

Charlotte County Public Schools

Improving the Quality of District Data Reporting

FLORIDA

Certify software validates data to ensure its accuracy, consistency, completeness, structural integrity and business rule compliance.

Preface

It's an important, but onerous and unending task: spurred by data-driven programs, funding and accountability, 16,000 school districts nationwide are obliged to report to their respective state education agencies data about student demographics, enrollment, eligibility for special education programs, discipline, drop-out rates, and a host of school performance-related indicators.

The data reported by schools to districts and states requires a high degree of uniformity, completeness and accuracy—a necessity that has challenged school districts to upgrade their data management processes in recent years.

District Pressures

Charlotte County Public Schools (CCPS), a district of 21 schools and 18,000 students in Southwest Florida, reports data nine times each year to the Florida Department of Education. A district data submission, called a "survey" in Florida, can contain dozens of data elements—each survey is different—but invariably a district's survey data must be free of errors and omissions, accurately reflecting the make-up of the district's student population.

Pressured by a national, decade-long focus on school performance and accountability and by a strict schedule of state submission deadlines, CCPS was forced to examine its data collection and data management practices. Many states, including Florida, impose a window on the time period in which school districts can submit data. When the submission window opens, districts submit data and the state department of education then performs a series of validations against the data, reporting back to the district any errors and inconsistencies. States may permit districts to clean up and re-submit data after the initial submission period, but time restrictions can put immense labor and cost pressures on districts doing so.

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As recently as the spring of 2006, when CCPS submitted its survey data to the Florida DOE, the district's level of quality hovered around 80%, based on the state's thresholds for data element completeness, validity and consistency. Two weeks after the district's initial submission, the state would report back to the district, but valuable time had elapsed.

CCPS would typically scramble to clean up their data, but documentation from the state provided little information or context that could help in making expedient corrections. Further, the process of submission, error review, error correction and re-submission was resulting in little sustainable improvement. The best CCPS could manage by the close of the submission period was 90% accuracy and completeness.

District leadership did not have confidence in its own data. Measurements such as the number of students in the district or the number eligible for special programs, lacked credibility. Worse, CCPS was in jeopardy of losing millions of dollars in funding and critical teaching positions if they were unable to clean up their data in a timely manner.

Says Greg Griner, CCPS Chief Financial Officer, "Florida districts need to get their FTE right," (FTE is the term that Florida uses for student full-time equivalents, a key measurement of student enrollment and eligibility), "and we were consistently missing up to 500 FTE. Coming up short on our enrollment figures, we were at risk of losing money. As the person responsible for managing the district's finances, I put a lot of pressure on our information systems department, and they were really in a crunch trying to reconcile the data."

After the survey submission period, the state gives districts six months to clean up their data. CCPS re-directed staff, putting programmers and other valuable personnel resources on data entry

and clean-up tasks, hoping to show an improvement. Following a given survey period, two people worked full-time for six months, cleaning up data. The process was haphazard at best.

Automating The Process

The district began looking for ways to control the process of validating, monitoring and certifying their data – on an ongoing basis – before survey submissions were due. CCPS considered custom-programmed queries to capture the requirements outlined in the state's data manual, but decided that the effort would be too labor intensive and difficult to maintain. Then, while attending a national education conference, CCPS information managers became acquainted with Certica Solutions' data certification software solution, which had evolved over more than a decade of data quality improvement projects with companies and government agencies worldwide.

Certica's solution enables districts to control the process of certifying data, to address data issues at the point of origin (usually schools), and to make the certification process entirely automated and systematic. Certica Solutions' software, called Certify™, provides a flexible and interactive mechanism for configuring data validation rules, testing data on an ongoing basis, and reporting detailed errors online to schools and districts.

CCPS began working with Certify in June 2006. Following their implementation, they trained school data managers to view and interpret data errors in Certify's online data quality report cards. Before using Certify, data managers at individual schools would run over 200 separate queries. Now, CCPS has set up an automated snapshot of the data's condition—called an "observation"—to run nightly, so that data entered by schools during the day is validated every 24 hours. The observation performs

a battery of tests against the district’s data, looking for violations such as invalid attendance records, missing dates in disciplinary actions, incorrect codes and dates pertaining to English language learning, and inconsistencies between district data and data extracted for state reporting.

Using Certify, CCPS has set up a systematic data certification process, entailing daily cycles of validation, error reporting, correction and monitoring. Ultimately, for Bethany Heslam, trainer for the district’s student information system, the key to the district’s sustained improvement is Certify’s ability to bring together all of CCPS’s rules, validations, documentation, measurements and error reporting.

“Using Certify,” says Heslam, “we can have an immediate understanding of the data validation rules. We can include documentation for each rule, so that district and school personnel can drill down and see it. For each error identified, you can find context, rationale, requirements and even references to the Florida DOE data manual.”

Says John Weant, CCPS Director of Information and Communication Systems, “Since implementing Certify, departments and even principals are much more accountable for keeping data up-to-date and accurate. Now, the superintendent can put pressure on individual schools with assurance about their data; we know what information we have now, which creates accountability.” In short, CCPS has gained more confidence in its data.

Certification

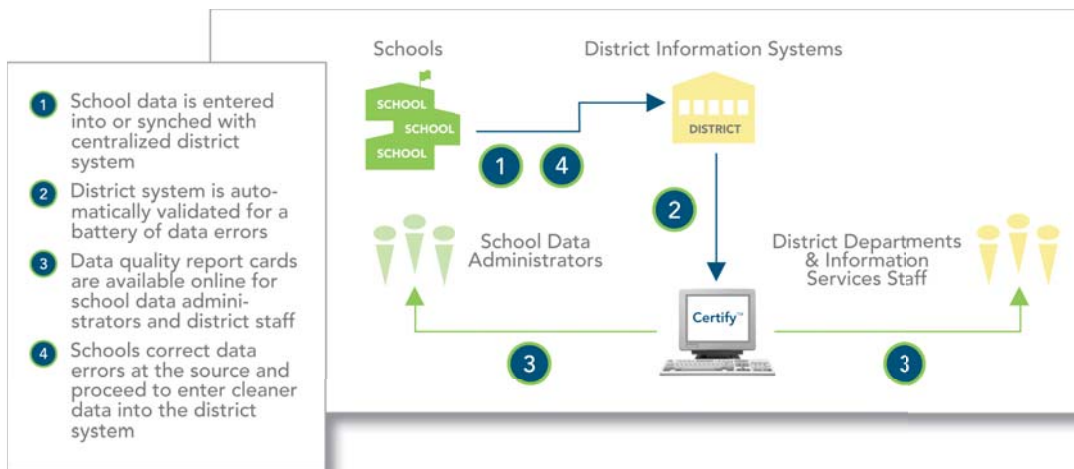
Three months after the implementation of Certify, CCPS was ready for its next state survey submission. At the outset of the previous survey period, CCPS was at an 80% quality level; for the next submission, the initial quality level had risen to 99.4%. In fact, CCPS knew well in advance how much better the quality of its data submission was; they had reached a point of sustainable improvement and certification.

The district is no longer in jeopardy of losing state funding. In addition, CCPS doesn’t need to assign extra staff to clean up data after the submission

period. The six-month, full-time, two-person requirement to fix old data problems has all but disappeared. Now only minor modifications are made.

The state benefits financially, too. According to John Weant, “the Florida DOE incurs a cost every time a district sends a submission; as they clean up errors, some districts will send a completely

K-12 District Data Certification: An ongoing, automated process of validating, reporting and monitoring



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new file multiple times, which is more costly for the state to process. Having higher quality data going into the survey submission period means that less data needs to be incrementally fixed and re-submitted, cutting down on the re-processing costs for the state of Florida.”

Six months after CCPS adopted Certica’s data certification solution, the district has been able to ensure proper state funding, can correctly report on the make-up of its student population, and can produce an accurate annual budget. The district sees an ongoing overall quality trend of more than 99.5%. It’s a measurement that the district owns, controls and understands, and is proud to share with other districts.

About Certica Solutions

Certica Solutions is the leading provider of data certification solutions to the K-12 education system. Certica works with education agencies at the federal, state and local levels, delivering a pro-active, systematic approach to data validation, reporting and monitoring. The company’s solutions enable organizations to streamline data management processes, optimize regulatory compliance, allocate funding equitably and minimize the time associated with data clean-up and reporting.

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