

MEETING THE MANDATE OF No child left behind



## STRATEGIES FOR K-12 SUCCESS

You're the Superintendent of a large school district and you're under pressure.

You have to ensure that the schools in your district can deliver what's required for No Child Left Behind. You also have to ensure that your district reports promptly to the state, so the state can report to the federal Secretary of Education. The grants for your schools and your district depend on your accountability and how well you deliver.

How will you get the schools in your district up-tospeed fast with collecting and delivering the required data?

How will you collect all the data from your schools and put it into comprehensive and comprehensible reports for the state?

How will you ensure your schools and your district are fully accountable?

A lot of difficult questions. Cognos has the answers.



#### MANAGE FUNDAMENTAL CHANGE: NO CHILD LEFT BEHIND

The No Child Left Behind Act is driving fundamental change in schools, school districts, and state education departments:

More accountability.

More need to measure performance.

New reporting requirements.

Tight deadlines.

Stiff penalties.

Everyone knows the point is to improve education for children—so no child is left behind, by poverty, by disadvantage, by schools, and by initiatives that don't deliver.

The entire educational process has grown both more transparent and complex. State officials, mayors, superintendents, teachers, and principals all want information on how well their schools are delivering education today and how they can improve. Parents are empowered to ensure that schools offer the education their children need and deserve.

There has never been greater pressure on teachers and administrators to succeed. The No Child Left Behind Act mandates annual assessments and performance measurements in reading and math, alignment with state standards, and prompt dissemination of results.

Assessments and performance measurements must be reported in a wide variety of ways: by gender, English proficiency, immigration status, racial and ethnic group, disability, and economic status. These assessments of individual students must include interpretive, descriptive, and diagnostic reports.



Analyze student data across multiple dimensions. Color-coding helps rapid analysis.

This means more data, more information, more detail, and more complexity than ever before. This also means the old ways of manual processing and reporting of data are impossible.

#### COGNOS HELPS YOU DELIVER A PERFORMANCE-DRIVEN EDUCATION

Teachers and administrators need help. The goals of *No Child Left Behind* are achievable, with deployed and proven K-12 reporting solutions from Cognos.

Cognos is already helping schools across the country. In this brochure, you can see several examples of the help Cognos is providing to schools and administrators in the School District of Palm Beach County and in the Pasadena Unified School District. Cognos experts are helping implement solutions that ensure schools, school districts, and states can meet the demands of *No Child Left Behind*.

A robust, data-driven K-12 solution provides you with accurate and timely information. It delivers a fact-based foundation from which to make decisions—about planning and implementing the best way to deliver the hands-on education of children.



View multiple dimensions concurrently.

# Why is investment in education across the U.S. not bringing a satisfactory return?

According to the Department of Education, the U.S. spent \$9,300 per student on K-12 education in 2000. This was an increase of 92 per cent from 1972 to 2002. And yet, national test scores have been flat during that period and graduation rates have dropped by about three per cent.

Even though the U.S. is near the top in education spending compared to other countries, the results in educational attainment, both quantitative and qualitative, are disappointing.

Taxpayers and parents want to see that their tax dollars are not being wasted. Teachers and administrators want to deliver a good return on the high investment in education. People want more accountability and results. Cognos can help deliver both.

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Rich financial reporting allows for quick and easy tracking of key indicators.

# EMPOWER PARENTS, TEACHERS, PRINCIPALS, AND ADMINISTRATORS

With technology and services from Cognos, you can engage all of your stakeholders with solutions for K-12 issues.

*Parents* can understand how their children are achieving and how the school district is meeting their needs.

*Teachers* can understand how their students are performing in comparison to similar classrooms and schools, and can make informed decisions about what is working in the classroom. Using quantifiable information, teachers can collaborate effectively to replicate and standardize classroom success.

*Principals* can rapidly identify classrooms that are succeeding and those that are struggling. Successful programs can be copied in other classrooms. They can track and manage the qualifications of teachers, understand which teaching qualifications lead to success, and assure that the qualifications of all teachers track against this successful standard.

Superintendents and District Administrators can understand the independent variables and programs that contribute to student success, and ensure that they are funded and replicated across the district. School boards, elected officials, and parents must make decisions about what to keep (and, even more challenging, what not to keep). These decisions are much easier to justify when they are data-driven. Cognos helps make mandatory compliance reporting significantly easier, especially as it relates to obtaining state and federal funding. *State Administrators* can rapidly report on and analyze student and school reporting across the state. This validates spending decisions and administration attention to the challenges of K-12 education.

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Student Profile

Reports can easily be customized. Security dynamically restricts access based on user profile.

## UNLOCK STUDENT POTENTIAL WITH EDUCATION INFORMATION

The No Child Left Behind Act is law—student performance must improve. You must be able to identify students falling behind, find out why they are underachieving, give them the special attention they need, and get them back on track to success.

While meeting the needs of children in your school system, you can use a Cognos K-12 solution to back up your decisions with hard data and rigorous analysis. For example, the Palm Beach County School District recently used the Cognos solution to measure the success of a special initiative in algebra and discovered they weren't getting the return on investment they had expected. (*See* Palm Beach County Schools and Cognos: Partners in Success, *p. 10*)



Portal enables organization of information for convenient access.

## **MORE ACCESS WITH FULL SECURITY**

A K-12 solution from Cognos also allows you to deliver Web access to information for teachers, principals, administrators, and parents, whatever their location. You can offer this access with complete security.

Security ensures that teachers look only at their students against an aggregate of classrooms in that grade; or parents only see the details on their child against an aggregate. With a Cognos solution, security is flexible but robust.

## SET THE STANDARD FOR 21ST CENTURY EDUCATION

Cognos gives you visibility across your organization so you can relate student performance to elements such as budgets, school lunch programs, and teacher qualifications. Previously, this type of analysis was difficult, slow, and hard to obtain.



High-impact visualizations allow display of complex information.

At Pasadena Unified Schools, educators and administrators are using Cognos to measure the affect of lunch programs on student performance. They use Cognos to access a wide variety of other information on trends and forecasting. (*See* Pasadena Unified School District: Hard Data for Complex Issues, p. 12)

As new information becomes available, Cognos software ensures your database is automatically updated. The database can reside anywhere—at the school district's site, or it can be hosted and delivered through a Cognos partner.



## PREDEFINED REPORTS SAVE TIME AND EFFORT

The Cognos K-12 solution offers predefined reports in a number of areas, including:

- NCLB Analysis
- Summary views of NCLB-related demographic data by NCLB subgroup
- High-Stakes Test results
- Graphical disaggregating of test results by NCLB subgroups including Gender, Ethnicity, FRL status, LEP, and ESE
- Student Profile
  - Basic Student Summary
  - Detailed Student Summary
  - Student Multi-Test Summary
  - Individual Student Discipline History
  - Current student schedule (with ability to download for PDA, etc. usage)
- Standardized Tests
  - Review by student detailing date of test, scaled score and level with conditional highlighting, including NCLB categories and demographics filtered on School, Grade or Teacher
- Performance Level Summaries
- Current/Prior Comparison by School, Grade or Teacher
- Student Performance
  - Aggregated performance reviews
- Movement of students across HST performance levels
- Graphical scatter-plot analysis
- Attendance
- Enrollment reporting
- Absence reporting
- Absence comparison graphs
- Discipline
- Discipline Reporting
- Discipline Analysis
- Finance
- Expenditures/Encumbrances
- Revenue
- Detail transaction level reporting

Standard compliance reporting is also supported for Adequate Yearly Progress and Limited English Proficiency programs.

## **POWERFUL TOOLS FOR KNOWLEDGE**

A further benefit of the Cognos K-12 solution is its advanced query functionality. You can easily form questions and perform ad hoc queries on the data to track trends, understand results, and create customized reports to document them.

You can track individual students or groups of students from year to year to determine how their performance changes over time. You can make instructional decisions that pinpoint where children are lacking as a group, as subgroups, or as individual students.

	Number	Student	FCAT SSS Math Date	FCAT SSS Math Grade Level	FCAT SSS Math Scale Score	FCAT SSS Math Lvi	FCAT SSS Math Dev Scr	Rac/Eth	F-R Lunch	ESE Abbr	LEP	Gende
1	51208593		3/3/03	07	286	LVL2	1,708	В	Y	z		F
2	86236650		3/3/03	07	318	LVL3	1,837	н	Y	z	LY	F
3	55215412		3/3/03	07	246	LVL1	1,547	в	Y	z		м
4	30232086		3/3/03	07	243	LVL1	1,535	н	Y	z		F
5	34212555		3/3/03	07	321	LVL3	1,849	в	Y	z		м
6	14207765		3/3/03	07	261	LVL1	1,607	в	Y	z		F
7	49217060		3/3/03	07	292	LVL2	1,732	н	Y	z		F
	44200681		3/12/02	06	288	LVL2	1,579	В	N	z		F
9	00221812		3/3/03	07	256	LVL1	1,587	н	Y	z	LZ	F
10	51237576		3/3/03	07	334	LVL3	1,902	В	Y	z		м
11	90219908		3/3/03	08	100	LVL1	1,025	w	N	к		м
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15	84203694		3/3/03	07	302	LVL2	1,773	в	Y	z		м
16	01214048		3/3/03	07	307	LVL3	1,793	A	N	z	LZ	м
17	41201369		3/3/03	08	280	LVL2	1,736	w	Y	z		F
18	34209999		3/3/03	07	260	LVLI	1,603	в	Y	z		F
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Educators don't have to spend their time acquiring information—they can make instructional decisions with accurate and timely information already in hand.

#### **IMMEDIATE ACCESS TO TIMELY INFORMATION**

Previously, a typical education report could take as long as a day or more to create. It was difficult and timeconsuming for educators and administrators to gather information from various sources and assemble it onto one spreadsheet. Cognos delivers ease of use for the non-technical user, so accessing information is simple and fast, and delivered in a format that makes sense for the user.

You don't have to spend time finding information—you can make instructional decisions with accurate and timely information in hand.

## ELEMENTARY AND SECONDARY SCHOOL ENROLLMENT

Total elementary and secondary school enrollment is projected to increase by three per cent (to 54.3 million) between 1998 and 2008.

Elementary and secondary public school enrollment (in thousands), by grade level of school, with projections:

1970-2008	Grades	Grades	Grades
Year/period	PreK-12	PreK-8	9-12
1970	45,894	32,558	13,336
1988	40,189	28,501	11,687
1998	46,792	33,522	13,270
2008 (projected)	48,201	33,455	14,746
Percentage Change			
1970-88	-12.4	-12.5	-12.4
1988-98	16.4	17.6	13.5
1998-2008 (projected)	3.0	-0.2	11.1

Note: Includes students in kindergarten through grade 12 and some nursery school students. Source: National Center for Education Statistics (http://nces.ed.gov/pubs2000/200008.pdf)

## **COGNOS DELIVERS EXPERIENCE**

Trained, experienced professionals deliver the Cognos K-12 solution. You gain the advantage of Cognos experience in delivering K-12 solutions to schools, school districts, and state education departments across the country.

We don't drop off a box of software and expect you to find your own way. We ensure you have the right implementation, support, and training you need.

It is your solution, not our solution—a user-friendly approach you can immediately put to use for your pressing needs.

#### **GET UP TO SPEED FAST**

Cognos ensures everything works for you to meet the requirements of the NCLB Act.

With our Rapid Deployment Service, you can be guaranteed early success right at the start in implementing the Cognos solution.

With the Go Forward Plan, our consultants help establish a roadmap that enables you to meet your specific K-12 needs.

Our Quality Assurance Check-ups ensure you stay on the right track. Our Training Solutions bring your teachers and other users up to speed quickly, so you can get the full value from Cognos.

Cognos Training offers instructor-led classes or computer-based training to fit your requirements.



## PALM BEACH COUNTY SCHOOLS AND COGNOS: Partners in success



The Palm Beach County School District in Florida, the 14<sup>th</sup> largest in the U.S., has a K-12 enrollment of 166,845 students for 2003-04, an increase of 4,000 students over the previous year. The students attend 160 schools that employ 9,813 teachers.

Recently, the Palm Beach District worked closely with Cognos to implement a solution for K-12. The key to ensuring the success of the solution was the fact that the school district and Cognos did not have a typical vendor/customer relationship but worked together to determine the very best solution for Palm Beach and its students.

Katheryn Gemberling, an Educational Consultant with the District, explains: "In delivering the K-12 solution, the first thing that Cognos did that made it successful was they listened to us. They didn't 'tell us' what we wanted, they 'asked' us. And frankly we didn't always know—but they would have alternatives and suggestions. We didn't always end up where we thought we would but, in the final analysis, we always knew we had the best possible combination of everyone's thinking."

#### **NO MORE GUESSWORK**

Previously, at the administrative and board level, the Palm Beach District had to rely to a certain extent on guesswork when it came to determining what worked and what didn't. Administrators talk about principals putting together graphs "with paper and pencil" and relying on "hunch and feel."

With the Cognos partnership, now decisions can be based on hard data. This is crucial when it comes to defending certain programs that work and cutting programs that do not work, always a difficult task.

"At the classroom level and at the governance level, we are now able to monitor very carefully what each student is doing and what each school is doing throughout the school year," says Art Johnson, Superintendent of Schools for Palm Beach County.

#### TRACKING AN ALGEBRA INITIATIVE

Now, Palm Beach schools and district administrators can readily gauge the success of school district initiatives. With the Cognos solution, they can monitor the results as well as the day-to-day implementation. They can find out if the initiative did what they thought it would do and if it worked. This type of timely feedback is critical to success and keeping budgets in line.

For example, the district wanted to know if money spent on a particular initiative in algebra was leading to improvements. With Cognos, they developed a dashboard to provide insight. Part of the initiative included a second period of math for students at risk. The district could compare students who had the second period of support with those who didn't have it. As a result, they discovered they weren't getting the benefit for the cost, and re-evaluated the approach. There was no sense spending the money with no return on investment.

An elementary school principal in Palm Beach Country, Beverlyann Barton, says: "I am very comfortable with Cognos. Cognos manages to give me a snapshot of my children and I can make decisions in a matter of minutes in lieu of inputting all the data, praying the data is correct, and then analyzing it. With Cognos, all we do is go on the computer, identify the reports we want and print them out in order to carry on discussions about our children. You cannot imagine the number of hours we have saved. Cognos has been worth every penny."

## **REPORTING PLUS ANALYSIS**

In Palm Beach, Cognos has delivered both a reporting solution and an analytic tool. Not only can administrators get the reports they need for *No Child Left Behind* and other purposes, they can also answer their own questions about educational initiatives, human resources, budgets, individual schools, classes, or students. They can compare and contrast quickly and easily. They can put their hands on the information they need. They can be accountable, and they can be successful, as well as fiscally prudent, while improving education for the kids in their care.

"We can track student progress over time, we can compare one student's progress to another's, we can compare one classroom to another, we can compare school to school, we can compare district to district, and we can look at the various programs and compare treatment to treatment," says Katheryn Gemberling. "The bottom line is we can know whether what we're doing is working—that's revolutionary for K-12 education."



# PASADENA UNIFIED SCHOOL DISTRICT: HARD DATA FOR COMPLEX ISSUES



The Pasadena Unified School District (PUSD) in the state of California operates a total of 32 schools for K-12 students. The district recently introduced a performance management strategy based on the Cognos solution.

In addition to helping meet the complex mandate of *No Child Left Behind*, the solution enables school administrators, teachers, and parents to access and analyze class performance. In this way, administrators and teachers can monitor individual student performance based upon assessments that correlate with state standards, and address the problems of these students.

At the same time, the solution can help assess the performance of individual classes and schools, allowing administrators to monitor trends and pinpoint areas of concern.

#### TRACK AND FORECAST WITH EASE

Using an Oracle data warehouse, the K-12 solution draws information on student demographics, human resources, facilities, finance, student attendance, grading, and food services. Educators and administrators can address a number of complex issues, such as the affect of lunch programs on student performance. Other information is available for a wide selection of trend spotting and forecasting.

Cognos lets PUSD deliver a secure online portal to parents and teachers that helps forecast student achievement. Educators can easily identify students who are falling behind and need extra help before it is too late. Parents can track the development of their own children and measure the success (or lack of success) of educational programs.

Following the guidelines of the *NCLB* legislation, Cognos allows administrators to monitor student performance, track and manage budgets, and access reliable data for rigorous analysis. The result: PUSD can invest in those areas that will help students the most.





## **ABOUT COGNOS**

Cognos is the world leader in business intelligence and performance planning software for the enterprise and the public sector. Our solutions let companies and public sector institutions improve and direct performance by enabling all of the key steps in the management cycle from planning and budgeting, to measuring and monitoring performance, to reporting and analysis. Cognos is the only company to support all of these key management activities with a complete solution that spans all of the essential components of CPM—enterprise planning, scorecarding, and business intelligence.

Founded in 1969, Cognos employs more than 3,000 people and serves more than 22,000 customers in over 135 countries. Whether they choose to apply Cognos software strategically on an enterprise scale, or leverage it as a point solution to address key operational requirements, our customers use Cognos to better monitor, understand, and drive the successful performance of their business or institution. Cognos customers are involved in every industry and public sector, including education, government, healthcare, automotive, banking and insurance, energy and natural resources, manufacturing, and pharmaceuticals.

Cognos solutions are sold directly and are also available from more than 3,000 worldwide partners and resellers. These solutions are supported by an experienced and award-winning field force of more than 1,400 customerfacing personnel.



