COLORADO DEPARTMENT OF EDUCATION

Colorado State Board of Education

RULES FOR THE LONGITUDINAL ANALYSIS OF STUDENT ASSESSMENTS

1 CCR 301-72

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

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1.00 Statement of Basis and Purpose.

The statutory basis for these rules is found in section 22-2-107(1)(c) and section 22-11-202(1), C.R.S. Section 22-11-202(1), C.R.S., requires the state board of education to adopt by rule a student longitudinal academic growth model.

2.00 Definitions.

2.00 (1) Department.

"Department" means the Colorado Department of Education created and existing pursuant to § 24-1-115, C.R.S.

2.00 (2) State Board.

"State Board" means the State Board of Education created pursuant to Section 1 of Article IX of the State Constitution.

2.00 (3) Statewide Assessments.

 "Statewide Assessments" means the assessments administered pursuant to section 22-7-1006.3, C.R.S.

2.00 (4) Academic Peers.

"Academic Peers" are all students in the same grade being tested in the same subject and having a similar statewide assessment score history in that subject prior to the current year.

2.00 (5) Quantile Regression.

"Quantile Regression" is a statistical regression procedure where various quantiles are predicted from an existing set of data rather than predicting the mean response as in typical regression procedures.

2.00 (6) Student Growth Percentile.

A "Student Growth Percentile" is the position of a student's current statewide assessment scale score relative to academic peers. The student growth percentile provides a measure of academic growth (i.e., relative position change) where students who have similar academic score histories provide a baseline for understanding each student's progress.

3.00 Implementation Procedures.

3.00 (1) Longitudinal Growth Model

3.00 (1) (a) The longitudinal model to be used in the State of Colorado for the analysis of student academic growth will utilize a Quantile Regression technique to estimate Student Growth Percentiles for each student in the state who completes at least two successive Statewide Assessments in at least one academic subject. The individual Student Growth Percentiles estimated through use of a Quantile Regression technique will be used to identify how much growth a student has made in relation to his or her Academic Peers in the state of Colorado and to identify which students are making adequate academic growth. Medians of the individual Student Growth Percentiles will be computed for schools based on all students for whom qualified scale scores are available as defined by the Department. The median Student Growth Percentiles computed for each school will serve as the indicators of student growth associated with specific schools. Median Student Growth Percentiles will also be computed for each school district and will serve as the indicators of student growth associated with specific school districts.

3.00 (1) (b) By August 15th (fifteenth) of each school year, the Department will report to each school district in the state and each charter school in the state a median growth percentile for each school by subject, grade, performance level, and student group. CDE shall also report median growth percentiles in a manner that relates them to school achievement levels.

3.00 (2) Defining Low, Typical and High Student Growth

3.00 (2) (a) The 50th (fiftieth) Student Growth Percentile will be defined as typical student growth in any given year. Due to measurement imprecision inherent in the Statewide Assessments and uncertainty introduced when utilizing statistical models, Student Growth Percentiles will not provide perfect measures of student growth. A margin of error, to be determined by the Department and subject to change over time, will be added and subtracted from the 50th (fiftieth) growth percentile to arrive at a range of Student Growth Percentiles that are statistically indistinguishable from the 50th (fiftieth) Student Growth Percentile. The margin of error is to be initially set at 15 (fifteen) percentile points such that students for whom Student Growth Percentiles are at or between the 35th (thirty-fifth) and 65th (sixty-fifth) percentile will be considered to have made typical growth

3.00 (2) (b) Growth below the margin of error below the 50th Percentile shall be considered Low growth and growth above the margin of error above the 50th Percentile shall be considered High growth.

3.00 (2) (c) By August 15th (fifteenth), or as soon as practicable, of each school year, the Department will report to each school district in the state and the Charter School Institute (Institute) the individual student growth percentiles for each student and which students enrolled in schools authorized by the school district or Institute made low growth, typical growth, and high growth.

3.00 (3) Identification of Students Making Adequate Academic Growth

3.00 (3) (a) The definition of adequate academic growth is dependent upon the current scale score of individual students. Adequate academic growth is defined as a growth rate within a subject area sufficient for a student to reach the next incremental target toward proficiency within or maintain grade level proficiency throughout a timeframe designated by the Department.

3.00 (3) (b) By November 1st, or as soon as practicable, of each school year, the Department will report to each school district and the Institute the individual Student Growth Percentiles for each student enrolled in a school authorized by the school district or Institute, which of those students did make adequate academic growth and which of

those students did not, and the amount of growth needed for each student to attain his or her designated incremental target or maintain grade level proficiency within the timeframe designated by the Department. Descriptors of the amount of growth needed shall include the categories of Low, Typical, High, and the actual growth percentile needed.

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Editor's Notes

History

Entire rule emer. rule eff. 03/06/2008.

Entire rule eff. 04/30/2008.