



SAS® helps small school district improve student performance

Beech Grove City Schools have increased student test scores, raised the percentage of students going on to higher education and earned national kudos with help from SAS®. For just \$10 per student a year, the district serving a working-class community near Indianapolis uses SAS to discover and remedy weaknesses before students take the all-important state tests.

Industry

Education

Business Issue

Track and improve student performance despite a limited budget and skill set.

Solution

SAS® provides a database that teachers use to track performance and spot student weaknesses.

Benefits

Aggregate state test scores have jumped 11 percent since 2002, and 80 percent of Beech Grove students are enrolling in college – tying 2006's all-time high and a 20 percent increase since 2005. A record 40 percent of the class of 2008 is on the Academic Honors Diploma (college prep) track, with 95 percent on the CORE 40 (above basic requirements) track.

With just 2,500 students, Beech Grove is smaller than most of the school districts in the Indianapolis area, and it faces a number of challenges. The percentage of children eligible for free and reduced-cost lunch has increased from 8 percent to 60 percent in the past 10 years. Enrollment is level, which is a disadvantage in a state that gives funding preference to growing school districts.

So when school board members wanted Clayton Collins, Beech Grove's Director of Instruction, to provide more data on how students were doing and why, he needed an economical solution.

"We're not a big school district, and we could not afford to put much money into a data warehouse. We needed a system teachers could use that didn't require entering tons of data," Collins says. "With SAS, we've learned much more about our students, improved their test scores and done it all with limited resources."

Beech Grove turned to B2S Analytics, an education data analysis and management services company, to create a customized SAS data warehouse to help Beech Grove assemble, analyze and report on student data.

Beech Grove's data warehouse integrates grades and demographic data from the district's student management systems with test results from the Indiana Department of Education (ISTEP+) and Northwest Evaluation Association tests (NWEA). Using SAS, Beech Grove analyzes NWEA results to predict student performance on the

ISTEP+. Instantaneous access to student information lets teachers deliver individualized instruction. Remedial tutoring offered in advance helps struggling students pass.

Beech Grove's results are impressive. Aggregate state test scores have jumped 11 percent since 2002. Of the class of 2007, 80 percent enrolled in college – tying 2006's all-time high and a 20 percent increase since 2005. A record 40 percent of the class of 2008 is on the Academic Honors Diploma (college prep) track, with 95 percent on the CORE 40 (above basic requirements) track. In 2008, Beech Grove High School was the only high school named a Four Star School in Marion County. The Indianapolis Chamber of Commerce has named the district a "Best Buy in Education" for three years running.

Creating a teacher-friendly solution

The district's superintendent was very specific about wanting a solution that teachers used regularly. "He told us he didn't want a product that just generates reports for the school board. He wants something teachers can work with," Collins says. Together with B2S, Collins spent about a year surveying teachers and discovering what they needed to help their students. "It's all designed around teachers," says Collins. NWEA evaluations are conducted three times a year and teachers meet regularly to go over the results of those tests and the state tests to spot strengths and weaknesses. With the data warehouse, the school system uses the NWEA to predict student

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Clayton Collins
Director of Instruction
Beech Grove City Schools

success on the state test. Teachers can also share that data with parents.

With the data warehouse, Beech Grove discovered that it needed to give more attention to students transferring into the district, who made up the group most likely to fail the state tests. It also discovered that while Beech Grove students were strong in basic reading and math, they needed more work on higher-level skills like multiple-step math problems and comparing different nonfiction texts.

“Teachers can figure out which strategies work based on the data,” Collins says. And the school district can also focus not just on students meeting benchmarks but on measuring growth from year to year. Measuring growth is the gold standard of student assessment. Students don’t learn at the same rate, and many educators see getting students to reach a certain bar before starting higher-level coursework in the seventh grade as key – as opposed to hitting a target each year.

“Our goal is that if you start your education with us, by sixth grade you will pass the state tests, no matter who you are,” Collins says.

Craig Buckler, the principal of Central Elementary, says the SAS data warehouse gives teachers and administrators a stronger understanding of where a student stands. If students are grasping a concept, they move ahead. If not, “we develop a plan to get them to where they need to be ... I used to say when meeting with parents, ‘I feel that the student is doing X, Y, Z.’ Now I can review the data and say ‘I know.’”

Buckler says the easy-to-read reports the warehouse generates for each child incorporate everything from test results to attendance records. Having everything on one sheet takes some of the tension out of a parent-teacher meeting. It also helps parents see what they need to do to help. “We had one child who entered second grade struggling quite a bit. We had a meeting, showed the parent what was happening with the testing

and the attendance, and that student has turned around,” Buckler says.

Freeing administrators to innovate

The database also frees Collins to spend more time on curriculum development and less time on the critical, but tedious, job of filling out grant applications. Before the database, it took Collins all summer to track down the data for programs like Title I. “With the data warehouse I can usually write a grant in only two days,” he says.

Collins hopes to expand the use of the database by incorporating SAT or ACT scores. He will also use it to study the effectiveness of some novel ways the district is working to reduce the high school dropout rate.



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