

Performance Series

The Basis of Academic Measurement

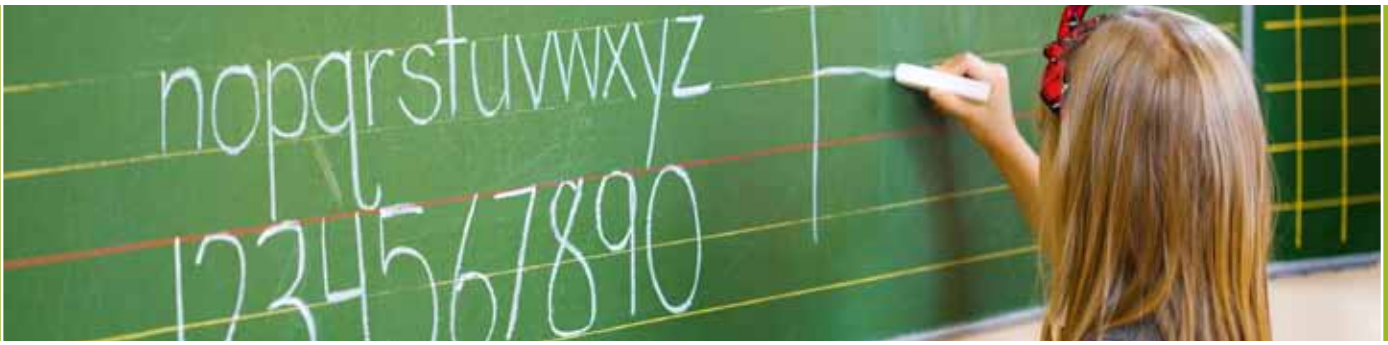




Executive Summary

As states across the nation prepare for targeted efforts in student-centered school reform and implement federal initiatives such as School Improvement Grants and Race to the Top, the importance of data-driven decision making and the value of assessment have become more important than ever.

U.S. Secretary of Education, Arne Duncan, shared this, “As I travel around the country the number one complaint I hear from teachers is that the state bubble tests pressure teachers to teach to a test that doesn’t measure what really matters.” He goes on to indicate that it is time for us to “move far beyond this and measure real student knowledge and skills.” Scantron’s Performance Series is an effective way to assess student performance and progress, thus allowing teachers in the classroom to make timely data- and assessment-driven instructional decisions that DO matter.



K12 Assessment Nationwide

Formative assessment, defined by the US Department of Education as “assessment questions, tools, and processes that are embedded in instruction and are used by teachers and students to provide timely feedback for purposes of adjusting instruction to improve learning,” is critical to student success in K-12 education.

Recent federal funding initiatives have emphasized the importance of assessment by making assessment plans a requirement of funding applications and improvement plans. For example, School Improvement Grant (SIG) programs and Race to the Top (RtT) define four intervention models: Turnaround, Closure, Restart and Transformation. Within both the Turnaround and Transformation models, schools/districts are required to promote the continuous use of student data (such as formative, interim, and summative assessments) to inform and differentiate instruction in order to meet the academic needs of individual students.

The federal Race to the Top (RtT) Grant application dedicated one of its four key assurance areas to “Standards and Assessment” and another to “Data Systems to Support Instruction.” States that were awarded RtT funds must focus on increasing acquisition, adoption and use of instructional improvement systems. Instructional improvement systems are defined as “technology-based tools and other strategies that provide teachers, principals, and administrators with meaningful support and actionable data to systemically manage continuous instructional improvement, including such activities as: instructional planning; gathering information (e.g., through formative assessments, interim assessments, summative assessments, and looking at student work and other student data); analyzing information with the support of rapid-time reporting; using this information to inform decisions on appropriate next instructional steps; and evaluating the effectiveness of the actions taken. Such systems promote collaborative problem-solving and action planning; they may also integrate instructional data with student-level data such as attendance, discipline, grades, credit accumulation, and student survey results to provide early warning indicators of educational failure.” As part of RtT, states were also asked to focus on “supporting the transition to enhanced standards and high-quality assessments.” This includes implementing high-quality instructional material and assessments with formative and interim assessments cited as examples of how to accomplish this.

Instructional improvement systems are defined as “technology-based tools and other strategies that provide teachers, principals, and administrators with meaningful support and actionable data to systemically manage continuous instructional improvement...”

Heightened federal emphasis on the importance of ongoing formative assessment and the effective use of data to inform instruction will continue to be a focus throughout this time of national educational reform. Computerized assessments are gaining an even greater foothold. The National Assessment of Educational Progress (NAEP), used across the nation as a common metric of student progress in core subject areas, will begin administering their eighth- and twelfth-grade writing test on the computer. “In today’s society, writing with paper and pencil has largely been replaced by writing using a computer. Students are expected to compose on a computer as they move through school and into the workforce.” Beginning with the 2011 NAEP writing test, students will use computers to compose and edit their responses. (NCES, 2010).

“In today’s society, writing with paper and pencil has largely been replaced by writing using a computer. Students are expected to compose on a computer as they move through school and into the workforce.”



Performance Series®: Pinpoint Measurement

Scantron's Performance Series® is an ideal assessment solution to help schools and districts rise to the challenge raised by Secretary Duncan—to truly measure student knowledge and skills.

It is not just a goal line measurement of success or failure; it is a pinpoint on a continuum of the learning process. It measures where a student is instead of focusing on where a student is not. Performance Series is not a measure of proficiency; it is a measurement of accuracy, which provides educators in the classroom specific information for targeted intervention. By identifying multiple pinpoints through time, a true measurement of academic growth can be obtained.

Performance Series is an internet-delivered, standards-based assessment that uses an innovative computer-adaptive model to help target the instructional level of each student and provide valid and reliable diagnostic assessment data. The adaptive nature of the test adjusts question difficulty based on the previous answer. When students answer questions correctly, the test engine increases item difficulty to appropriately challenge the student. When a student answers incorrectly, the test engine decreases item difficulty to lower level skills. Once the test has been completed, it provides a portrait of the student's abilities. The results are available immediately online by student, class, school and district allowing for immediate instructional use in the classroom and beyond. Because state tests are not adaptive, Performance Series offers a floor to ceiling effect, providing a picture of growth no matter where students are leveled.

When students answer questions correctly, the test engine increases item difficulty to appropriately challenge the student. When a student answers incorrectly, the test engine decreases item difficulty to lower level skills.



Validity

The Standards for Educational and Psychological Testing define validity as “the degree to which accumulated evidence and theory support specific interpretations of test scores entailed by proposed uses of a test.”

Scantron provides accumulated evidence of validity through continuous research against national and state assessments. Correlation and predictive validity studies have shown the strong relationship between Performance Series and learning expectations, thus supporting the use of Performance Series as a valid assessment tool.

Richard Stiggins, a renowned testing and assessment expert and the founder/president of the Assessment Training Institute, Inc., emphasizes the importance of assessment; however he makes a strong distinction between assessment of learning and assessment for learning. “We rely on assessments of learning to tell us if schools are delivering. The tests tell us how much students have learned, whether standards are being met, and if educators have done the job they were hired to do. Interested parents, communities, and politicians demand and deserve evidence of student learning. But there is another way in which assessments can contribute to the development of effective schools, one that has been largely ignored. We also can use assessments for learning. Assessments of learning provide evidence of achievement for public reporting; assessments for learning serve to help students learn more. The crucial distinction is between testing to determine the status of learning and testing to promote greater learning.” (Stiggins, 2002). Extensive research conducted around the world indicates impressive gains in student achievement, especially for struggling learners, by consistently applying the principles of assessment for learning, (Black & Wiliam, 1998).

As America works to reform assessment to a system that focuses on assessment for learning, it will be important to make the critical distinction between assessments for compliance versus assessments to improve individual student performance. Using Performance Series can assist educators with focusing on assessment for learning with the goal of helping all students reach their full academic potential.

“We also can use assessments for learning. Assessments of learning provide evidence of achievement for public reporting; assessments for learning serve to help students learn more. The crucial distinction is between testing to determine the status of learning and testing to promote greater learning.”



A Personalized Testing Experience

Performance Series provides for a personalized testing experience, one that allows educators to assess for the purpose of determining student ability levels in order to make instructional decisions and to meet the individualized needs of each of the students they teach.

Because every child—whether gifted or challenged—learns at a different pace and has different instructional needs, assessments that truly have value must provide teachers with important information about individual needs. Through the adaptive nature of Performance Series, teachers are able to quickly pinpoint student achievement levels across a range of subjects that correspond with state and Common Core standards. As a result, students can be more accurately placed, instructional needs can be diagnosed and adjustments made accordingly, and student gains can be measured across reporting periods. Unlike traditional standardized assessments that focus on the standards one grade level at a time and return results at a later date, Performance Series provides students with tests custom-tailored to their ability level in reading, math, language arts and life science and inquiry. The results are delivered immediately. The online test automatically adjusts to each student’s ability level, generating more difficult questions as the student answers correctly and easier ones when the student answers incorrectly. As a result, students do not waste unnecessary time testing on items that are too difficult or too simple. This leads to less testing time; therefore, more time for learning. The adaptive assessment provides a valid and reliable scaled score that can be used to measure academic growth and evaluate student abilities at, above and below grade level.

“In the past, a major focus was on what the students could not do. Now that we have accurate assessments of what they can do, it’s easier to formulate goals and objectives so they can be successful.”

Bartow County School System in Georgia uses Performance Series as a tool that helps Special Education Teachers focus instruction more effectively and supports their work in inclusion settings. Greg Peterson, former Associate, Department of Student Support Services, shares this thought: “In the past, a major focus was on what the students could not do. Now that we have accurate assessments of what they can do, it’s easier to formulate goals and objectives so they can be successful.” In addition to Performance Series, Bartow County Schools utilizes a web-based companion program, Skills Connection. “With Skills Connection, our teachers can go right to a standard and print a step-by-step study guide to use for instruction,” says Lynn Robertson, the district’s special education coordinator for middle and high schools. “These mini-lessons are a great resource. Because they’re ready to use, teachers can be more efficient.” (2008 Success Story, Bartow County)



Alignment to Federal Models

Within a Turnaround or Transformation School Improvement Model, Performance Series provides formative assessment data “to inform and differentiate instruction in order to meet the academic needs of individual students.”

The results not only allow for district, school and class intervention but they provide the individual student data needed to customize learning experiences and differentiate individual learning accordingly. As a result of the needs identified by Performance Series, teachers are able to create individualized learning plans for each student based on their unique and particular needs. Scantron’s Suggested Learning Objectives feature organizes skills and concepts by ability level according to the student’s scaled score. These skills and concepts, aligned to state and Common Core standards, serve as next steps to guide instruction for the teacher, student and parent and allow educators to target the correct supporting skills for students who achieved lower levels as well as to provide enrichment opportunities for high performing students.

In Albany, NY at Green Tech High Charter School, students use Performance Series to assess students in Reading, Language Arts and Math several times each school year. This small and unique school has a specialized mission: to prepare young men for higher education or an alternative responsible career path upon graduation. Green Tech High Charter School’s Testing and Data Specialist, Emily Goldwaser, describes the use of technology to support instruction as “in the DNA of the school from the day the doors opened.” She goes on to describe their use of Performance Series as a tool that “allows all of us to see how we are performing at the macro level and provides teachers meaningful information at critical times of the school year about what is working and what is not.” (2010 Success Story, Green Tech High Charter School)

“Performance Series allows all of us to see how we are performing at the macro level and provides teachers meaningful information at critical times of the school year about what is working & what is not.”



Reporting and Results

The reporting features and capabilities of Performance Series provide individual student information (in a Student Report) as well as school and district-wide progress (in a Summary Report) and gains over time.

Teachers are able to compare performance scores to state and Common Core standards, national student groups and reading resources, Standards Item Pool Score, National Percentile Ranking, and Lexile Reading Scores, if desired. The reports can be manipulated with a few clicks to develop custom learning plans for each student immediately after the first assessment. In addition, because Performance Series is an on-line test, results are available immediately so that they may impact instruction while the information is still relevant and can be accessed any time from any location with an internet connection.

Green Tech High Charter School in NY also uses the diagnostic information provided by Performance Series to predict individual student performance on New York State-administered exams. “Using data gathered since Green Tech High Charter School’s opening in 2008, we’ve extrapolated a correlation between students’ Performance Series results and Regents scores. For instance, once a student has achieved the knowledge and wherewithal that enables him to earn a specific score on the Performance Series Mathematics test, we can be certain that this student will have no problem passing the Algebra Regents at the very least—this is based upon a paradigm that has proved itself relevant for 100% of our students to date,” states Goldwaser. “When a student is found to not be at his target score, the site itemizes Learning Objectives, which allows academic intervention to be as on point as possible.” (2010 Success Story, Green Tech High Charter School)

Performance Series helps educators show annual yearly progress by measuring gains on a consistent scale. Users can create groups, such as Free/Reduced Lunch, Before School/After School Programs, etc., to measure gains by specified groups. In addition, within the reports, the user is able to select students according to specified demographics, such as ethnicity, gender, etc.

“Once a student has achieved the knowledge and wherewithal that enables him to earn a specific score on the Performance Series Mathematics test, we can be certain that this student will have no problem passing the Algebra Regents at the very least—this is based upon a paradigm that has proved itself relevant for 100% of our students to date.”



Supporting Race to the Top's Instructional Improvement System Initiatives

Performance Series is also well-aligned to support RttT instructional improvement system initiatives. The State, in collaboration with its participating districts, is required to show that they have a high quality plan to use data to improve instruction.

This includes providing information and resources to inform instructional practices, decision-making and overall effectiveness; providing effective professional development to support continuous instructional improvement; and making data available to evaluate program effectiveness.

In support of these efforts, Performance Series addresses each area. The data provided can be used immediately by teachers and leaders to inform instructional decisions and improve student achievement. This data is available immediately, providing rapid-time reaction so that teachers can inform current lessons, instruction and related supports. To support continuous improvement and collaborative instructional decision making, Performance Series data provides test-based evidence of student achievement. As a web-based electronic tool, access to diagnostic data from Performance Series can transcend the walls of buildings allowing for district-wide collaborative decision making. Data can be used to facilitate the effective transition of students from elementary to middle and secondary school buildings, providing educators with the ability to make data-driven decisions before their students even arrive. At the same time, this collaboration can be done in accordance with the Family Educational Rights and Privacy Act (FERPA) because of Scantron's security measures and the encryption within Performance Series itself. To utilize Performance Series as evidence of student growth and program effectiveness, test-based evidence of student achievement can be gathered through cross-tabulation of Performance Series data and site-based studies of the factors that affect achievement. As such, best practices can be identified and efficacy of programs can be determined. A number of schools across the country use Performance Series to gather this kind of research. With federal initiatives requiring transparency into how funding is allocated, Performance Series can help provide the proof of effectiveness required to justify funding decisions.

“It will be state assessment systems that define how students and schools actually meet the new standards. And these assessment systems should provide students and teachers with the feedback required to improve and succeed.”

The Bill and Melinda Gates Foundation recognizes the assessment challenges facing States today. In light of the adoption of the new Common Core State Standards, Carina Wong, Deputy Director of Education at the Gates Foundation, believes that States welcome the “unprecedented opportunity” to rebuild their assessment systems. “It will be state assessment systems that define how students and schools actually meet the new standards. And these assessment systems should provide students and teachers with the feedback required to improve and succeed.” (Gates Foundation, 2010)

An October 2004 McRel research study identified Seven Characteristics of Effective Accountability Systems. Number six was District and School Personnel Data Usage. The premise is that “Changes can be made more effectively at the school and classroom levels if school personnel are using data to make informed decisions. Thus, an important consideration for effective accountability systems is not only the ways in which principals are using data to inform decision making but also the ways in which they are supporting their staff in using data. ... the extent to which principals encouraged staff to incorporate data into their practices through professional development, established teacher policies and expectations for data usage, and monitored school progress toward data-driven goals.” Working together, teachers and leaders can use data to make a difference.



A Teacher Effectiveness Resource

Performance Series can also be used as a student-centric assessment system that provides a model for analyzing teacher effectiveness.

Student growth can be measured and aligned with teacher evaluations as a part of RttT's focus on the assurance area entitled "Great Teachers and Leaders." John Grisby, Assistant Superintendent, Joshua Independent School District, comments that, "Having used the program for a couple of years, we found that our special education students were exceeding state averages and performing significantly better than they had in the past on state performance assessments. We feel that this increased performance is primarily because our teachers can now better assess the status and abilities of the students and more efficiently determine effective intervention strategies. We can better identify what is wrong and intervene more quickly." (2008 Success Story, Joshua Independent School District)

"Having used the program for a couple of years, we found that our special education students were exceeding state averages and performing significantly better than they had in the past on state performance assessments."



Scantron: An Assessment Partner

Scantron has helped education and other organizations worldwide measure and improve effectiveness with assessment and survey solutions.

As an education partner, Scantron provides assessment, data collection and survey solutions for the rapid, accurate and reliable capture of individual student performance data at the classroom, school and district level. Scantron's assessment solutions help educators meet federal requirements and raise student achievement through a combination of computer-adaptive diagnostic testing and standards-based formative assessment leading to customized and personalized instructional curricula. Scantron's comprehensive educational solutions include district-wide assessment, diagnostic testing, classroom testing, campus surveys, data collection, and stakeholder surveys along with project management and professional development.

Scantron is proud to serve 80% of the largest school districts in the United States as well as 70 countries and 15 Ministries of Education throughout the world by providing them with solutions for their assessment programs. Scantron's assessment products provide high-quality web-based assessment solutions to help children achieve, to assist teachers with instruction, and to inform educators and parents on student and school performance.

Scantron is a well-established and highly respected company and understands well the challenges of the marketplace and the criticality of the new direction of education in this country and beyond. Scantron's strength and core technology offers schools, districts and states the support necessary to succeed in this transformative time.

Scantron President and former U.S. Deputy Secretary of Education, Bill Hansen, sums it up this way "Scantron has a broad and full understanding of the challenges our education infrastructure is facing in today's world as well as a robust suite of forward leaning solutions. We are a strategic partner to help guide the direction for schools, districts and states to meet the challenges head on, now and well into the future. We help chart and navigate the course leading to academic success."

"Scantron has a broad and full understanding of the challenges our education infrastructure is facing in today's world as well as a robust suite of forward leaning solutions. We are a strategic partner to help guide the direction for schools, districts and states to meet the challenges head on, now and well into the future. We help chart and navigate the course leading to academic success."



Scantron's Assessment Solutions & Services

Scantron offers a suite of assessment solutions and services to meet varied and diverse assessment needs.



Achievement Series: Achievement Series is a web-based assessment that allows educators to develop and administer online as well as paper-based tests, capture immediate results, and produce standards-based reports. As a district-wide solution, Achievement Series can be used for all grade levels and subject areas providing administrators and teachers with the data they need to monitor student progress and guide instruction. Achievement Series is a content neutral testing platform—a district can use Scantron's item bank (aligned to state and Common Core standards), Scantron's custom test development services, locally-created items, and items from other third-party or commercial item banks. Non-Scantron items can be aligned to standards as well, allowing for the production of reports by standards in order to identify strengths and weaknesses in preparation for state testing. Data can be aggregated and disaggregated by selected criteria in order to inform instruction or link to instructional resources. Achievement Series is a powerful formative assessment platform that is used for all grade levels and subject areas district-wide using a traditional common test format that typically targets standards for a particular test level. Its open content structure and online or paper-based testing options offer flexibility to meet individual district's needs.

Scantron offers custom test development services, district and local alignment services, and research study options (predictive validity, linear equating, correlation, differential item functioning analysis, and more) to assist administrators with meeting board, state and financial requirements.



Performance Series: Performance Series is a criterion-referenced, web-based computer-adaptive test that allows educators to quickly pinpoint the estimated ability level of students across a range of subjects corresponding to state and Common Core standards. Performance Series dynamically adjusts to each student's instructional level for personalized testing. It provides a clear understanding of students' performance across a range of subjects without being limited to a particular grade level, making it easy to develop individualized learning plans.

Performance Series can be used as a diagnostic tool to assist with student placement and to measure gains to provide insight into program effectiveness. To support Performance Series, a Data-Driven Professional Development offering is available. The Data-Driven Classroom piece includes three programs that provide techniques to combine student scores, state standards, and instructional resource options that connect classroom progress and communications with both peers and students.



ReportFolio: ReportFolio is a flexible reporting platform that provides the ability to analyze assessment data easily and effectively. This application is built upon Scantron's

enterprise level data warehouse that hosts student and test information from a variety of state sources, education tools and our own Achievement Series and Performance Series products. ReportFolio Series provides access to a variety of test results so you can view scores, compare student performance on tests, and review gains for districts, schools, classes, or individual students. Users can create reports on high-stakes tests results in order to track progress, showcase schools' performance, discuss student progress with students and parents, evaluate class progress with subject departments and individual teachers, and identify areas where instruction can be improved to better support student performance. The reports available in ReportFolio Series include a variety of statistics, presented both in tables and as full-color graphs, to help you view, analyze, and use your data effectively and efficiently.

Content and Research: The Scantron Content and Research group has an extensive background in test development, measurement and research methodology. To accommodate specific data needs, Scantron offers custom test development services, district and local alignment services, and research study options (predictive validity, linear equating, correlation, differential item functioning analysis, and more) to assist administrators with meeting board, state and financial requirements. For Achievement Series, the content team provides item writing and validation services for customer-defined tests or item bank blueprints.

Professional Development: Scantron has a fully-staffed Professional Development Department through which an extensive list of product training and staff development classes/seminars are offered. K-12 Professional Development team has a strong background in education and is dedicated for building capacity for change within schools through a series of training and consulting activities. Professional Development can be offered onsite or online. In addition, Scantron provides user-friendly award-winning manuals, an online Help system; quick start guides proctoring scripts, research reports and more to assist with implementation of Scantron Assessment Solutions.

Project Management: Scantron offers project management services to ensure the most successful implementation possible. These services help organize staff, data, training and testing to alleviate much of the pressure associated with any assessment project.

In 2010, Scantron acquired Spectrum K12, a leader in education technology solutions. Spectrum K12 delivers a Student Achievement Management solution suite that manages, administers and prescribes the personalized learning process and data required for all students: in general, compensatory, gifted or special education; pre-K through graduation and beyond. Spectrum K12 is the industry leader in providing Response to Intervention (RTI) Student Achievement Management, and Special Education (IEP) software solutions, serving 11 percent of the U.S. K-12 student population including 20 of the largest 100 school districts in the United States.



In our drive to support K-12 educators more effectively, Scantron recently acquired GlobalScholar. This acquisition further expands Scantron's portfolio of offerings to support a complete instructional management platform. This scope now includes student information systems, performance based scheduler, gradebook, learning management system, longitudinal data collection analysis and reporting, teacher development and performance tracking and online communication and tutoring portals.





Conclusion

From Scantron's suite of assessment platforms, Performance Series assessments, whether coupled with other platforms or standing alone, provide districts and schools with beneficial value-added growth measurement components that complement existing assessment activities.

Using Performance Series, students tested receive a personalized experience that adjusts to their appropriate instructional level in order to assess ability at, above, or below grade level. Teachers receive rapid-time data that provides detailed information about the appropriate instruction and next steps needed to remediate or challenge each student. Performance Series can be used to predict success on state assessments and can be used as a source of data to measure student growth over time as well as to evaluate program and teacher effectiveness. Secretary Duncan's vision for assessment is this: "If America is to have a public school system second to none, each state needs a first-rate assessment system to measure progress, guide instruction, and prepare students for college and careers." (Duncan, 2010) With the comprehensive benefits of Performance Series, districts should feel confident that they are armed with the tools necessary to "race to the top" and improve achievement in each and every student they serve.

"If America is to have a public school system second to none, each state needs a first-rate assessment system to measure progress, guide instruction, and prepare students for college and careers."

References

Black, P. & Wiliam, D. (1998) Assessment and classroom learning. *Educational Assessment: Principles, Policies and Practices*, 5(1), 7-74.

“Beyond Bubble Tests: The Next Generation of Assessments.” (2010). Prepared Remarks of U.S. Secretary Duncan to State Leaders at America Achieve’s Diploma Project (ADP). Alexandria, VA.

Gates Foundation. (2010) What’s Next? The Assessment Challenges Facing States. Available online: www.gatesfoundation.org

McREL: Seven Characteristics of Effective Accountability Systems, Oct 2004.

NAEP Writing Computer-Based Assessment (2010) [On-line] Available: <http://nces.ed.gov/nationsreportcard/pdf/writing/2010470.pdf> Washington DC: US Dept of Education, National Center for Education Statistics.

Robelen, Erik. (2010) Two State Groups Win Federal Grants for Common Tests. *Education Week*, 30(3).

Stiggins, Rick. (2002). *Assessment for Learning*. *Education Week*, 21(26), 30-33.

Stiggins, Rick. (2008). *Assessment FOR Learning, the Achievement Gap, and Truly Effective Schools*. Portland, OR: ETS Assessment Training Institute.

Success Story: Green Tech High Charter School, 2010. [On-Line]. Scantron Corporation. Available: <http://www.scantron.com>

Success Story: Joshua Independent School District, 2006 [On-Line]. Scantron Corporation. Available: <http://www.scantron.com>