

## State Council for Educator Effectiveness – Draft Recommendations

### Measuring Student Growth for Use in Teacher Evaluations

**Draft February 10, 2011**

Colorado’s definition of teacher “effectiveness” is premised upon the demonstrated ability to improve student academic growth. In developing its recommendations for how to measure student growth for use in individual teacher evaluations, the Council closely examined the limitations of currently available assessments to provide fair, valid, and reliable measures of student academic growth for use in the evaluations of all teachers. Members also paid close attention to the risk of unintended negative incentives that could result from not being thoughtful in developing an approach to using student growth measures (discouraging collaborative work among teachers, for example). The following recommendations reflect the Council’s effort to balance the current technical limitations and concern with unintended consequences against the value that effective teachers have demonstrated positive impact upon student academic growth. Finally, the Council strongly agreed that these recommendations reflect the best response to current conditions and that they should be periodically revised in response to developments in available assessments and experience with how best to incentivize positive teacher performance. Specifically, the Council has agreed on the following broad principles which are reflected in their recommendations:

- An individual teacher’s performance on Quality Standard VI, Responsibility for Student Growth, shall be evaluated based upon two primary sets of measures:
  - The academic growth of students towards mastery of the content area that a teacher delivers to the students whose growth is being measured;
  - The academic growth of students should be attributed to all educators who are responsible, directly or indirectly, for ensuring that such students attain mastery of the Colorado Academic standards. Attribution of student growth may be shared across all educators in a district, school, grade level, content area or other professional learning community. Every teacher’s overall student growth measure shall include a student growth element which is based on some type of shared attribution of student growth outcomes.
- Two main issues are involved in gauging the technical merits of a student growth measure:
  - Validity – the extent to which an assessment/measure closely reflects the academic content and skills included in a teacher’s instruction; [*you wrote “processes”???*]
  - Reliability – the extent to which an assessment/measure consistently measures student performance across a wide variety of occurrences and students.
- Measures of student growth should strive to provide both valid and reliable assessments of student growth for use in educator performance evaluations. The assessments that are currently available at the national, state, district and school level, each have varying degrees and combinations of validity and reliability which need to be considered carefully with respect

to different categories of personnel, particularly when choosing student growth element measures for individual teachers.

- As states, districts and schools continue to refine current assessments and develop new ones, CDE guidelines developed as a result of these recommendations will need to be revised.

## Quality Standard VI/Student Growth measures recommendation language

NB: Current law requires that the SAC provides guidance/advice to inform decisions that a school principal is making about student growth tools. SCEE should propose a policy change so that this is a DAC function instead of a SAC function.

1. All districts shall develop evaluation systems which measure teacher performance against Standards VI using multiple measures.

The following recommendations relate to the process of choosing and applying assessments for the purpose of calculating a teacher's individual student growth [score].

2. For the purpose of calculating a teacher's individual student growth score, districts in collaboration with teachers including representatives of the local teachers association or federation, if one exists, shall categorize personnel into appropriate categories based on the availability of state summative assessment data [Personnel Categories Matrix].
3. Districts, in collaboration with teachers including representatives of the local teachers association or federation, if one exists, shall choose or develop appropriate measures of student growth (as defined in Section 8 below) to be used in the evaluation of each personnel category. Districts shall consider the following issues in selecting assessment measures:
  - a. Involving teachers in the district in discussions about which of the available measures will best match their instructional responsibilities;
  - b. The technical quality of the analytic methods available.
4. Districts shall develop a process for identifying and handling the calculation of individual student growth scores for educators teaching two or more subjects, where there are multiple sources of student growth information.
5. Districts shall develop a process for assigning teachers to the role of "teacher of record" versus "contributing professional" for the purpose of state data collection. A teacher need not be required to be identified as a "teacher of record" for a particular student in order for that student's academic growth data to be used in a teacher's performance evaluation.
6. Districts shall clearly articulate to each educator the category or categories of personnel into which they fall, and how the growth of the students they teach will be measured for the purpose of informing their performance evaluation.
7. For the purposes of evaluating the technical validity and reliability of measures of student growth or learning [NB: using only "growth" means that this statement should technically not allow districts to use things like SGOs since SGOs will not allow for a calculation of "student growth" in the way that state assessments or other level 1 or 2 measures would allow. For some categories of personnel, calculations of student learning against standards are feasible while calculations of "growth" in a technical sense are currently not feasible. Having said this, growth may be calculable within an SGO framework if the measures can support it.], the following three categories shall apply.

- CDE shall develop formal definitions of these data levels and use them to classify popular assessments or assessment approaches, indicating the strengths and potential issues involved with using them to measure student-level outcomes and calculate growth:
- a. Level 1 data: CDE-certified student-level assessment data that is of a technical quality (standardized, external and objective) that allows student growth to be calculated for personnel in specific grades and subjects using the CGM, and justifies its use as a major portion of the educator’s student growth score effectiveness evaluation;
  - b. Level 2 data: student level assessment data collected from assessment tools that are comparable across classrooms with demonstrated rigor which meet CDE guidelines for technical quality. (e.g. NAEP, NRT, SAT/ACT). These measures may or may not allow for the calculation of student “growth”;
  - c. Level 3 data: student level assessment data that are collected at the district, school or individual teacher level, and do not meet the higher technical requirements of Level 1 and Level 2 data but which do comply with minimal technical guidelines developed by CDE. These measures may be highly valid as measures of student progress/learning against standards, but will not technically allow for the calculation of student “growth.”
8. For the purposes of calculating an individual teacher’s student growth performance, districts shall use at least one of the measures outlined in section [8] below, applied in a manner that is consistent with CDE guidance on evaluating the technical rigor of particular approaches as outlined in Section 7.
- a. Districts shall consider both the validity and reliability of data when determining the proper student growth measures and their weight. Districts are strongly encouraged to emphasize the validity of the measures they use while maximizing reliability to the extent possible. Districts shall be transparent about what measures of student growth will be included within a teacher’s evaluation.
  - b. For the purposes of measuring the academic growth of students for use in determining an individual teacher’s performance, districts are strongly encouraged to emphasize the validity of a given measure.
  - c. Measures of academic growth of students designed to improve educators’ knowledge and skills (and ultimately, effectiveness), should be validated for the intended purposes.
  - d. Districts are strongly encouraged to use the data identified in 8(a)-(c) as the predominant measure of a teacher’s individual performance against Quality Standard VI.
9. Districts shall measure teacher performance of Quality Standard VI using guidance developed by CDE that informs the selection of reliable and valid available measurement methods. Currently, the most reliable available measurement methods are as follows:
- a. For a given category of personnel if there is a state summative assessment available and:

- i. there is a state summative assessment available in the same subject for the prior grade then districts shall use the median student growth percentiles calculated by CDE as part of the Colorado Growth Model; these shall comprise a portion of a teacher's individual student growth score;
    - ii. there is a state summative assessment available in a related subject for the prior grade then districts may calculate conditional status;
    - iii. there is another valid covariate, as defined in CDE technical guidelines, then districts may calculate conditional status;
    - iv. there is no other assessment data or covariate available then districts should consider using student growth objectives or other goal setting approach.
      - 1. CDE shall develop guidance on the use of student growth objectives, and shall develop high-quality exemplars.
  - b. For a given category of personnel if there is no state summative assessment available but there is a high-quality [end of course], norm-referenced, or interim assessment and:
    - i. there is a high-quality pre-test then districts should calculate growth or value-added results in the most technically defensible manner possible;
      - 1. CDE shall develop guidance on the technical requirements for appropriate use of pre-tests for calculating student growth and shall develop high-quality exemplars.
    - ii. there is no high-quality pre-test then districts should consider using student growth objectives or other goal setting approach consistent with CDE guidelines.
  - c. For a given category of personnel if there is no state summative assessment available, and no high-quality [end of course] assessment, norm-referenced, or interim assessment available then:
    - i. Districts should consider using student growth objectives or another goal setting approach, which is consistent with CDE-developed technical guidelines for the development of SGOs or other goal setting approaches referenced in 9(b)(i)(1).
    - ii. Districts may use shared attribution of available and appropriate assessments as a greater proportion of such educators' overall student growth score than outlined in Section 11(a) below.
10. Regarding the choice of assessments for all categories of educators, districts shall meet the technical requirements and considerations laid out in CDE guidelines for measuring student growth for teacher evaluations. **[Elena's documents in modified form].**

The following recommendations relate to the process of choosing and applying assessments for the purpose of determining the appropriate manner of attributing student growth among teachers.

11. Every district shall determine the method to be used for attributing student growth for students to multiple educators that best supports district and school improvement priorities, school design and mission, collaboration among educators, and available sources of student growth data.
  - a. Student growth that is jointly attributed among educators shall not comprise more than 50% of the total values used to determine a teacher's performance of Quality Standard VI.
12. For the purpose of including student growth that is attributable to multiple teachers into an individual teacher's performance evaluation, districts in collaboration with teachers including representatives of the local teachers association or federation, if one exists, shall categorize personnel into appropriate categories based on the grade level of the students with whom they work and the availability of Level 1 assessment data. At a minimum, these categories shall include the following though districts may add more as they deem fit:
  - a. teachers responsible for students in ECE-grade 3;
  - b. teachers responsible for students in grades 4-8;
  - c. high school teachers.
13. Districts, in collaboration with teachers including representatives of the local teachers association or federation, if one exists, shall choose appropriate Level 1 or Level 2 measures of student growth to be used for purposes of shared attribution for each personnel category, or groups of teachers within each personnel category.
  - a. Districts shall consider both the validity and reliability of data when determining the proper student growth measures and their weight. Districts are strongly encouraged to emphasize the validity of the measures they use while maximizing reliability.
  - b. For the purposes of determining student growth measures that will be jointly attributed across teams of teachers or school-wide, districts are strongly encouraged to evaluate the validity of such attributions for each of the teachers held accountable for these results.
14. Districts shall develop processes for identifying and handling shared attribution of individual student growth scores for educators falling into more than one personnel category of personnel, where there are multiple appropriate sources of student growth information.
15. Districts shall clearly articulate to each educator the category or categories of personnel into which they fall and how the growth of the students they teach will be measured for the purpose of informing their performance evaluation.

The following recommendations charge CDE with developing guidelines related to the above recommendations.

16. The SCEE recommends that CDE develop guidelines that at a minimum address and require that:
  - a. districts consider the match of available assessments to the instructional responsibilities of personnel categories, both in terms of content and attribution of student learning;
  - b. districts involve teachers in the district, including representatives of the local teachers association or federation, if one exists, in choosing or developing appropriate measures of student growth that match teachers' instructional responsibilities;
  - c. state-wide assessments, where available and aligned to instructional responsibilities, be used in the evaluation of student growth;
  - d. for subjects with annual state assessments available in two consecutive grades, districts shall use results from the Colorado Growth Model for evaluating student growth;
  - e. if available and feasible, districts include at least one additional measure of student growth common to personnel teaching in the same or similar content area (even when state tests are available) in order to create more valid and reliable measure of a teachers' performance of Quality Standard VI;
  - f. the content tested shall align to the Colorado Academic Standards;
  - g. districts shall incorporate some shared attribution of student growth as part of each individual teacher's student growth calculation.
17. CDE shall also develop technical guidelines regarding the development and use of various measurement instruments for evaluating student growth, which shall be updated as research and best practices evolve. Tools to be addressed within these guidelines include but are not limited to:
  - a. The development and use of teacher-, school- or district-developed assessments;
  - b. The use of commercially available interim and summative assessments;
  - c. The development and use of student growth objectives;
  - d. The development and use of other goal-setting approaches; and
  - e. Piloting of new and innovative practices. *[you wrote something like lots? Help? And then need analytics]*
18. CDE shall develop and/or provide examples of the following:
  - a. Approaches to categorizing personnel for the purposes of measuring individual student growth;
  - b. Approaches to categorizing personnel for the purposes of joint attribution of student growth;
  - c. Exemplars of student growth approaches for all categories of personnel and for the major categories of assessment data available.