

# turning paper into power

## *A Customer Success Story from Scan-Optics*

### In High Stakes Tests, Scan-Optics Earns an A+ for Accuracy and Speed

**The Situation** Standardized assessment tests in K-12 schools are justifiably termed “high stakes” testing. The results are extremely important for individual students, teachers, schools and school districts. Accuracy in reading and scoring the answer sheets is critical. Furthermore, to improve student achievement and help educators teach more effectively, interim testing has become an indispensable tool. Capturing information on these interim assessment tests must be not only accurate but very fast to enable rapid feedback in support of classroom and individual student remedial instruction.

**The Scan-Optics Solution** Scan-Optics was engaged to digitally capture the images and data for the interim test forms for a major metropolitan school district. The work was performed at Scan-Optics’ Document Processing Center, and involved almost 3 million answer sheets over the course of a school year. Each batch of tests had to be scanned and uploaded to a website the same day they were received, allowing only 8 hours to complete the tasks of receiving, document preparation, scanning, scoring and transmittal. Hundreds of schools’ tests were included in each run, and the results had to be strictly controlled and sorted so that each school received only its own students’ tests. The scoring accuracy required for these assessment tests require high fidelity grayscale or color images. Scan-Optics deployed its state-of-the-art SO 300 Series OCR scanners, patented AccuScore OMR grayscale software and Lean Six Sigma document processing disciplines to meet very tight turnaround times as well as achieve quality levels above Six Sigma accuracy standards.

*Steps taken to assure this extraordinary level of accuracy included:*

- Scan-Optics’ scoring software capable of detecting and resolving answers, erasures and multi-marks.
- SO 300 Series “intelligent” scanners with decision making capabilities that ensure contract, district, school, class and student document integrity.
- Advanced use of data recognition technologies to prevent students’ test results from being sent to the wrong school.
- Implementation of scanner software algorithms that automatically recalibrate every four hours to ensure test results are consistent over multiple scanners and scanning periods.
- Post-scan QA processes to validate all data before transmittal.

**The Sequel** Once the answer sheets have been scanned, the images are transmitted live, and there is no going back. The information has to be accurate the first time, and Scan-Optics assured that accuracy by building Six Sigma-based error-proofing into the scanner software itself, thus removing the possibility of operator error. Since fail-safe processes have been embedded in the production and image capture system, every run has been flawless. The school system receives the information flawlessly imaged, flawlessly sorted by schools, and ready to be scored and returned to the teachers.

