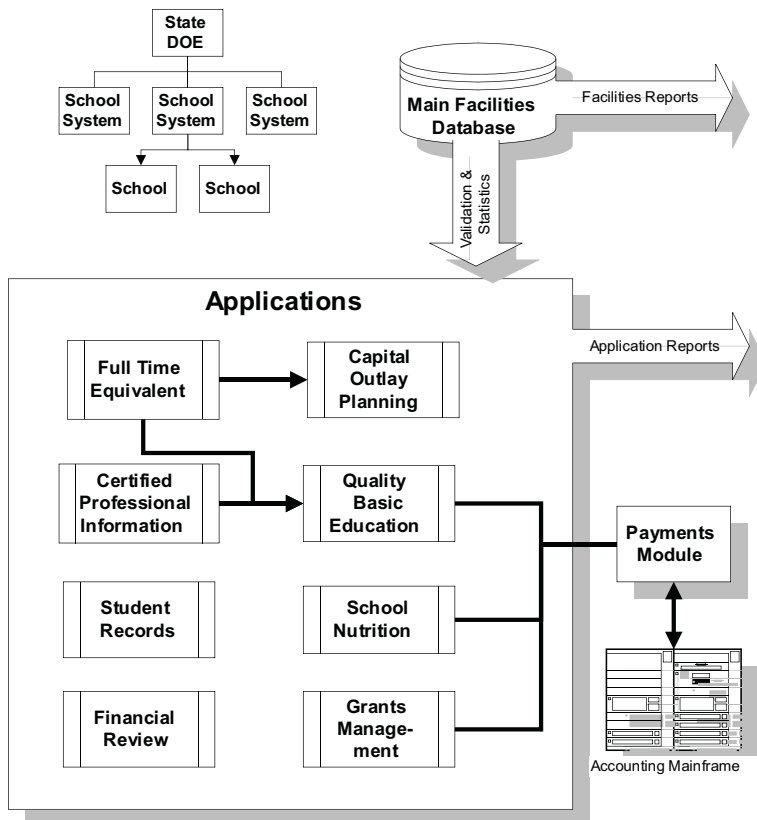


The State of Georgia, Department of Education

Summary

In 1997, The State of Georgia, Department of Education (GDOE) embarked on an aggressive program of web based administrative solutions development to address the information needs of internal and external stakeholders desiring up-to-date information on education related topics. GDOE has directed the design, development and implementation of 10 core applications that form the foundation in meeting the financial and non-financial information needs of its constituents. The core applications are depicted in the diagram below. The programming for these web applications has been undertaken by ECS, a Georgia corporation, under an IBM contract.



Web Reports

System Name	Kindergarten	Grade 1-3	Grade 4-6	Grade 7-12	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10	Level 11	Level 12	Non Voc Lab	Psych/Spec Ed	Ha
1. Appling County	236	691	594	700	581	4	76	123	15	2	4	97	170	214	1				

	Total	Black	White	Hispanic	Asian	American Indian	Other	Male	Female
K-12	1,344,623	502,951	742,251	39,040	25,168	1,774	11,479	639,431	675,242

INSTRUCTIONAL COST	FTE	SALARY	OPERATING	STATE FUNDS	Other	Net of	Cost
Direct Instructional Cost	370	944,177	14,667	272,867	186,188	113,113	1,516,909

The State of Georgia, Department of Education

▶ Non Financial Applications

School Facilities

Challenge

The GDOE needed an application to track facility information statewide. A facility would include such information as school name, grade ranges served, type of school (elementary, middle, high, magnet, alternative, charter etc), principal name, address etc, GDOE also needed a way to manage the approval process for new school facility requests and change requests for existing facilities.

Benefit

Paperwork and manual data processing and reporting is eliminated. The approval process for new facility requests and change requests is now automated, processed via the web and data accuracy is increased. The process of reviewing and comparing facilities statistics is also streamlined, saving DOE users valuable time.

Solution

Because all other non-financial and financial applications data relate directly to a facility, the facilities database is the main system database at GDOE. Authorized school system users can submit, verify and update detailed information about each school within their school system--via the web. The basic information for each school system is then warehoused in a web-based, centralized decision-support application that allows users to review and compare facilities statistics for any school system in the State, as well as query the database to display the latest information about school systems, schools and facilities statewide. The system also completely automates the approval process for new school facility requests and change requests via intelligently routed emails to appropriate personnel.

Student Records (SR)

Challenge

School districts in Georgia are required to report detailed student record information including discipline data to GDOE. The information is needed in order to satisfy the law and reporting requirement for funding many federal Title and state programs. In addition, there was an urgent need of an easier method for tracking a very mobile student population.

Benefit

The process of collecting and reporting student information is simplified and automated, reducing paperwork and eliminating manual processes. Data is collected in a timely manner and reporting is accurate and prompt. Checks and balances ensure the accuracy of data.

Solution

The Student Records application collects detailed individual student demographic information reported to the State annually via the Internet. Information is collected at the school system level, school level, student level and course level. The same data is also analyzed to monitor the State's progress via an education "Report Card." It also tracks the number of students involved in different title programs, disciplinary actions, gifted, special and remedial education programs at the school system, school, student and course levels

In Georgia, this unprecedented data collection program results in about 10,000,000 records of data annually. School systems or individual schools extract the detailed student information from local legacy systems and transmit data to the Student Records application via a Web browser interface annually during the summer. Data is parsed, and validated for any inconsistencies. Validation is critical because the State uses the detailed student demographic and curriculum information, instructional segments, schedules, disciplinary incidents and other data to update the multitude of web reports and determine funding levels for several programs. Student data is also crosschecked with course-level

The State of Georgia, Department of Education

▶ Non Financial Applications

data, current information with historical data, FTE, CPI and other DOE databases. Detailed error and diagnostic messages are returned to the school and data can be edited online with a web application. Once the data is error-free and the superintendent has given his approval, the data becomes available for analysis and reporting.

Full Time Equivalent (FTE)

Challenge

Georgia law requires the collection of FTE data several times a year. The FTE data is used to determine the state funding level by program for each school district. A system was needed to gather this information accurately and consistently.

Benefit

Data is now collected via the Internet and file upload; this process allows GDOE to reduce paperwork, save time, increases data accuracy and ensures the timeliness of school system reporting. The system is easy to use and prevents duplication, ensuring accurate information for determining funding levels.

Solution

The FTE application tracks the number of full-time students enrolled in each school and/or system statewide through a web-based interface. This data serves as input for determining State and Federal funding levels and for facilities planning.

School systems or individual schools extract student, segment, program and ethnicity, data from local legacy systems and transmit its data to the FTE application via a Web browser interface three times a year: October, March and in December for Special Education students. Data is parsed, extracted and validated for any inconsistencies. Detailed error and diagnostic messages are returned to the school and data can be edited online with a web application. Once the data is error-free and the superintendent has given his approval, the data becomes available for analysis and reporting.

Certified/Classified Professionals Information (CPI)

Challenge

The process of collecting and validating teacher and other school personnel certifications and keeping track of updates and staff changes was becoming increasingly time-consuming.

Benefit

The CPI application was designed to save time by automating the validation of teacher certifications as well as to provide a central, readily accessible database for tracking certified and professional employee information statewide.

Solution

The CPI Application tracks professional certifications and qualifications of teachers and other employees in the school systems. It verifies teacher certifications and updates against the State's accreditation (PSC) database. It also summarizes and reports this information to the budget program for funding determination.

School systems or individual schools extract professional certification, employment history and salary data from local legacy systems such as mainframe, AS-400 or other Human Resources data systems and transmit to the CPI

The State of Georgia, Department of Education

▶ Non Financial Applications

application via a Web browser annually. Data is parsed, extracted and validated for any inconsistencies. Detailed error and diagnostic messages are returned to the school and data can be edited online with a web application. Once the data is error-free and the superintendent has given his approval, the data becomes available for analysis and reporting.

▶ Financial Applications

Grants Accounting Online Reporting System (GAORS) Challenge

State-level program managers and grants administrators needed an application that allowed users to document, approve and track disbursement of Federal and State Grant awards to Georgia school systems.

Benefit

GAORS saves all parties involved (State level, District level, and school level) valuable time by automating the grant approval process. Paperwork is reduced and manual data processing and reporting has been eliminated. GAORS also ensures rapid and accurate funds disbursements to school districts and schools.

Solution

The Electronic Grants Manager web application allows users to request, document, approve and track disbursement of Federal and State Grant awards to school systems. All request and processing is accomplished a Web browser. There are five user types: System Administrator, Accounting, Approver, Preparer and Help Desk. Each user, according to their access privileges, has a different set of system menus and online forms available to them.

Grants management accounting personnel enter approved grants into GAORS. This creates a Grant Master record against which all pending payment requests are evaluated. The data in the Grant Master describes the grant's source, purpose, amount and applicability. It also contains automatic approval guidelines for School System or individual school disbursement requests.

School System or individual school administrators enter requests for payments into GAORS via the Internet. Claims that meet automatic approval guidelines are forwarded to the payment module without further human intervention. Requests over the automatic approval amount trigger a request for a detailed explanation. Payment advice is also generated within the system so that school systems can track when approved funds will be deposited to their respective bank accounts via ACH transactions.

GAORS also generates many reports for authorized users that are accessible via the Internet.

Financial Review Module Challenge

Georgia law requires school districts to transmit detailed financial information (Balance sheet and Income statement) to the State at the end of each academic year. The State needs this information for budgetary analysis and financial reports need to be compiled and released to the public.

Benefit

Districts now have a seamless method of transmitting financial data to the State. Financial data is sanitized during the

The State of Georgia, Department of Education

Financial Applications

process, increasing accuracy. Data is now collected in a timely manner, plus data is integrated with other relevant information, such as QBE and the Report Card, automating statewide analysis and reporting processes.

Solution

The Financial application collects information on the balance sheet, revenues and expenditures of each school system by the different programs. It maintains a detailed budget for each school system and tracks construction, instruction, administrative programs, grants, funds and other transactions. An annual financial report can be submitted to the State Department of Education. The system also tests accounts and evaluates spending by budgeting rules.

QBE (Quality Basic Education)

Challenge

An application was needed to automate the generation of district level funds based on funding formulas and rules determined by the State Legislature. QBE represents approximately 75%- 80% of the total funding needs of every district. For the most part, these funding formulae are based on FTE and CPI data. Also, an application that automates monthly payments of this approved budget to the school systems was needed.

Benefit

Paperwork and manual data processing and reporting is eliminated, increasing the accuracy of funding levels. Complex funding rules are automated, greatly simplifying budget calculation, verification, change management and documentation. This allows administrators more time for planning and analysis.

Solution

The QBE application incorporates State Legislature's funding formulas and rules to automatically calculate funding levels for schools within a district or school districts statewide, based principally on the number of students and teachers. It automates the budget approval process and supports the budget development process by quickly calculating proposed budgets and complex "what if" scenarios. The QBE application's primary output is an allotment sheet showing the itemized operating budget for the select Fiscal Year.

School Nutrition

Challenge

The GDOE needed a web-based system to track meal counts and financial data from schools statewide for the National School Lunch Program (NSLP), School Breakfast Program (SBP), After School Snack Program and Special Milk Program. Also, GDOE needed a cost-effective and accurate way to get the data from the schools, as well as transmit federal reimbursement dollars back to the systems.

Benefit

The data collection process is streamlined and simplified, ensuring that data is received in a timely manner. Data accuracy has increased, extensive paperwork is eliminated, and administrators can now monitor and supervise filing status and track payments. The application has saved valuable time and has cut costs. Meal reimbursement payments are also accurate and received in a timelier manner.

Solution

The web-based Child Nutrition application collects meal counts and financial cost data from individual schools and

The State of Georgia, Department of Education

Financial Applications

county school systems for the 4 nutritional programs listed above via the Internet or file upload from point-of-sale systems. Claims data can be submitted for periods of one day to one month. Meals in the different programs are divided into categories, such as Paid, Free, and Reduced. Meal rates (reimbursement rates) are calculated at a school level based on eligibility and percentages of meals served in the Paid, Free and Reduced categories as per federal guidelines. Users can access the application twenty-four hours a day, seven days a week, allowing data entry at the earliest possible time permitted by federal regulations.

The Child Nutrition Application currently processes reimbursement claims for over 175 million lunches and 60 million breakfasts annually in 212 city and county public school systems, and many private schools statewide.

The Depreciable Equipment Financial Data is collected yearly from the school systems in all the categories allowed by federal regulations. Financial data also includes General Data (pricing and cost data), Inventory Data, Revenue and Expenditure Data, and Balance Sheet items. This data is entered at the school system level for trend analysis and future reimbursement rate calculation.

The system complies with all federal regulations, including 60-day and 90-day rules. These regulations are enforced at the school level whenever appropriate and warnings or errors are returned to the user. Any attempt to input data that violates federal reporting regulations generates an error message.

There is also a messaging system that allows administrators to quickly disseminate information to school nutritionists. Messages display when users login to the system. Users can easily share other information by using the built in document repository. Any type of file can be uploaded the system. The document repository lists all documents and descriptions and users can retrieve any of the posted files quickly and easily.

Capital Outlay Planning Application Challenge

Keeping up with rapidly changing school population, as well as changing facility needs, construction requirements and bids were becoming unmanageable. Funding requirements, school population forecasting, and project planning for facility expansion and renovation 5 years ahead was difficult to calculate and track.

Benefit

The entire process-- from student data projections, to tracking facility inventory, to planning school construction needs and funding formulas is now automated and centralized in a single, web-enabled application. Local school boards, district and State-level planners now have concise reports that include requirements up to five years ahead to be used in the approval process.

Solution

Capital Outlay Planning is a scalable application designed for a State Facilities Department to help school systems track trends and plan for facility expansion and renovation up to five years ahead. Experience-based formulas are applied to input from school system demographics and Full-Time Equivalent (FTE) historical data to generate planning reports. The reports, including budget projections, architectural requirements, and forecast facilities requirements by grade by instruction unit and by classroom, are designed to be used in the school board approval process and for financial planning at district and State levels.