act, unless the context otherwise requires:

(1) “Department” means the state department of education.

(2) “State board” means the state board of education.

Section 4. {State data reporting system}

(1) (a) The department shall develop and implement a comprehensive data collection and reporting system for collecting and reporting student assessment data from each public school. The state data reporting system shall be designed to collect, through electronic transfer where possible, all student and public school performance data required to ascertain the degree to which students, public schools, and school districts are meeting state performance standards. The state data reporting system shall be designed to protect the privacy of students. At a minimum, the state data reporting system shall be capable of the following functions:

(I) Storing all scores from the assessments administered pursuant to the statewide student assessment program in the ______ school year and each succeeding school year;

(II) Storing data that may be used to perform a variety of longitudinal analyses of individual student assessment results, classroom assessment results, and entire school assessment results with respect to said assessments; and

(III) Longitudinally tracking the assessment results of students who transfer from one school district to another and whose annual assessments are administered by different districts.

(b) In addition to the functions described in paragraph (a) of this subsection(1), the state data reporting system shall be designed to include all the information and data elements needed for measuring student and school performance, including fiscal, student, program, personnel, facility, community, evaluation, and other relevant data and shall allow for the analysis of the relationship between school district and public school expenditures and student longitudinal growth toward state standards. Data elements collected and provided by the department, school districts, and individual public schools shall be compatible. The state data reporting system shall be managed and administered by the department. Each school district that has a unique information management system shall assure that compatibility exists between its unique system and the data elements of the state data reporting system so that all data required to be input into the state data reporting system is made available through electronic transfer and in the appropriate input format.

(2) The department shall have the following duties and responsibilities with regard to the state data reporting system:

(a) To consult with school district representatives in the design and development of the data model and implementation plans for the electronic transfer of data between school districts, individual public schools, and the state data reporting system;

(b) To provide operational definitions for the state data reporting system;
(c) To determine the information and specific data elements required for the performance decisions made at each school level, recognizing that the primary unit for information input is the individual public school and recognizing that the time and effort of instructional personnel expended in collection and compilation of data should be minimized;

(d) To develop standardized terminology and procedures to be followed at all public schools;

(e) To develop an electronic standardized transmittal format to be used for collection of data on the various levels of the system from the school districts and individual public school levels;

(f) To develop appropriate technology applications to assure the integrity and integration of the various information and specific data elements dealing with students, personnel, facilities, fiscal, programmatic, assessment, community, and evaluation data;

(g) To develop the necessary applications to provide statistical analysis of the comprehensive information and supporting data elements provided in paragraph (f) of this subsection (2) in such a way that required reports may be disseminated, comparisons may be made, and relationships may be determined in order to provide the necessary information for making performance decisions at all school levels;

(h) To develop output and reporting formats that will provide school districts with diagnostic information for making academic and safety environment decisions at the various school levels;

(i) To assist school districts in establishing their standardized electronic transmittal capabilities, including but not limited to awarding schools and school districts grants to assist them in upgrading their transmittal capabilities and establishing rules for the awarding of such grants;

(j) To establish procedures for the annual evaluation of the effectiveness and ease of use of the state data reporting system;

(k) To conduct a data reporting study to ascertain whether duplication exists in the collection of data and to determine whether forms and reports for reporting under state and federal requirements and other forms and reports are prepared in a logical and uncomplicated format and result in a reduction in the number and complexity of required reports, particularly for each individual public school; and

(l) To perform such other actions as are necessary to carry out the intent of the general assembly that the needs of the state data reporting system for performance decision-making and reporting are met.

(3) The specific responsibilities of each school district shall include:

(a) Developing, with assistance from the department, system compatibility between the state data reporting system and unique school district and individual public school data systems;

(b) Providing, with the assistance of the department, inservice training dealing with the state data reporting system’s purposes and scope, a method of electronically transmitting input data, and the use of performance reporting information;

(c) Advising the department of all school district data management
needs as they relate to the state data reporting system;

(d) Electronically transmitting required data elements and an accounting as required by the department to the appropriate processing locations in accordance with guidelines established by the department;

(e) Determining required data output and reports, comparisons, and relationships to be provided to the school district by the state data reporting system, continuously reviewing these reports for usefulness and meaning, and submitting recommended additions, deletions, and changes in accordance with the guidelines established by the department; and

(f) Being responsible for maintaining the integrity and accuracy of data elements transmitted to the department.

Section 5. {Longitudinal growth calculation - model}

(1) (a) The general assembly hereby finds, determines, and declares that:

(I) In ____, the general assembly adopted legislation establishing state model content standards in several areas, including reading, writing, and mathematics, and directing school districts to adopt district standards in these areas;

(II) The state model content standards were designed to measure what each child should know and be able to do at various levels of development in the child's academic career;

(III) In ____, the state began implementing the statewide student assessment program to measure whether students were successfully meeting the state model content standards;

(IV) A next step in implementing content standards in education is to identify how much academic growth is required to meet each level of content standard and to measure whether students are achieving this growth;

(V) The goal for most students, no matter where a student starts, is to achieve yearly academic growth sufficient to perform at least at the proficiency level of "proficient" in reading, writing, and mathematics by the time the student completes grade ten. In the case of students who have not yet completed grade ten but who are performing at the proficiency level of "proficient" or "advanced" in reading, writing, or mathematics on statewide assessments administered at their respective grades, the goal for such students is to advance from year to year in a way that maintains or improves upon their proficiency level performance.

(VI) The numeric statewide assessment scores received by each student in successive school years can be used to provide a diagnostic measure that will indicate the student's degree of academic growth over time;

(VII) Measuring each student's academic growth over time will provide necessary diagnostic information to assist parents, teachers, schools, and school districts in identifying students who need additional assistance and will help to close the learning gap that sometimes exists among students in the same classrooms;
The measurement of student academic growth over time should be based upon all available individual scores for the student on statewide assessments administered to the student through the years; and

The methodology of calculating student academic growth over time should be capable of accommodating the inclusion of all students, including students for whom sparse data is available.

(b) The general assembly further finds and declares that:

(i) Efforts to improve student academic growth should emphasize closing achievement gaps;

(ii) A true longitudinal measure is required that tracks individual students from one grade level in the first year to the next higher grade level in the following year and that accommodates students retained in grade;

(iii) Only students who were enrolled in a school by October 1 of the school year should have their academic growth included in the school’s overall academic growth rating for that school year in the school accountability report;

(iv) An academic growth measurement should account for the influence of artificially high- or low-scoring students and regression toward the mean;

(v) Credit should be given for students who maintain their performance at the advanced level of proficiency, even if their scale scores decline, to recognize the substantial amount of learning required to maintain that level of performance and to avoid penalizing schools with large numbers of advanced-level students whose scores might decline slightly due to measurement error;

(vi) An academic growth measurement should measure each student’s progress toward performing at the proficiency level of “advanced” or “proficient”;

(vii) An academic growth measurement should measure the performance over time of students assigned to specific classrooms and teachers; and

(viii) Teachers should be able to identify individual students who are not making sufficient progress and to use the diagnostic properties of the statewide assessments’ objectives to plan instructional strategies for improvement.

(c) Therefore, it is the intent of the general assembly to adopt legislation to implement a process for measuring student academic growth longitudinally and to include a longitudinal student growth measurement on the school accountability report that will:

(i) Create a cooperative atmosphere among students, parents, teachers, school district administrators, the department of education, and the state board of education; and
(II) Promote the highest possible academic achievement.

(2) (a) On or before _______, the department shall choose a public or private entity to develop, no later than _______, a statistical model to calculate students' annual academic growth and to calculate annually the amount of each student's and each school's academic growth, and the adequacy of the growth rate to achieve proficiency, in reading, writing, and mathematics over the periods between the administration of the statewide assessments, which calculation shall be based on students' statewide assessment scores.

(b) No later than ______, the department shall convene a technical advisory panel that includes experts on the measurement of longitudinal growth for accountability purposes. The technical advisory panel shall review the proposed model developed pursuant to paragraph (a) of this subsection (2) for calculating the annual academic growth of students. The model, at a minimum, shall specify the standard error of measurement and shall specify the stringency of the confidence interval used to determine whether the annual change in test scores can be attributable to chance due either to measurement error or to regression to the mean. In reviewing the model, the advisory panel shall consider recent national studies of different methodologies and models for measuring longitudinal growth.

(c) No later than ______, the technical advisory panel convened shall submit its written comments or recommendations to the department, the state board, the education committees of the senate and the house of representatives, and the governor.

(d) The department shall convene the technical advisory panel within existing appropriations.

(3) (a) On or before ___________, the state board shall consider the model developed pursuant to subsection (2) of this section and reviewed by the technical advisory panel and shall adopt by rule a statistical model used to calculate students' annual academic growth toward proficiency on state standards that shall be a scientifically rigorous statistical model available in the public domain.

(b) The state board, in adopting the statistical model described in paragraph (a) of this subsection (3), shall ensure that the model:

(I) Is scientifically rigorous, defined as having methodological efficacy for measuring individual student longitudinal growth with high precision as demonstrated in refereed journal articles;

(II) Considers improvement for students whose test scores increase even if they do not increase to a higher state performance level;

(III) Measures the annual growth and rate of growth in test scores of individual students from one year to the next, including the annual growth and rate of growth toward the performance levels for proficiency and above;

(IV) Allows calculation of the percentage of students in a school that are making sufficient longitudinal growth toward the performance levels for proficiency and above;

(V) Is capable of including more than two years of data for each student to improve the precision of growth measures and to accommodate missing student data;

(VI) To the greatest extent possible, uses a methodology that will serve the diagnostic purposes of school districts and schools;
(VII) Provides results that are meaningful, reliable, and valid, given their intended purposes, to enable administrators and teachers to identify individual students and groups of students that are and are not making sufficient longitudinal growth; and

(VIII) Is described in a publicly available document that describes the mathematical equations used in the statistical model and that describes the methods used to complete records for students with incomplete data.

(4) (a) No later than ________, the department shall calculate what constitutes sufficient academic growth for each student for each school year. The department shall formulate the calculation in such a way that sufficient academic growth means:

(I) A student is progressing sufficiently to perform in reading, writing, and mathematics at increasing levels of proficiency, projected at grade levels determined by the department, in consultation with the technical advisory panel, with the goal of performance at least at the proficiency level of "proficient" before completing grade ten; and

(II) For a student who is performing at the proficiency level of "advanced", the student is progressing from year to year in a way that maintains or improves upon the student’s proficiency level performance.

(b) The department shall use data available for longitudinal analysis to review and revise the calculation of academic growth as necessary.

Section 6. {Longitudinal growth information - dissemination - use}

(1) (a) On or before _____, and on or before ____ each year thereafter, the department shall provide to each school district an academic growth information report for each student enrolled in a public school of the school district, based on the statewide assessment results for the preceding school years. The academic growth information report shall include the student’s statewide assessment scores for each statewide assessment taken by the student while enrolled at a public school in this state and the growth amounts that indicate the student's amount and sufficiency of growth in reading, writing, and mathematics over the period between the administration of statewide assessments.

(b) Beginning in the _____ school year, the department shall provide to each charter school in the state an academic growth information report for each student enrolled in the charter school, based on the statewide assessment results for the preceding school years. The department shall ensure that data provided to a charter school pursuant to this paragraph (b) include only the data for students enrolled in the charter school.

(c) The state board shall promulgate rules establishing the procedures by and time frames in which the department shall provide the academic growth information reports to school districts and to charter schools pursuant to this subsection (1). The department may provide the academic growth information reports in an electronic format.

(2) (a) Each school district and each charter school shall establish a policy for using the information provided in the academic growth information reports received pursuant to subsection (1) of this section. At a minimum, the policy shall include creation of an academic growth profile for each student who participates in the statewide assessments for reading, writing, and mathematics. Each student’s academic growth profile shall meet the minimum requirements specified in paragraph (b) of this subsection (2). In addition, the policy shall include procedures by which:
(I) Each student’s academic growth profile is prepared and disseminated to the principal of the public school in which the student is enrolled and provided to the student’s classroom teacher on or before October 1, if possible, but in no event later than December 1;

(II) Each student’s academic growth profile is shared with the student’s parents and with the student in a discussion of the student’s academic strengths and weaknesses and strategies to increase the student’s academic growth;

(III) Each student’s academic growth profile is applied as a tool in increasing the student’s academic achievement.

(b) Each student’s academic growth profile shall be prepared in a format that is beneficial and useful to the student’s parents and teachers in helping the student to grow academically. Each student’s academic growth profile, at a minimum, shall include the following information:

(I) All of the information included in the student’s academic growth information report provided by the department pursuant to subsection (1) of this section;

(II) Analysis of the student’s learning needs and strengths; and

(III) Instructional strategies to assist the student in increasing his or her academic growth.

(3) The department, school districts, and charter schools shall maintain the confidentiality of each student’s statewide assessment scores consistent with the federal “Family Educational Rights and Privacy Act of 1974”, 20 U.S.C. sec. 1232g, and all federal regulations and applicable guidelines adopted in accordance therewith.

(4) The academic growth information reports provided by the department shall be included in each student’s individual student record maintained by the school district or charter school in which the student is enrolled.

Section 7. {State board - rules} The state board is authorized to promulgate any rules necessary to calculate annual academic growth and to otherwise implement the requirements of this act.

Section 8. {Repealer clause.}

Section 9. {Effective date.}

Adopted by the the Education Task Force at the States and Nation Policy Summit, December 2005. Approved by the ALEC Board of Directors January 2006.

Related Files
The Longitudinal Student Growth Act (Microsoft Word Document)