Standards and Assessment Bulletin

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Field Notes

In-depth explorations of innovation in schools

Student Support Programs Flourish at Colchester Middle School

"It's really all about what's best for kids." This is a phrase you'll hear often expressed at Colchester Middle School. Principal John Barone and district leadership have helped the school transform its view and use of assessment data to provide students the support they need to succeed. Colchester, the second largest middle school in the state, offers eight different support programs to its 6th, 7th, and 8th graders and relies on a comprehensive assessment system to match students to available supports. Assessment data are also used to evaluate the effectiveness of those programs and whether or when students are ready to exit them. Programs range in intensity from year-long additional mathematics and reading classes to a voluntary after-school home work club.

Colchester Middle School has a long history of creating innovative student support programs. Its after-school homework club began over six years ago. However, the school's view of student support has changed dramatically in that time. Specifically, programs have become more purposeful, more intense, more targeted to the students who need them and, perhaps most importantly, more data-driven. When asked about the catalyst for this shift, the principal and staff cite their status as an identified school. Colchester is currently identified in mathematics for its free/reduced price lunch population based on its past performance on the annual New England Common Assessment Program (NECAP). While obviously not pleased with their status, the principal reports that it has forced the entire school community to focus on the needs of students and has defined priorities for the school. He explains, "You have to be willing to put out the good and the bad. We tell the students, the parents and the community, 'This is what the data are telling us. This is where we need to be working harder.'"

A subtle but key point that emerges from this sentiment is that it is not solely the principal communicating assessment results and deciding next steps—it is the entire staff. All staff members at Colchester Middle School have been trained in a team approach to data-based decision making through professional development provided by the Champlain Valley Educator Development Center and the Center for Performance Assessment. The staff at Colchester Middle works together to analyze state assessment returns and draw accurate and actionable conclusions from the data. For example, when the outcomes of the NECAP become available to the school, the staff first sifts through a section of the results in pairs. These pairs then interpret the data and create visual representations of their interpretations. These visuals are posted for everyone to see. As a group, the staff reviews all of the charts and graphs and together, generates overall conclusions. Barone calls this "an honest approach to sharing and using data" and adds: "This is the same inquiry-based approach we take with our kids. Why should it be any different for us as staff?"

School-wide analyses of state assessment results have actually pointed to the need for something unexpected—more data. State results have identified areas of weakness at the school level but also highlighted the need for more nuanced, classroom-level data to track students' progress. "Checking in" with students once a year does not provide enough information about what supports and interventions they may need. As a result, the school has worked collaboratively, along with the district, to develop common classroom assessments in reading and math. These classroom data, along with state level data, are used to help match students to programs and determine if and where new programs are needed. As mentioned earlier, the school currently offers eight *(continued on page 4)*

Building Assessment Literacy

A focus on assessment design and interpretation of results

Unraveling the Mystery of the Scaled Score

With the most recent release of the 2007 New England Comprehensive Assessment Program (NECAP) results, many educators, administrators and parents across the state might be asking themselves, "What exactly *is* a scaled score?" Scaled scores are the most common way of reporting standardized assessment results, yet the concept underlying their meaning is often not clearly explained or understood. According to Pearson Educational Measurement, the textbook definition of a scaled score is, "a conversion of a student's raw score on a test or a version of the test to a common scale that allows for a numerical comparison between students." In plain English, a scaled score enables accurate comparisons to be made across students, across tests and across grades.

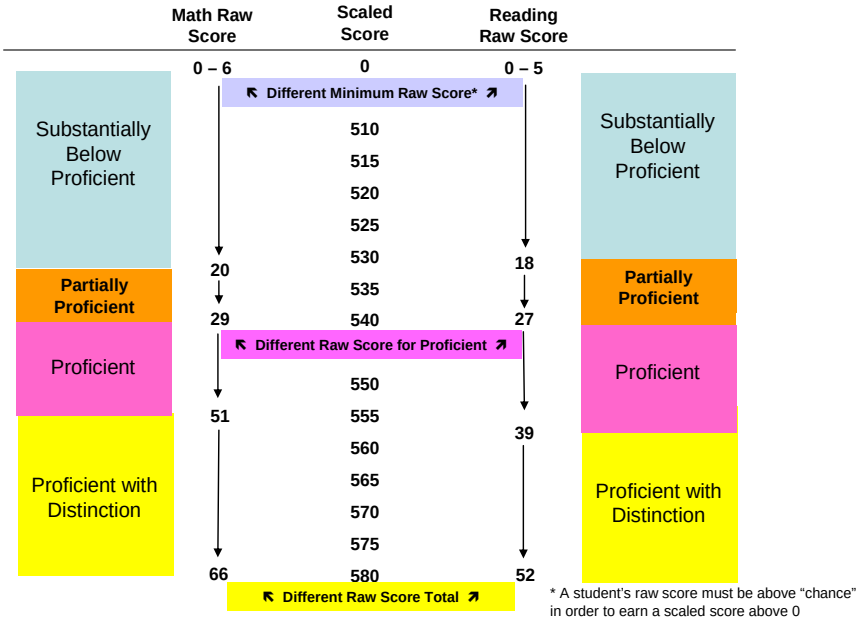
Scaled scores represent approximately equal units on a continuous scale and each raw score point corresponds to a specific scale score. Raw scores are converted to scaled scores so that one common metric can be used to compare student and school results across grade levels and content areas. This conversion is a very important part of the NECAP process and is crucial to interpreting a student's test results. This is how the conversion works. When students in Vermont take the NECAP, they receive a certain number of raw score points. Because the various NECAP tests have different numbers of test items or questions, and because each grade level has its own unique set of grade level expectations and achievement standards, the total number of raw score points a student earns may be different for each grade level and content area. Each raw score has a corresponding scaled score (see graphic below).

Scaled scores provide a common scale to:

- *Compare groups*
- *Compare content areas*
- *Measure progress across years*

Why is this important? Couldn't teachers and parents do basic arithmetic to determine the percent of total raw score points a student received on a given test? Sure. But imagine the alternative—if NECAP scores were NOT scaled. There are 17 different NECAP tests (Reading and Math at seven grade levels plus Writing at three grade levels), all with their own specific raw scores and achievement level "cut scores." Without scaled scores, we would have 17 different numbers to describe whether students are or are not meeting the standards. With scaled scores, the magic number for proficiency is always 40...which should hopefully remove at least some of the mystery of the scaled score.

2006 Grade 5 Scaled Scores



* A student's raw score must be above "chance" in order to earn a scaled score above 0

If you have any additional questions about NECAP scaled scores, please contact Michael Hock at 802-828-3115 or michael.hock@state.vt.us

Additional Readings:

Educator Guide to Using the 2006 NECAP Reports
http://education.vermont.gov/new/pdfdoc/pgm_assessment/necap/interpretive_guide_06.pdf

Companion Presentation
http://education.vermont.gov/new/pdfdoc/pgm_assessment/necap/interpretive_guide_06_supplement.pdf

Pearson Educational Measurement (scaled score explanation)
http://www.pearsonedmeasurement.com/research/faq_2e.htm

From the Mailbag: Question of the Day

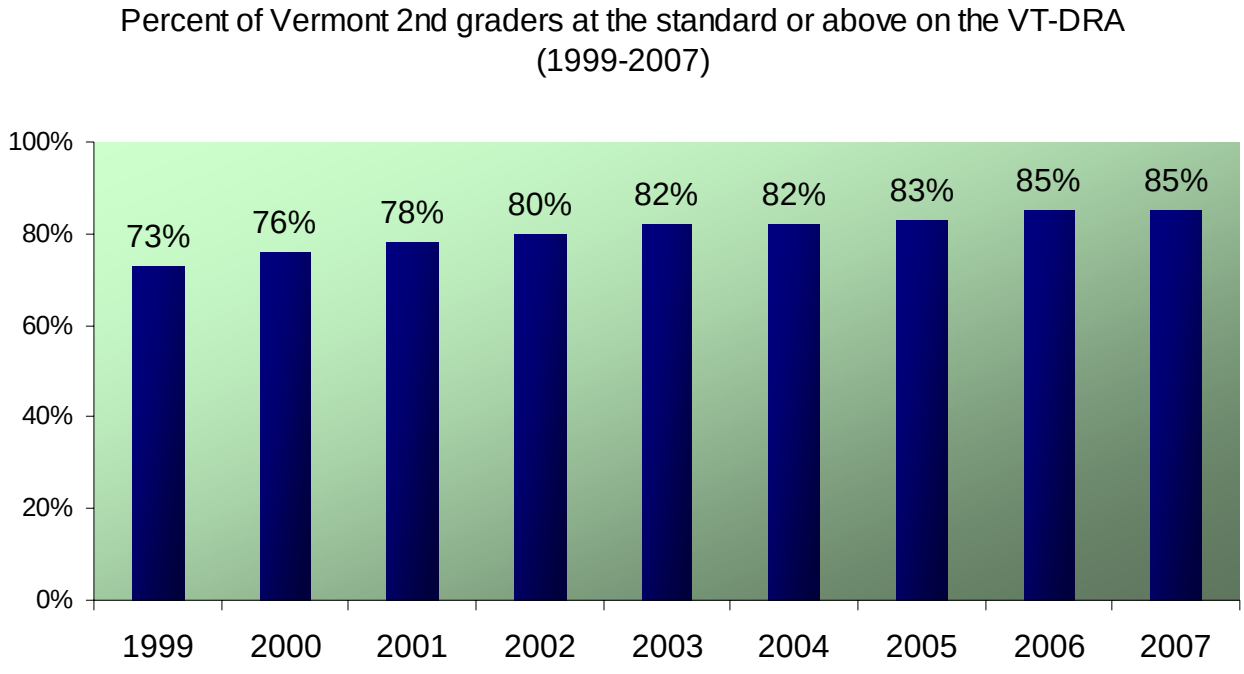
"What is the difference between Vermont's Framework of Standards and Learning Opportunities and Grade Expectations (GEs)?"

Vermont's **Framework of Standards and Learning Opportunities** identifies the essential knowledge and skills to be taught and learned in schools and provides the foundation for a standards-based curriculum and local comprehensive assessment system. The Framework also encompasses what is tested on state assessments. Vermont's Framework includes both **Vital Results,** which cut across all fields of knowledge and are the responsibility of all educators, as well as **Fields of Knowledge,** which are specific to each field of knowledge and must be applied to attain the Vital Results. The **Grade Expectations** (or GEs) are more specific and detailed benchmarks for Vermont's Framework and clearly describe what students should understand and be able to do *at a certain grade level or grade cluster*. GEs are specified by grade level in literacy and math and by grade span in arts, health, history and social studies, information technology, non-native languages, physical education and science. It is hoped that Vermont's Framework, Vital Results, Fields of Knowledge and GEs are useful classroom tools that provide practical, useful reference points for the development of local curriculum and assessment. The complete Framework (including the Vital Results and Fields of Knowledge) and the GEs can be downloaded from the Vermont Department of Education website at:
http://education.vermont.gov/new/html/pubs/framework.html#grade_expectations

Have a question for the S&A team that you would like to see answered in this section?
Please contact Susan Hayes at 802-828-5892 or susan.hayes@state.vt.us

Data Grab: Statistic of the Day

How do 2nd graders perform on the Vermont Developmental Reading Assessment?



Vermont 2nd graders have consistently performed well on the Vermont Developmental Reading Assessment or VT-DRA and achievement has trended upwards from 1999 to 2007. A majority of students perform at or above the standard, averaging 80% across the nine years. The VT-DRA measures both reading accuracy and reading comprehension through the reading and re-telling of narrative stories. The VT-DRA can serve two additional purposes: informing instruction and providing information to parents.

(continued from page 1) distinct support programs to students. These range from supports offered to the whole student body on a voluntary basis to structured programs for specific students.

Strategic Math and Strategic Reading are supplemental courses designed for students who struggle on the NECAP. Students who score "partially proficient" (2) or "substantially below proficient" (1) on the mathematics portion are automatically enrolled in a year-long supplemental mathematics course referred to as Strategic Math. Students who have received Title I services through 5th grade and those who score below "proficient" on the reading portion are automatically enrolled in a similar course entitled Strategic Reading. These classes meet for 40 minutes every other day in addition to students' regularly scheduled reading and mathematics courses. Classes are small (the largest numbers 13 students) and are unique in that they are designed to cover concepts and content as well as more general study skills including behavior, effort and participation. Toni Zimmerman, a Strategic Math teacher, explains that she focuses on increasing students' confidence and excitement about math in addition to bolstering their content knowledge. "The class acts as a motivator," she says, by giving students a "positive experience" in a content area they have demonstrated difficulty mastering. The strategic classes also benefit from having certified content-area teachers at the helm. This ensures that students who need additional help are paired with educators well equipped to support them.

The school has a detailed data system in place to track the progress of students in Strategic Math. Their marks in Strategic Math are compared to those from their regular math class. Teachers meet in teams to discuss these data and determine if and when students are ready to move out of Strategic Math. It is hoped that this data system can be replicated for the Strategic Reading class soon, as well. While student movement out of these strategic courses is somewhat fluid, students are initially placed in the course for the entire school year as part of their full-time schedule. Barone admits that this means some students are unable to take multiple electives but emphasizes to both children and parents that this additional support in mathematics or reading is necessary. He says it is his and the school's responsibility to ensure that they are "doing everything they can to help the kids who are not meeting the standards."

Colchester Middle School Local Assessments

STAR Reader: A computerized reading comprehension assessment that all students take three times per school year.

Connected Math: All math teachers have agreed on common grading expectations and use the unit assessments at the end of each chapter.

Strategic Reading: Teacher assesses students' progress in reading fluency on a weekly basis.

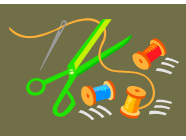
While this support is targeted to students who struggle to meet academic content standards, more general supports are offered to all students. Several years ago, the school determined that an overwhelming majority, 98 percent, of student referrals to the school's educational support team (EST) were the result of failed homework completion. Thus, a homework club was born. The after-school homework club meets Monday-Thursday every week from 2:10 to 3:45 in the school library and is open to anyone who wants a jumpstart or additional assistance on their homework. One member of the school support team and an adult math tutor staff the club. The school's computer lab is also open during homework club hours and is staffed by a lab monitor. Information is collected daily on the students who take advantage of this program and has revealed two important things. One, the homework club is heavily used, averaging between 30-40 students on any given day. Accordingly, the number of referrals to EST because of failed homework completion has dropped. And two, there is apparently little stigma associated with participation; students who attend range from those who struggle academically to the "high-flyers" who are enrolled in advanced courses. For example, some 8th graders choose to take high school level math classes and benefit from the fact that the homework club is staffed by a math tutor who can assist them with advanced skills. Student athletes seem drawn to the club, as well, because it gives them an opportunity to complete their homework before team practices or games. The school operates two after-school activity buses to provide transportation for students who participate in the homework club or any other after-school program.

In addition to these two programs, Colchester has also initiated other types of student supports. The school employs an in-house math tutor 30 hours a week and runs an after-school teen center to provide a "safe, supervised place to hang out after school." Furthermore, the school has scheduled "student support time" for every single student. This block of time, 30 minutes a day, is designed to "provide students with academic support during school hours" according to Barone. Students can choose to work with their teachers on homework or staff can provide individual or groups of students with supplemental instruction. Alternately, special educators can use this block to provide direct instruction to students with disabilities. The school has also decided to increase home room time to 15 minutes so that teachers have an opportunity to advise students and check in with them regarding homework completion, progress in class or upcoming school events.

The principal and staff at Colchester Middle School stress that their system for supporting students is an evolving one as they learn from the data what works and what does not. One constant, however, is their commitment to team-based, data-driven decision making. As Maureen Grassley, a Strategic Reading teacher, explained, analyzing student work and assessment data "is the only way to know what kids need—you don't have to guess." The culture of the school is now one that supports and relies on data, at all levels, to inform instructional and programmatic decisions. Principal John Barone echoes a familiar theme when he says, "We know this is best practice and we know it is best for kids."

Odds and Ends...

A few things we thought you would appreciate knowing



Network Meetings

Did you know that the Vermont Department of Education has professional development networks in various content areas including literacy, mathematics, science and social studies? The Vermont Professional Development Network (VPDN) holds regional meetings in the fall and spring for educators of all grade levels from across the state. Department staff have partnered with content-based educators to develop plans for the various professional development experiences offered each season. Topics are wide ranging and are designed to reflect the needs and interests of Vermont teachers, as well as provide instructional support for the Grade Expectations. This spring, **Mathematics** and **Science** network leaders will offer joint meetings focused on local comprehensive assessment. Some workshops will be content specific whereas others address both mathematics and science classroom assessment techniques. Spring **Literacy** network meetings will focus on responding to informational text. Participants will explore what this looks like at various grade levels as well as instructional models for this genre. Literacy network leaders will also discuss their use of a "wiki" to collaborate in planning the meetings.

To learn more about VPDN opportunities in your area, contact the appropriate assessment coordinator (contact information below) or check the curriculum and assessment portion of the Department's website for announcements of upcoming events: http://education.vermont.gov/new/html/pgm_curriculum.html

Quote of the Day:

The mind is not a vessel to be filled but a fire to be kindled.

— Plutarch

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