THE COUNCIL OF CHIEF STATE SCHOOL OFFICERS

INNOVATION QUARTERLY (IQ)

HIGHLIGHTING CUTTING–EDGE RESEARCH AND INNOVATIONS OF CCSSO PARTNERS

In This Issue...

CCSSO thrives on partnerships. The work that state education agencies (SEAs) must do to improve student achievement cannot be accomplished in a vacuum. CCSSO values the knowledge, expertise, and resources that partners can offer state chiefs and the Council. Our goal with *Innovation Quarterly* is to share new and innovative ideas from CCSSO partners.

The articles in this edition of *IQ* delve into a variety of issues concerning teaching and learning, with several pieces focusing on innovative assessment practices to improve student achievement. The articles in this publication include:

For questions or comments about Innovation Quarterly, *please contact Carrie Heath at carrieh@ccsso.org or 202.312.6433.*

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NORTH CAROLINA COMMUNITY COLLABORATES TO STOP SUMMER READING LOSS

by Malbert Smith III, Ph.D.

No matter what type of academic calendar a state or school district adopts, U.S. students attend school every year for an average of 180 days. During that time, talented teachers, dedicated administrators, and involved parents work hard to ensure that students build the skills and abilities necessary for success in school and in life. Then summer break comes, the formal learning process ends, and, instead of progressing, many students start to slip in their abilities. Research shows that all students experience some level of learning loss when they do not engage in educational activities during the summer. Students also score lower on standardized tests at the end of summer vacation than they do on the same tests at the beginning of summer vacation.[1]

Summer learning loss is particularly evident in students' reading abilities—simply due to a lack of practice. Low-income students, who often do not have access to books in the home, experience an average summer loss in reading achievement of more than two months.[2] As the 2007–2008 school year comes to a close,

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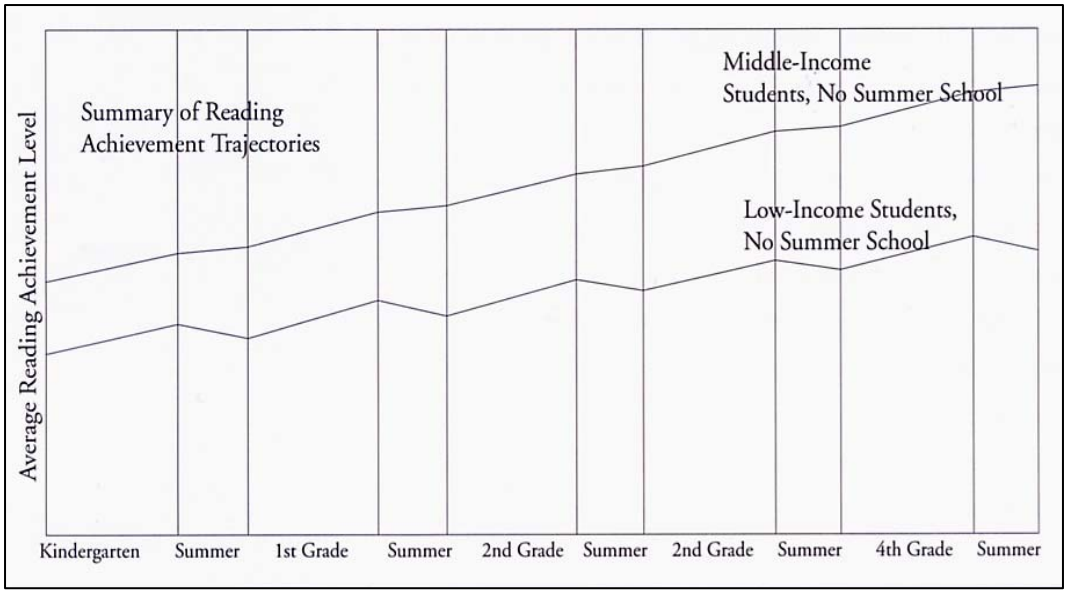

This graph depicts the typical relationship between income levels and reading achievement both during the school year and the summer. The graph assumes that children are not attending a summer learning program. The bottom line represents the average reading achievement level of low-income children; the top line represents the average reading achievement level of middle-income children. You will notice that low-income children lose a significant amount of reading knowledge over the summer months, while middle-income children make slight gains. This contributes to the widening of the achievement gap. By the end of fifth grade, low-income children are approximately two and a half years behind their more affluent peers, primarily because of summer learning loss.

Fairchild, R. McLaughlin, B. & Brady, J. (2006). Making the Most of Summer: A Handbook on Effective Summer Programming and Thematic Learning. Baltimore, MD: Center for Summer Learning.

(Continued from page 1, "Summer Reading Less")

states and school districts are faced with developing strategies for combating this dilemma commonly known as summer "loss" or "slide."

If schools can connect students with books that match their abilities and interests, students may avoid this backsliding and, in some instances, continue to build critical literacy skills. Research by James Sangil Kim, Ed.D., assistant professor of education at Harvard University, supported this concept. Kim's study demonstrated that if children read only eight ability-appropriate books over the summer that are of interest to them, their reading skills can grow as much as if they attended summer school.[3]

Existing summer reading programs sponsored by public libraries, community centers, businesses, and city parks departments can make this important connection for students. These programs offer fun, motivational approaches to encourage reading. However, the students participating must receive some guidance in selecting the "right" books that are targeted to their abilities and interests.

Last summer in Durham, N.C., the school district, county library, and other community organizations came together to create a targeted reading program that helped students continue to build their reading skills after the school doors closed for the summer. Like many school districts and public library systems, educators and librarians in Durham already had the tools for connecting students with books that matched their reading abilities.

Each year more than 20 million students around the country, including Durham Public School students, receive Lexile® measures from classroom assessments and reading programs. The Lexile Framework® for Reading is an educational tool that measures reading ability and the difficulty of text on the same developmental scale. Lexile measures help teachers, parents, and students to select books that meet and challenge the student's unique abilities and interests and to measure reading growth across the curriculum, in the library, and at home.

Together, Durham teachers and school and public librarians participated in workshops to learn and understand more about Lexile measures. Collectively, they then developed an initiative that leveraged the district's existing summer reading program and Lexile measures to connect students with books that met their interests and abilities.

Communities around the country can replicate this effort by using MetaMetrics' **free "Find a Book" website** to build summer reading lists for students. By simply visiting www.lexile.com/findabook, entering a Lexile measure, and picking a favorite subject, a custom "bookbag" of titles is created. Then, through a link to WorldCat, an online network of library holdings, users can determine if their school or public library has the books. As part of its commitment to helping prevent summer loss in student reading ability, MetaMetrics also developed a number of free tools and resources, available at www.lexile.com/readforthesummer.

Mitigating summer reading loss is key to meeting the No Child Left Behind goal of having all students read at grade level by 2014. By collaborating with their communities, schools and districts can leverage existing summer reading programs to develop targeted initiatives that keep the educational faucet turned on and ensure students have access to level-appropriate reading materials year-round.

[1]Cooper, H., Nye, B., Charlton, K., Lindsay, J., & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research*, 66, 227-268.

[2]Ibid.

[3]Kim, J.S. (2005). *Project READS (Reading Enhances Achievement During Summer): Results from a Randomized Field Trial of a Voluntary Summer Reading Intervention.* Paper presented at Princeton University, Education Research Section, November 7, 2005.

Malbert Smith III, Ph.D., is the president of MetaMetrics, Inc., an educational measurement company, and co-developer of The Lexile Framework for Reading. He can be reached at msmith@Lexile.com or 1-888-LEXILES.For more information, visit www.Lexile.com.

Low-income students... experience an average summer loss in reading achievement of more than two months.

USING HIGH-STAKES ASSESSMENT RESULTS TO INFORM INSTRUCTION

Adapted from Pearson White Paper *Perspective: Integrated Assessment and Instructional Resources System*

By Jason L. Meyers, David Shin, and Paul Nichols

High numbers of students per classroom combined with the diverse needs of each student, often makes it difficult for educators to locate appropriate resource materials for personalized remedial instruction. This is particularly true when attempting to utilize score information from state assessments. While large scale assessments can serve as a powerful vehicle for diagnosing and addressing student learning deficiencies, that potential is rarely realized.

The need for an integrated system of assessment and instruction is what prompted Pearson to develop the Perspective™ Reporting System and the Learning Locator™ service. Perspective and the Learning Locator are intended to realize the full potential of using information from large scale statewide assessments for formative purposes by providing a pathway from assessment results to remediation and enrichment resources.

Perspective can be conceptualized as part of a larger system of integrated elements. Such a system is depicted in Figure 1. The elements of this system are assessments, instruction, and student learning. Perspective operates at the intersection of these three elements.

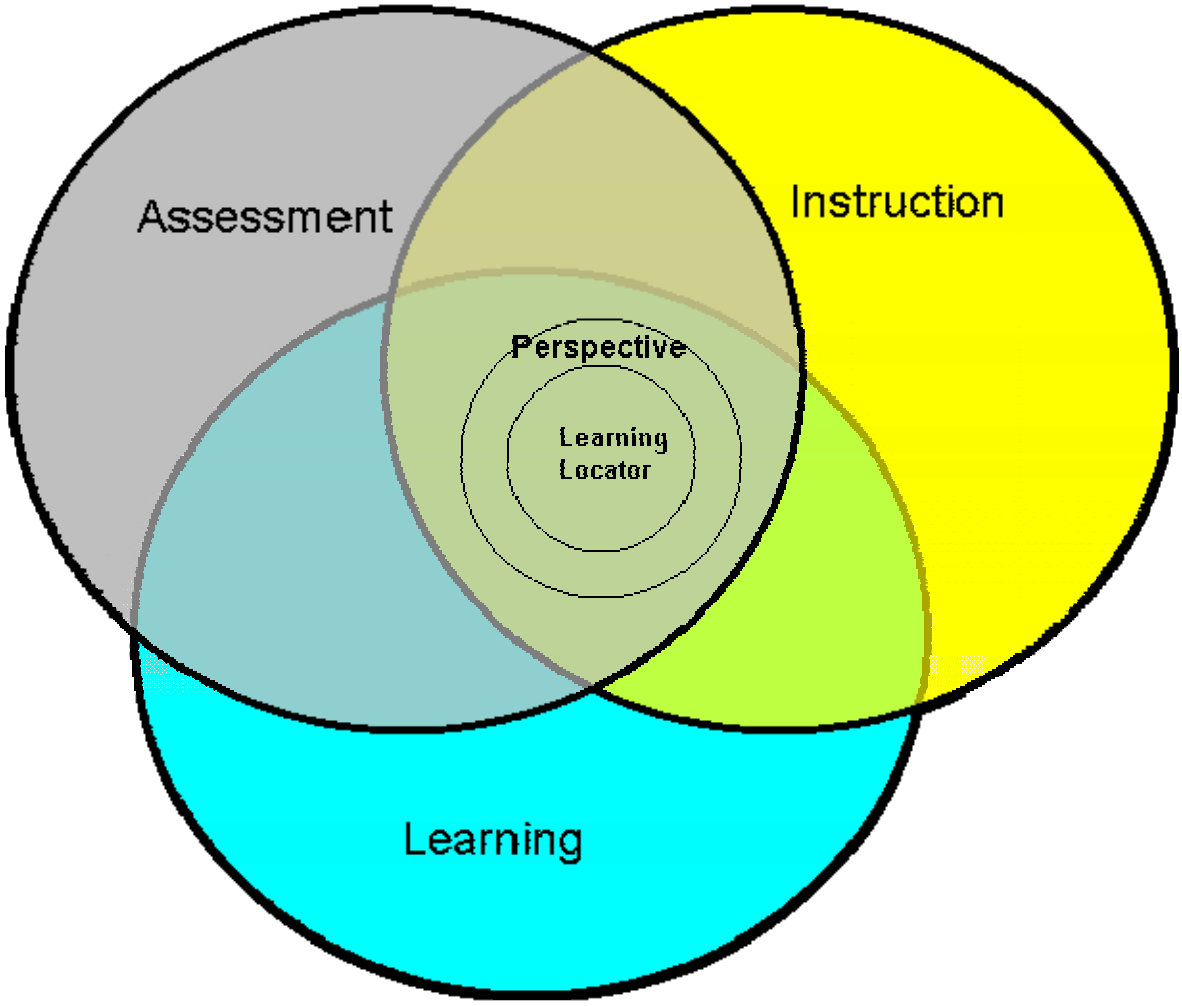

Figure 1: Components of Pearson Perspective

The Perspective system performs within the context of a specific statewide test, while the Learning Locator mechanism drives the integration of three components: customized reports, an online portal, and learning resources.

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After assessment, a Learning Locator code is printed on each student's test report. The code is entered in the state's Perspective portal to access personalized learning resources.

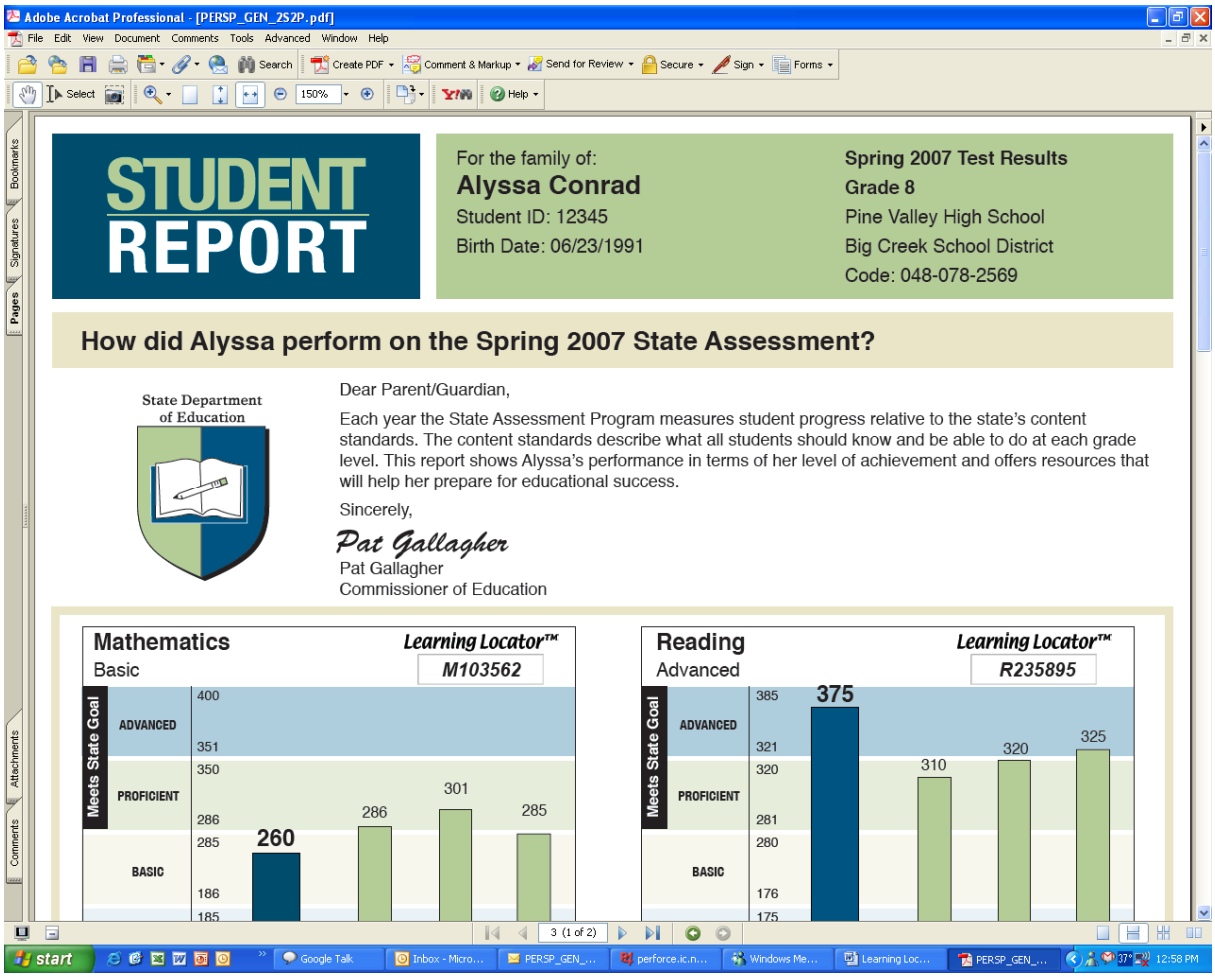

Figure 2: Individualized Student Report (Fictional Student and School)

Learning Locator uses a four-step process that employs research-based methods.

Step 1: Estimation of Student Subscale Scores - Within Perspective, a statistical analysis program estimates student subscale performance and generates a learning profile. Scores from these item subsets might represent student performance on learning objectives, subtests, or learning standards. To provide valuable formative information, scores are needed that focus as narrowly as possible on the content areas in which a student may be having difficulty (Wainer, Vevea, Camacho, Reeve, Rosa, Nelson, Swygert, & Thissen, 2000). A subscale score is a crucial component of any assessment that provides formative, diagnostic test score information.

Step 2: Estimation of Subscale Cut Score - After the subscale score is estimated, the second step in finding a student's subscale performance level is to estimate the cut score (or performance standard) at the subscale level. Most assessments utilize a performance standard at the overall test level to assign students to proficiency categories. However, to evaluate student performance at the subscale level, which is required to provide accurate diagnostic feedback, it is necessary to have a cut score for that subset of items.

Step 3: Generation of a Student Learning Profile - After estimating the subscale score and comparing it to the estimated scores for each objective, Perspective generates a student learning profile for each student. The profile method of presentation permits identification of areas of strength or weakness. The student learning profile is associated with a Learning Locator,

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which is then printed on the Individual Student Report.

Step 4: Link to Learning Resources - The Learning Locator links a student learning profile to a repository of student resources targeted specifically for that assessment profile. A variety of supplemental learning resources is reviewed in order to provide learning activities for all of the assessed standards on a test.

This pool of resources is then reviewed and narrowed in order to help students focus on resources that will provide the most effective practice in specific standards and at a particular performance level.

Utilizing subscale estimation, subscale cut score estimation techniques, and student learning profile information, the Learning Locator takes student assessment performance and links it to a collection of learning resources unique to the needs of each student.

The Perspective system ties large scale assessment to supplemental instruction and bridges the gap between students' current achievement levels and differentiated instruction. The strength of the Perspective system stems from its scientifically based approach to leveraging assessment data to inform instruction.

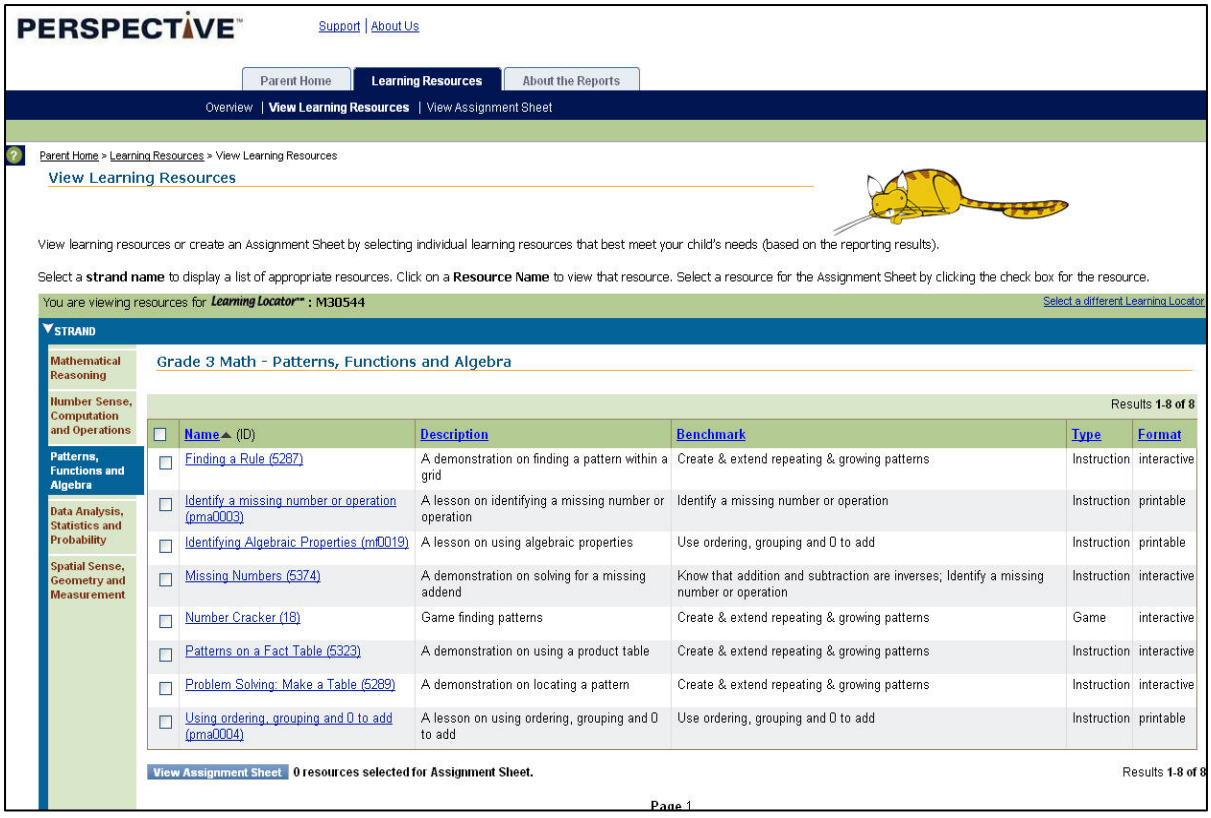

Figure 4: Personalized Resources

Reference

Wainer, H., Vevea, J. L., Camacho, F., Reeve III, B. B., Rosa, K., Nelson, L., Swygert, K. A., & Thissen, D. (2000). Augmented scores—"borrowing strength" to compute scores based on small numbers of items. In D. Thissen, & H. Wainer (Ed.), *Test scoring.* (pp. 343-387). Hillsdale, NJ: Earlbaum Associates.

Drs. Jason L. Meyers, David Shin, and Paul Nichols are research scientists at Pearson, where they provide ongoing support for state assessments and conduct independent research in the field of psychometrics. The full text of their white paper may be viewed at http://www.pearsonedmeasurement.com/downloads/white/Perspective_wp0801.pdf *For more information please visit* http://www.pearsonperspective.com

NOTIFICATION AND ALERT SYSTEMS: NOT JUST FOR SCHOOL-TO-HOME USE

By Evan Arguelles

Communication plays a major role in the entire educational process, and not just between school and home, but also between principal and teacher, superintendent and principal, and chief to everyone in between.

At the school level, studies show that keeping parents better informed regarding important school information on a regular basis greatly increases parental involvement in the educational process, which in turn, has shown time and again to improve student achievement. But effective means of communication are not only critical in our schools, but essential at *all* levels of the educational administrative system.

Practicing, supporting, and modeling successful communication methods are vital to educator success. Leaders should regularly and clearly communicate with their staff about their vision and directives in order to successfully implement programs. It is inadequate to convey vision and passion solely via e-mail and memos.

Increasingly, education administrators have embraced the new technology of mass notification and alert systems for inter-staff, cross-division, and top-down communications. Such systems have become "must haves" for school-to-home communication, as they represent highly effective approaches to getting parents more deeply involved in their child's education, and in times of emergency, have become crucial for rumor abatement, staff and parent coordination, lockdowns, student evacuations, and overall community calm.

When used in a similar manner by chiefs and SEA/LEA administrators, mass communications technologies could impart similar benefits, and in an emergency, be just as vital.

Emergency Manager: The Educator's New Role

A new world has emerged. Not only is emergency management an intractable necessity, but it has now become *a federally mandated* role for all educators and educational administrators.

There are a wide variety of responsibilities associated with this onerous yet essential duty, but perhaps none more important than implementing an effective emergency communications strategy. In fact, these communications form the cornerstone of the very national and state-mandated disaster preparedness and response plans that educators hold responsibility for implementing.

Every state chief, and every educator and student under their oversight, benefits from an advanced mass communications system. Not simply e-mail, but a multi-modal communications and notification system that enables them to reach out (in any language) to the tens of thousands or millions of people they oversee - *in a matter of seconds.*

What to Look For in an Inter- and Cross-staff Mass Communications, Notification, and Alert System

VoIP-based Platform. Traditional telephone systems limit the number of simultaneous telephone calls that an administrator can make to the number of physical telephone lines wired to a SEA/LEA office or physical school building. VoIP *("**Voice over Internet Protocol**")*, however, presents no such limitation – and sends interactive telephone calls out in much the same way email is delivered to hundreds of thousands of people near instantly.

Multi-Modal Message Delivery. A mass communications system should be completely compatible with traditional copper-wire, landline telephones and cell phones alike. Moreover, administrators should be able to record and deliver ***voice messages*** in any language, and then simultaneously send text-based messages, such as ***email*** and "***SMS/Texts***," to any cell phone, PDA, Blackberry, or pager.

"Hosted" Interface. A mass communication system should be completely accessible through any Internet-connected computer through a web-based interface in a standard web browser (e.g., Microsoft Internet Explorer, Mozilla's Firefox, etc.). This way, no new hardware, software, computers, handsets, or phone lines need to be purchased or installed.

"Natural" Hierarchical Account Management. Existing "K-12" notification systems are based on student records imported from local school information systems. Accordingly, such systems are inherently limited to calling parents of a par-

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ticular grade level in a school, as opposed to the many types and layers of administrative personnel within SEA and LEA organizations. To be easily usable for inter-, cross-, and top-down mass communications within your administration, identify a system that is open to any and all "types" of potential message recipients – not just parents – and has a naturally hierarchical security and administrative control architecture where user "permissions" and recipient contact information are based on a simple account hierarchy that inherently imparts "top-down" control, from state chief to school principal.

Geospatial "Map-based" Call Execution. Educators and public safety officials should be able to view and monitor weather, Doppler radar, traffic, wildfires, CDC, and other visually-based actionable information on a graphical map-based interface, and then rapidly disseminate information to the affected school communities by simply selecting regions or site locations on the map.

Lastly, make sure *any* technology system you consider is as ***"Administrator-Friendly"*** as possible. Many educators are not generally technologists, so look for a system that allows immediate usage with minimal training.

To learn more about what to look for when reviewing mass-communications technologies like notification and alert systems, and how such systems can improve inter-staff awareness, involvement, and emergency coordination, please contact Evan Arguelles, President, The School Broadcasting Company, Inc,. at 949-651-5011 or earguelles@thesb.com .

Communication plays a major role in the entire educational process, and not just between school and home, but also between principal and teacher, superintendent and principal, and chief to everyone in between.

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ers and students with special needs. Candidates must then produce written reflections on their responses to the case studies. This rigorous exercise requires evidence of both contemplation and performance.

Teacher candidates complete Tasks Two, Three and Four by working directly with K-12 students in the classroom. In Task Four, the Culminating Teaching Experience, candidates must integrate the strands of the previous three tasks by designing a standards-based lesson, which they teach to K-12 students in a classroom setting.

Scoring and Scorers

Each task has a rubric that specifies the standards of performance, aligned to the TPEs. Candidates earn between one and four points on each task. To pass, they need a minimum score of 12 on all four tasks combined; they cannot pass if they score below two on any individual task.

Scorers include experts in the field: current and retired university teaching faculty, field supervisors and master teachers, as well as current and retired K-12 teachers, supervisors, support providers, and administrators.

The Commission on Teacher Credentialing offers overview training sessions for scorers, task-specific training sessions for each performance task, and training for local lead assessors.

Strengthening Teacher Education

Among the benefits of the CalTPA are the opportunities it creates for teacher education programs to align coursework with practical field experience. Because aggregated TPA scores will be included in the accreditation process, the TPA will also strengthen teacher education programs, which must implement either the CalTPA or a commission-approved alternative such as the PACT.

Currently, the Commission on Teacher Credentialing and ETS are working to develop Task One — the Subject-Specific Pedagogy task — for 13 additional secondary subject areas.

ETS is also working with several states to design customized teacher performance assessments. In addition, ETS offers Praxis III, a direct observation performance assessment of first-year teachers.

Linda Tyler is the Associate Vice President for Higher Education & School Assessments at the Educational Testing Service. For more information on teaching performance assessments, contact Katherine Bassett, Director of Educator Relations and Director of the ETS Center for the Study of Teacher Assessment, at kbassett@ets.org.

In California, Teaching Performance Assessments Improve Teaching Quality

By Linda Tyler

In response to policy mandates and a desire to strengthen preparation of its state teaching force, California will soon implement a teacher performance assessment system at the pre-service level. Beginning July 1, 2008, all California institutions of higher education preparing elementary and secondary teachers will be required to use a teaching performance assessment (TPA) model.

California institutions have multiple TPA models from which to choose, including an ETS-developed assessment, the California Teaching Performance Assessment, or CalTPA. Institutions can also opt to use the Performance Assessment for California Teachers (PACT) model, developed by a collaborative including Stanford University and the University of California.

The CalTPA

The TPA initiative stemmed from 1998 state legislation that charged the California Commission on Teacher Credentialing with developing a model teaching performance assessment. This commission worked with ETS to develop the CalTPA. Funding constraints delayed implementation until 2006, when Senate Bill 1209, authored by Sen. Jack Scott, set the July 1, 2008 implementation requirement.

ETS designed the CalTPA to assure that pre-service teachers demonstrate, through actual performance, their mastery of the knowledge and skills required of a beginning teacher in California as defined by the *California Teaching Performance Expectations (TPEs)*, on which the assessment is grounded.

4 Critical Tasks

Currently, the CalTPA covers five subject areas — elementary education, math, general science, social studies, and English/language arts. The assessment requires candidates to undertake four performance tasks addressing different essential components of teaching:

- Subject-Specific Pedagogy
- Designing Learning
- Assessing Instruction
- Culminating Teaching Experience

Through these four tasks, teacher candidates demonstrate their command of the TPEs, which require teachers to:

- make subject matter comprehensible
- assess student learning
- engage and support students in learning
- plan instruction and design learning experiences for students
- create and maintain effective environments for student learning
- reflect on their practice and continually work to strengthen it

The four tasks require candidates to *demonstrate* their skills and abilities rather than simply respond to questions on their content knowledge of these aspects of teaching. For example, Task One, Subject-Specific Pedagogy, assesses a candidate's ability to understand how information about a class is used to prepare instruction for particular subjects and content areas, and to develop and adapt student assessment plans accordingly. It also measures a candidate's ability to address the needs of English-language learners and students with special needs.

In Task One, candidates are given four case studies of specific classes and learners. They propose teaching methods, lesson plans, and assessment strategies focused on the content, as well as adaptations of lesson plans for English-language learn

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