

MEMORANDUM

To: Select Committee on School Finance Recalibration

From: Allan Odden and Larry Picus

Re: Model Element 18: Short Cycle Assessments

Date: July 27, 2015

Funding for Short Cycle Assessments is provided to enable teachers and school systems to purchase a variety of assessments, exclusive of the current statewide student assessment PAWS results or the results of future statewide assessments, to track student progress during the school year, identify students who need interventions and engage in data-based decision making around student data. In addition to the information provided below, pages 67-70 of the January 2015 Desk Audit address short cycle/formative assessments.

The Legislative Funding Model includes \$37.70 per student for short cycle interim assessments. Our 2010 recommendation advised this amount was not been subject to the ECA and has not been increased since then. Based upon our review of current costs for short cycle assessments, we recommend lowering the amount to \$35 per student for school year 2016-17, which equates to a reduction of \$2.70 or 7.15%. We once again recommend the ECA not be applied to this figure in the future. This amount is adequate for districts to purchase sufficient interim assessment systems. If this recommended amount is implemented across the estimated 93,089 Model ADM for school year 2015-16, it would decrease funding by an estimated \$250,940 and provide an estimated \$3.3 million for short cycle assessment resources.

At the July 1-2 Stakeholder meetings, we were told schools and districts use a wide variety of student performance data beyond the statewide PAWS assessment. Participants further indicated their professional learning communities (PLCs) discuss the instructional implications of the assessment data on a regular basis.

Below we discuss the variety of assessment instruments that are available commercially to school districts and are currently in use in Wyoming. They include the NWEA MAP test, DIBELS, AIMSWEB, FAST and Renaissance Learning STAR Enterprise.

Picus Odden & Associates

NWEA MAP

According to the Measures of Academic Progress (MAP) website, the assessments are electronically administered and scored achievement tests designed to measure growth in student learning for individual students, classrooms, schools, and districts. The tests provide accurate and immediate scores to help teachers plan instructional programs, place new students in the appropriate courses, and screen students for special programs. MAP is a computerized adaptive testing system that tailors tests to a student's achievement level. Each student takes a test that is dynamically developed for him or her as the test is being administered. The program instantly analyzes the student's response to each test question and, based on how well the student has answered all previous questions, selects a question of appropriate difficulty to display next. The standard package includes tests for reading, language usage, mathematics, and the upper math series (Algebra I, Geometry, Algebra II, Integrated Math I, and Integrated Math II). A science assessment has recently been added to the MAP package. Further, NWEA has created a Skills Navigator for math and reading that can be used to progress monitor students receiving interventions. The Navigator is also an on-line assessment.

Nearly all Wyoming districts use the Northwest Evaluation Association (NWEA) MAP assessments, which usually are administered in September, January and May and reflect "benchmark" assessments, i.e., assessments that show how students are progressing over the course of the year to Wyoming proficiency. In the fall, the results from the screener portion of the MAP can be used to place students into small reading or math groups, and to identify appropriate interventions. All districts need to use MAP if they access summer school (Bridges Program) funding, as the spring to fall scores show progress made over the summer.

The core MAP assessments can be administered three to four times a year. The cost for the reading, language usage and math assessments is \$13.50 per student per year. The new science test costs an additional \$2.50 per pupil. The Skills Navigator used for monitoring the progress of students with interventions can be administered as often as needed and costs \$7 per student and covers both reading and math. All together these assessments would cost \$23 per pupil. NWEA would negotiate a lower cost if the State negotiated a deal and paid for all students. ¹

DIBELS

One assessment mentioned by several schools was the Dynamic Indicators of Basic Early Literacy Skills (DIBELS). DIBELS includes a set of procedures and measures for assessing the acquisition of early literacy skills from kindergarten through sixth grade. They are *administered by teachers* and designed to be short (one to six minute) fluency measures used to regularly monitor the development of early literacy and early reading skills. DIBELS is comprised of seven measures to function as indicators of phonemic awareness, alphabetic principle, accuracy and fluency with connected text, reading comprehension, and vocabulary. DIBELS were designed for use in identifying children experiencing difficulty in acquisition of basic early literacy skills in order to provide support early and prevent the occurrence of later reading difficulties. The cost is a nominal \$1 per student.

 $^{^{1}}$ These cost figures were obtained from the NWEA Wyoming liaison for the MAP assessments, Carolyn Mock.

Representatives of most schools at the at the July 1-2 Stakeholder meetings stated DIBELS was most often administered by an Instructional Facilitator, guidance counselor or Title I teacher, or a trained paraprofessional, but not by the student's classroom teacher. Under these circumstances, the assessment data must then be provided to teachers if they are to use the results in classroom activities.

AIMSWEB

Another assessment that is frequently used in Wyoming is AIMSWEB. AIMSWEB, now owned by Pearson, is an assessment system that provides up to 33 alternate forms per skill, per grade. AIMSWEB covers more skill areas and grade levels than any other assessment system. Although browser-based scoring allows teachers to automatically upload scores to the AIMSWEB database system, the assessment itself is administered to each individual student by the teacher. AIMSWEB assessments include:

- Reading: early literacy, Spanish early literacy, reading (English and Spanish) and reading maze.
- Language arts: spelling and written expression.
- Mathematics: early numeracy, math concepts and applications, and math computations.
- Behavior: Exclusive screening, monitoring, and intervention tools for behavior and social skills.

The complete AIMSWEB package costs \$6 per student.

FAST, Renaissance Learning, and STAR Enterprise

A few Wyoming school districts are using online, computer adaptive assessment systems linked to a learning progression. One such system is FAST, a system covering both reading and mathematics available for low cost from the University of Minnesota. Another system is Renaissance Learning STAR Enterprise, which includes Early Literacy, Math and Reading. These systems require much less staff time than the aforementioned teacher administered assessments as students can take these assessments virtually on their own. Since they are online, computer adaptive systems, they provide immediate feedback to teachers and include many instructional strategies to address any learning needs identified by the results. Both of these assessments can be administered as often as needed, at no extra cost, so they work well for progress monitoring.

The STAR Assessment programs support "instructional decisions, RTI, and instructional improvement" by measuring student progress in early literacy, reading, and math. The early literacy program measures student proficiency from the pre-kindergarten to grade 3. The reading and math programs assess student skills for grades 1 to 12. STAR tests are administered in an on-line, computer adaptive format. A science program is being developed. The math and language arts assessments have been modified to align with the expectations of Common Core standards. The new STAR 360 is a comprehensive K-12 assessment package, allowing educators to screen and group students for targeted instruction, measure student growth, predict performance on PARCC exams, and monitor achievement on Common Core State

Standards. STAR 360 includes all the features of STAR Reading, STAR Math, and STAR Early Literacy, giving educators valid, reliable, actionable data in the least amount of testing time. It can be used for screening, benchmarking, student growth measurement, progress monitoring, and instructional planning. Educators have immediate access to the data and insights they need to improve student outcomes on PARCC exams.

Subscriptions to STAR products cost \$3.80 per student for each of math, reading and early literacy, and the smallest subscription size available is 100 students. The more comprehensive subscription, STAR 360, costs \$11.45 per student. In addition to the per student subscription fee, subscribers must pay a small annual fee (\$500 in 2013) for online product hosting services. New subscribers to STAR pay a one-time licensing fee of \$1,600.

Addressing the Costs of Assessment

Though districts need interim assessments to provide teachers with interim data for instructional decision making, grouping students, identifying appropriate interventions for struggling students, and monitoring the progress of all students, many districts have adopted too many and often overlapping assessments. DIBELS is largely a screener assessment. AIMSWEB, FAST, MAP and STAR also can function as screeners. Districts do not need both DIBELS and one of FAST, MAP or STAR. Further, DIBELS and AIMSWEB, while popular, also require *teachers* to administer the assessments so consume teacher time. For these reasons, the computer adaptive assessments – STAR, MAP and FAST – have become more popular in many places, often replacing both DIBELS and AIMSWEB.

For more information about benchmark assessments, Hanover Research² recently completed an extensive review of the above and other interim assessment systems, including costs and ratings of them from the National Center for Response to Intervention.

Decision Item

- 1. **Adopt the Evidence-Based recommendation:** Decrease and precise the amount for short cycle/formative assessments to \$35 a student for school year 2016-17. This figure does not need an ECA in the future.
- 2. **Continue with the current legislative policy:** Continue to provide \$37.70 per student for short cycle/formative assessments and do not adjust amount by the ECA in the future.

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² Hanover Research. (2013). Review of K12 Literacy and Math Progress Monitoring Tools. Washington, D.C.