Reporting and Analysis Tools: Helping Mine Education Data for Information Riches

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By Julia Steiny and Nancy J. Smith, Ph.D., Data Quality Campaign

With the passage of the No Child Left Behind Act (NCLB), state education agencies (SEAs) and local educational agencies (LEAs) have stepped up activities to broadly expand their data collection and reporting systems. The Data Quality Campaign (DQC) has advocated strongly for states to build robust student-level longitudinal data systems based on standards and common definitions that address 10 essential elements. (See box, page 2.)

Although these elements are necessary, they are not sufficient to make the states' data systems fully functional or useful. The DQC also has identified seven

> ### Highlights
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> In this brief, find out more about:
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> ▶ Nine tips for making data accessible and useful.
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> ▶ Lessons learned from leading states for developing reporting and analysis tools.

fundamentals of a longitudinal data system to make it become more than just a repository of vast amounts of data. The data must be analyzed and widely used to make the large investments in such systems worthwhile.

Data Are Only as Useful as People's Ability To Access, Understand and Use Them

Before NCLB, most SEAs collected only aggregated or summarized data about school and student performance from LEAs and then focused their energies on creating annual reports that were mandated by state and federal regulations. In fact, the reporting requirements from the U.S. Department of Education (ED) generally came from specific program areas and often were redundant.

After NCLB, an ED initiative to synthesize reporting requirements and streamline data submission processes — the Education Data Exchange Network — gained momentum and widespread support. SEAs, in turn, recognized the need to streamline their data collection and reporting processes as they expanded their data

systems to include the student-level data needed to meet NCLB reporting requirements.

As SEAs adapt to collecting a wider array of data at the student level, they also must adapt to the changing demands for data and related analyses from more stakeholders. To date, SEAs have not always had the capacity, in staff and technology, to respond to both mandated reporting requirements and ad hoc requests from legislatures, researchers and reporters, among others.

Because it is not enough just to collect the data — the data must be used to make it worthwhile — more SEA staff and resources are needed in the new culture

of data-driven decisionmaking. These staff and resources are vital to collect, clean, synthesize and share the data with other stakeholders (e.g., parents, educators, administrators and policymakers) so that all can be involved in the continuous improvement of student performance. Investments in data warehouses and reporting and analysis tools are the means for SEAs to be more responsive and get more reliable information to more people faster.

Discussions about data warehouses and reporting and analysis tools so often occur at the same time that it is easy to think that they are one and the same. Although

these two components of a robust data system go hand-in-hand, they require separate types of technology and staff expertise.

A data warehouse is, in essence, a storage facility for many datasets culled from a variety of source files, such as student enrollment, program participation, graduation, state-level test data, teacher data and financial data. Reporting and analysis tools, however, are essentially the software programs written to calculate the statistics that stakeholders need to evaluate the performance of a student, school, district or state and produce reports (electronic or print) that answer

10 Essential Elements of State Longitudinal Data Systems

1. A unique statewide student identifier that connects student data across key databases across years

2. Student-level enrollment, demographic and program participation information

3. The ability to match individual students' test records from year to year to measure academic growth

4. Information on untested students and the reasons they were not tested

5. A teacher identifier system with the ability to match teachers to students

6. Student-level transcript information, including information on courses completed and grades earned

7. Student-level college readiness test scores

8. Student-level graduation and dropout data

9. The ability to match student records between the P–12 and higher education systems

10. A state data audit system assessing data quality, validity and reliability

Fundamentals in Designing State Longitudinal Data Systems

In addition to the 10 essential elements, states need to ensure that they take into account the following fundamental concepts in the construction of their longitudinal data systems:

1. **Privacy Protection** —— the assignment of unique student identifiers and guarantee that personally identifiable data do not become available to data users

2. **Data Architecture** —— the documentation and enforcement of rules regarding how data are coded, stored, managed and used

3. **Data Warehouse** —— a repository of data, such as student, staff, curriculum, facilities and finances

4. **Interoperability** —— the ability of different software systems from different vendors to share information without customized programming or data manipulation

5. **Portability** —— the ability to exchange student transcript information electronically across districts and states or between P–12 and postsecondary systems

6. **Professional Development around Data Processes and Use** —— the training of people charged with collecting, storing, analyzing and using data

7. **Researcher Access** —— the capacity and willingness to share data with researchers while meeting federal and state privacy regulations to enable research and evaluation studies

stakeholder questions. A separate implementation brief about the development of a data warehouse will be published alongside this brief.

According to the 2006 DQC survey,[1] 28 states report having deployed a Web-based data access, analysis and reporting solution. State policymakers and educators need a data system that makes it easy for users to query those databases and review available reports to adapt policies, programs and teaching plans to the unique needs of their students.

Reports and analytical tools are valuable only if they are used; therefore, they must be designed with the end-user at least in mind — but preferably with the end-user actually involved.

Typical users of the reports and tools produced by the state include teachers, school and district administrators, state program area staff, and state-level policymakers, along with parents and students. Each group will have a different set of questions it wants answered, and standard reports produced by the state should address those questions.

In addition, it is critical to display the data in such a way that the user can easily understand the report. This is often easier said than done. Consequently, the state must include representatives of each group in the design of the reports and allow for regular feedback to improve the reports and tools over time. It is common practice to work with information technology (IT) staff in local districts, but if the district has research staff — that is, people who are trained to ask research questions and analyze findings — it is important to include them in the design of the reports as well.

Answering the Demand for Data Collection and Analysis

In the late 1980s, before the education field knew how to use the full powers of IT, reports with analyzed data usually came in one of only two forms. First, researchers in higher education and the upper echelons of P–12 administration studied questions and wrote reports that few people outside of those ranks ever saw. Second, and far more well known, were the annual public reports of student achievement test scores by schools and districts. Test scores and rankings would appear in the local news and produce a brief flurry of discussion by the press and community. That would be the end of it.

However, as information technologies expanded, educators and researchers alike began exploring how to use the new technologies to answer questions that had dogged them for years. From statehouse to schoolhouse, investments, initiatives and strategies had been implemented, but to what effect? Did the reading initiative, lowering of class size or new tests improve student achievement? If so, with whom? Are gains being sustained over time? And how should the answers be reported and put into the hands of the people who need to know?

When NCLB became law, the modest IT offices of most SEAs suddenly were confronted with handling an even more daunting volume of new data and/or new data collection activities to comply with the law's mandates.

Today, the technology exists to meet increasing data collection and reporting demands, but SEAs still need to expand the staff and resources to be responsive to these demands. This is equally true among LEAs.

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[1] Data Quality Campaign/National Center for Educational Accountability, *2006 Survey of State Data Collection Issues Related to Longitudinal Analysis.*

Next Generation of Data Use: Making Data Accessible and Useful

Collecting and analyzing data are fairly straightforward activities when compared with designing reports and developing public information strategies for releasing what can be politically sensitive information. The public information office and IT office need to work together to make their data useful to their own agency, educators, researchers, policymakers and parents. Reporting and analysis strategies will always be a moving target as the conversation about education data evolves and the public's questions and interests shift from focusing only on accountability to ensuring continuous improvement. Every organization, education related or not, benefits from ongoing evaluation and analysis.

Before responding to an ad hoc request, SEAs must review the request and desired product to ensure that it meets state and federal privacy laws and that they have both the technology capacity to handle the request and the staff with the research and analytical ability to produce the analyses needed. A data warehouse and standardized reporting and analysis tools often make it easier to be responsive because much of the data cleansing, merging and programming already has been performed.

The DQC interviewed staff from Florida, Hawaii and Ohio to ascertain how each state approached the design and development of its reporting and analysis tools and to gather lessons learned. These three states were selected because of the varying ages of their data systems and their approaches to reporting and analysis tools. The common lessons learned include:

1. Annual "report cards" and single-shot information briefs are usually summative tools.

At a minimum, every state has published NCLB reports online for the public view; these report cards range widely in quality and user friendliness. Some have raw numbers loaded into tables that are accompanied with little explanation and are not parent friendly. At the other end of the spectrum are colorful, graphic, at-a-glance charts that use, for example, state comparisons to give the reader a context for understanding the performance of an individual school. Few have longitudinal data that show how the students have performed or changed over time.

Although schools are keenly aware of their public reputations, the NCLB-mandated reports show only the tip of the data iceberg. Below that summative tip lie details that can inform all levels of educators as to what is helping children learn versus what is ineffective. The question confronting all education stakeholders is how to organize the newly available data into regular cycles of reports that support and inform the ongoing and continuous improvement of every state's schools and districts.

2. Ongoing information feedback loops serve decisionmaking.

Arguably, the most important service that educational IT can provide is getting useful reports and information into the hands of classroom teachers, school communities and those who create policies to support them. State data managers generally receive data requests from four primary groups of stakeholders:

▶ Schools and districts;

▶ Universities and researchers;

▶ Colleagues at the SEA and other government agencies, such as Health, Social Services, Department of Corrections, Department of Labor and the Legislature; and

▶ Press.

Every stakeholder should have an opportunity to provide feedback to the state to make sure that the reports are meeting their needs over time. Data managers continually are refining the access to the data, user friendliness of reports, protocols for control over the data's use, and the identification and use of new reporting indicators for evaluation activities and data-driven decisionmaking.

In response to large volumes of annual data requests, each SEA must establish procedures for who in the agency will respond to requests and what type of product (report or dataset) will be provided. For example, in Hawaii, the Systems Accountability Office handles data requests — sometimes by forwarding predetermined reports and sometimes by sending datasets cleaned of identifying information.

Florida's Office of Accountability, Research and Measurement has a customer relations manager who triages the requests. Normally, data requests of all kinds come in by e-mail. If the requestor wants something that already exists, the manager directs the person to the appropriate source; otherwise, the manager forwards the state's Security and Access Policy to help the requestor understand what is and is not available and how to proceed. Similarly, Ohio's Office of Enterprise Applications has a data request manager whose unit operates in roughly the same way. They handle approximately 50,000 requests per year.

The requests — as well as feedback from the schools and districts — help the data managers decide on any refinements to the system itself. For example, if a specific type of request is made frequently, the SEA might develop a standardized report. Naturally, these refinements are decided in collaboration with the other SEA offices, such as assessment.

3. Remember that reporting information is always political.

Researchers tend to think of data as value-neutral or as objective pieces of information. However, when aggregated and put into report form, the topic of the report — such as student performance by subgroup — can become very sensitive, no matter how indisputable the facts. Not all answers or information are wanted or welcome. Even when the information will help with their work, people can easily become defensive, and reports without the necessary context and appropriate explanations or definitions can have serious political consequences. Data directors should work in partnership with the communications staff to ensure the right messages are being crafted with the reporting and analysis tools.

Florida provides an example of how powerful data analysis can be: Students in any Florida school that receives an "F" in its accountability report may transfer to a charter school if they choose. Recently, researchers wanted to test the widely held opinion that the charter schools were draining the more competent students from the regular public schools. If, in fact, the more competent students were the only ones leaving, the performance in the school from which they departed would decline the following year. But that was not the case. The competition brought on by the charter schools helped the public schools improve student performance.

4. Guarantee confidentiality.

Building a system based on historical student-level data automatically raises questions about the confidentiality of student records. Many of the state and federal laws governing privacy protections in education were enacted prior to the development of state longitudinal data systems and, therefore, do not address all of the questions about how to best protect student privacy.

The DQC's legal analysis provides a guide for state policymakers to ensure that the development and use of state longitudinal data systems are in compliance with the Family Educational Rights and Privacy Act.[2]

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[2]Data Quality Campaign, *Maximizing the Power of Education Data while Ensuring Compliance with Federal Student Privacy Laws: A Guide for Policymakers,* 2007.

One of the key messages in this brief is that states need to ensure that routine procedures and processes are in place and followed to safeguard the personally identifiable information that is captured in a longitudinal data system. The bottom line, however, is that it is possible to promote wide-scale access and use of data while also protecting privacy.

5. Minimize opportunities for misuse of data.

As more data become available to the public through online sources, anyone with a computer can become an informal educational researcher, so the potential for the misuse of information becomes significant. Encouraging public access and use of data has to be balanced with the pitfalls of uncontrolled information.

Most states are developing systems of role-based access to specific reports and queries. Each user is assigned a unique login name, password and role. Teachers, for example, have access to student-level data for only their students, while a school administrator has access to student-level data for only the students in his or her school. The same is true for district administrators. State policymakers, researchers and the press generally have access to aggregated data at the school and district levels and to specific types of reports and analyses, while parents generally have access to both the public aggregated data and their own child's records.

6. Ensure data quality, validity and reliability.

An SEA's credibility is established by avoiding inconsistent reporting on similar indicators and by maintaining a well-defined, documented and cohesive data collection and reporting system for the entire agency. There should not be separate program-specific data collections and reports, unless they are conducted in coordination with the IT staff.

To date, many states are still operating with siloed data systems across program-specific areas within the SEA. If, for example, teacher certification records are not collected with the principal teacher counts each

year, an SEA might publish two different numbers as to how many teachers it has. Educators and the public become suspicious of the data in general when two different numbers surface for similar indicators.

Partly to avoid the conflicting number problem, Florida was one of the first states to gather all of its information into a single data warehouse. But for years, the state was finding pockets of unincorporated data tucked here and there within the SEA that were being gathered by different program areas according to their own rules, enabling different areas within the SEA to produce a number contradictory to one produced by the data warehouse.

7. Train the users of data to understand and use data.

When the first NCLB "report cards" appeared, teachers and parents were almost entirely unschooled in data analysis. Since then, data literacy appears to be improving. But every time a state changes a program, procedure or report, its successful implementation depends on good training of data users. State and local education agencies must teach their stakeholders how to read and interpret reports about their students and schools.

Each year, staff in Hawaii's Student Assessment Section visit schools and districts to provide training on the state's standardized reports. They meet primarily with principals and administrators. Although some tend to just hand the data and reports off to their staff, many are becoming much more comfortable with and adept at using the data. Increasingly, Hawaii's educators feel confident about backing up decisions with the data available from these reports.

8. Adapt to changing culture of data-driven decisionmaking.

As more data become infused throughout the education system, states must build the capacity of the SEAs, LEAs, parents and other stakeholders to use data on a daily basis for decisionmaking. Just as doctors base their diagnoses and prescriptions on research-based findings

and corporations analyze data to determine product and marketing effectiveness, so must educators, policy-makers and parents base their decisions on data.

The way to do this is to make data readily accessible and useable via a wide array of diagnostics, reports and analyses geared toward answering specific questions about such things as academic growth, program cost effectiveness and teacher preparation. As changes in policies and programs are made because of early analyses, more questions will arise, and other data may be needed. SEAs must be responsive to ongoing changes in the culture of data, whether they

are changes in technology, types of data to collect or requests for reports and analyses.

9. Assess the role of vendors in developing sophisticated and useful reporting and analysis tools.

Vendors are critical partners in the development of state longitudinal data systems, especially as many states struggle with budget shortfalls and limited staffing. Although many states try to build as much in-house capacity as possible, most states need to contract out some of the work. In some states, vendors or contractors are housed at the SEA and become part of its culture, sensitive to its unique needs and context.

Developing Reporting and Analysis Tools: Three States' Stories

Hawaii: Getting Longitudinal Data to Schools Quickly

Unique among school systems in the United States, Hawaii is a statewide system, without districts or counties. The islands each act as a region for organizational purposes but have no independent authority outside of the state's oversight. The islands do not keep student records apart from those of the SEA. With the records of their roughly 189,000 students already collected into a single dataset, Hawaii became an early convert to a system based on a unique student identifier because the system made mining the data easier. Thus, well before NCLB was passed, Hawaii had been analyzing longitudinal data because it could link student records from year to year and from school to school when students moved or matriculated.

Hawaii's SEA already had a long-standing relationship with a testing vendor. When faced with complying with NCLB, the vendor made it easy for the state to add the necessary tests and avoid the massive start-up demands experienced by others. More complicated was creating an "Accountability Workbook," which

outlined precisely how students and schools were to be held accountable for their performance.

In 2003, Hawaii contracted with an individual contractor to create an Excel-based reporting tool designed to allow individual schools to analyze their own longitudinal student data. The following year, the SEA took over the newly finished tool and has been refining both the tool and its in-house use.

Prior to 2007, Hawaii created a CD every fall containing the Excel-based, confidential student records for each individual school and distributed them by mail. The CD also contained tools necessary to allow district and school-level leaders to create their own reports. A large array of dropdown menus allowed users to generate their own reports. Sophisticated users also could export and manipulate the data in their own Excel spreadsheets. With considerable specificity, the teacher or administrator could open historical records for any child. Each file contained every year's data on the 37 target elements mandated by NCLB. School Improvement Teams or the region's

Central Office could ask and answer questions about how well their initiatives had performed over time.

In the 2006–07 school year, an online portal was created through which the schools can download their own folder of data.

Currently, Hawaii is committed mainly to this one standardized yearly report because it has served the state and the schools well as an information loop. The state expects to continue to refine it to serve those educators charged with improving the function of their schools.

However, a different office within the SEA, the Office of Information Technology Services, currently is building a more robust data warehouse that will link a wider variety of indicators using the student identifier. This effort should generate reports that respond to more general research questions, rather than add to the data the schools already receive.

Florida: Tapping the Powers and Promise of a State Data Warehouse

Florida is an especially good example of why defensible data is critical. As with 23 other states, Florida requires its students to pass high-stakes tests, but Florida requires students to pass these tests at two different points in their academic careers in order to progress to the next level. Third grade students must pass a reading test to matriculate to the 4th grade, and high school students must pass a 10th grade test to get a diploma. Thus, the state's data must be accurate because children's lives are directly affected. The schools, especially those whose results require them to be sanctioned by the state, need fast, meaningful and reliable data to identify weaknesses and adjust their programs accordingly.

Districts send student data to the state, where they are assembled in a data warehouse. However, until recently, even reports to schools of longitudinal stu-

dent data were generated at the state level, from the data warehouse, without giving schools direct access to the year-to-year, student-level source data. Each year, the SEA gave the district its schools' assessment data on a CD. In turn, the districts distributed each school's data to the individual school.

But this is changing. In 2007, Florida is conducting a parallel release of its online tool and the CDs, and in 2008, it plans to release results only online. The state has district representatives who are in contact with the Assessment Office and will help the schools and districts with any problems they have with the online portal, although use of this portal should be fairly intuitive. Both the CD and the online site have reporting tools of various kinds, allowing for users with varying levels of expertise. There are expert tools that allow users to create their own reports, but there are also generic, predefined reports. For example, users can identify the chart they want and select the school plus the subpopulation, and the data warehouse populates the predefined graphics.

Not surprisingly, the quality and size of Florida's dataset makes its research capabilities attractive to outsiders. Universities and federal organizations that track education issues often request permission to conduct research of their own. These external research requests go before a review process, and if the query involves certain specific populations — special education students, for example — the review committee will involve the relevant program office. Once the state understands what the requestor wants and ensures that privacy concerns are met, an agreement is made for the researchers to share their results with the state. In other words, the attractiveness of Florida's information often means that researchers will partner with the state to spend their time crunching Florida's data for the benefit of both the researcher and the SEA.

Hopefully, districts and building-based educators themselves also will become adept at using the state's

robust data. The Web-based portal greatly eases their access to the entire scope of Florida's data capabilities.

The state also is developing a system to deliver test results directly to a teacher's desktop. The state is about halfway through this five-year project.

Ohio: Developing a Homegrown Data-Sharing Portal While Ensuring Privacy

In 1997, the Ohio Office of Enterprise Applications (OEA) purchased Oracle software and continues to build its own software applications on that platform. Although the Office of Accountability designed the content for Ohio's first school accountability report card, the OEA built the report itself. In 1998, the report became standard for all schools and districts.

Each year, the reports were generated through the data warehouse by populating the fields of a report template for each school and district. The agency then printed out enough copies for every parent in the state — close to 2 million. Simultaneously, the OEA was building an online version to obviate the need for paper and printing. The resulting online reports looked a little different than the print version but had the same information.

Although the Ohio SEA was at the forefront of creating data warehouses, the warehouse's utility is limited by the laws governing the unique student identifier — called the State Student Identifier (SSID). SSIDs can be used only within the agency's primary data collection and reporting system, the Education Management and Information System, which includes the data warehouse. The SEA has strong research capabilities within a dataset, but it cannot track K–12 students into public higher education, unemployment, prison or the military.

In fact, the SEA does not have any records with student names at all — only the identifiers. Due to state

law, the SSID assignment system is hosted externally at a regional service center, and the external host is responsible for assisting the districts in assigning identifiers to students when they first enter the system. Testing vendors send test results directly to the schools, which negotiate directly with the vendor in the event of mistakes; the SEA is not involved in school testing issues. Schools then send the cleaned data to their district offices, which each have a "regional entity," called the Information Technology Center (ITC), to manage their data. The ITC confirms each child's code and then strips out the child's name and identifying information before sending the data on to the SEA.

Restrictions on the use of identifiers make for some awkwardly executed research, although the SEA manages to fulfill most data requests. According to the agency, its work could be more efficient and elegant, but the restrictions have forced some creative solutions, such as the powerful Data-Driven Decisions for Academic Achievement system, or D3A2. (See www.d3a2.org/tools.asp.[3])

Concerned that it was spending too much time managing data at a high level — cooperating with federal requirements, state compliance issues and bird's-eye research — OEA initiated the work that became D3A2 to give more help directly to the teachers and the students. (Now, the agency does not host or oversee it.)

Through D3A2, starting in fall 2006, teachers in 12 pilot districts were issued passwords that allow them to see data relating only to their own students. Administrators can see the data for their school only. The passwords also tell the system administrators who is looking at the data, an added measure of security for student privacy.

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[3] Data Quality Campaign, *Data Use Drives School and District Improvement,* Quarterly Issue Meeting: September 25, 2006, Washington DC, www.DataQualityCampaign.org/activities.

Now, educators can use their own computers to search a vast database that gives them not only results for each of their students, but also how the child scored on each individual test item. With its intentionally easy-to-use interface, teachers can manipulate data to see how their African-American students performed on a single test question, for example. Or they can determine which students have not grasped a particular skill. Such data will help teachers and school communities build on strengths and pinpoint weaknesses in their program. These data give them hard evidence they can use to back up a decision, adjust a program or advocate for a certain change.

Furthermore, D3A2 also offers a "Content Repository" — a vast array of "lesson plans, activities, assessment items and instructional resources in a variety of formats from some of Ohio's most trusted content providers. These resources are aligned to Ohio state standards and searchable either by the standards or keywords," according to the program's Web site. A large committee of stakeholders, led by the SEA, regularly vets new content offerings before they are included. As of 2007, everything offered is free — shareware and materials that can be copied and distributed. Such a tool has great potential to improve classroom practice and, in time, student achievement.

Conclusion

A consistent refrain is heard in statehouses, district offices and school staff meetings: "We need quality education data to do our jobs." Good information is critical to both the processes and the outcomes of a high-performing education system, and increasing numbers of voices, both inside and outside the system, are calling for this issue to be a national priority. It is widely acknowledged that vital policy conversations now under way — conversations about increasing the rigor and relevance of high school, improving

teacher quality, promoting higher graduation rates and reducing achievement gaps — cannot be successful unless they are informed by reliable longitudinal data.

We must build the will and understanding to use this information for policy and program decisions. Designing and deploying sophisticated and user-friendly reporting and analysis tools is vital to informing these policy conversations.

Resources

American Association of School Administrators.
www.aasa.org/links/content.cfm?ItemNumber=2626

Consortium on School Networking.
www.3d2know.org

Mid-continent Research for Education and Learning.
www.mcrel.org/PDF/LeadershipOrganization
Development/5031TG_datafolio.pdf

National School Boards Association.
www.Nsba.org/site/page.asp?TRACKID=&DID=
8648&CID=402

Wayman, Jeffrey C., 2005. *Involving Teachers in Data-Driven Decision Making: Using Computer Data Systems to Support Teacher Inquiry and Reflection,* Journal of Education for Students Placed at Risk, Vol. 10, No. 3, pp. 295–308.
www.leaonline.com/doi/abs/10.1207/s15327671
espr1003_5?cookieSet=1&journalCode=espr

State Contacts:

Florida Department of Education
Jeff Sellers, Assistant Deputy Commissioner of Accountability, Research, and Measurement, jeff.sellers@fldoe.org

Hawaii Department of Education
Robert McClelland, Director of Systems Accountability, robert_mcclelland@notes.k12.hi.us

Ohio Department of Education
Michael Carmack, Director of Office of Enterprise Application, michael.carmack@ode.state.oh.us

Vendors used by states for reporting and analysis tools as reported on 2006 Data Quality Campaign survey:

Crystal Reports, Cognos, Edsmart, eScholar, Grow Network, IBM, Infinite Campus, Microsoft SQL, Microstrategy, PCG, Pearson, Powerplay Tools, SAS, Sligo Computer Services and Tetra Data.[4]

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[4] The Data Quality Campaign does *not* endorse any vendor; this is a list of vendors used by states as displayed on the DQC Web site (www.DataQualityCampaign.org/survey_results/vendors_2006.cfm).

CCSSO is a nonpartisan, nationwide, nonprofit organization of public officials who head departments of elementary and secondary education in the states, the District of Columbia, the Department of Defense Education Activity, and five U.S. extra-state jurisdictions.

CCSSO provides leadership, advocacy and technical assistance on major educational issues. The Council seeks member consensus on major educational issues and expresses their views to civic and professional organizations, federal agencies, Congress and the public.

DATAQUALITY
C A M P A I G N
Using Data To Improve Student Achievement

www.DataQualityCampaign.org

The Data Quality Campaign is a national, collaborative effort to encourage and support state policymakers to improve the collection, availability and use of high-quality education data and to implement state longitudinal data systems to improve student achievement. The campaign aims to provide tools and resources that will assist state development of quality longitudinal data systems, while providing a national forum for reducing duplication of effort and promoting greater coordination and consensus among the organizations focusing on improving data quality, access and use.

Managing partners of the Data Quality Campaign include:

▶ Achieve, Inc.

▶ Alliance for Excellent Education

▶ Council of Chief State School Officers

▶ Education Commission of the States

▶ The Education Trust

▶ National Association of State Boards of Education

▶ National Association of System Heads

▶ National Center for Educational Accountability

▶ National Center for Higher Education Management Systems

▶ National Governors Association Center for Best Practices

▶ Schools Interoperability Framework Association

▶ Standard & Poor's School Evaluation Services

▶ State Educational Technology Directors Association

▶ State Higher Education Executive Officers

Endorsing partners of the Data Quality Campaign include:

▶ ACT

▶ Alliance for Quality Teaching

▶ American Association of Colleges for Teacher Education

▶ American Association of State Colleges and Universities

▶ The American Board for Certification of Teacher Excellence

▶ APQC

▶ The Business Higher Education Forum

▶ Center for Teaching Quality

▶ College Summit, Inc.

▶ Consortium for School Networking

▶ Educational Policy Institute

▶ ETS

▶ GreatSchools

▶ Institute for a Competitive Workforce

▶ Institute for Educational Leadership

▶ Jobs for the Future

▶ League of Education Voters Foundation

▶ Learning Point Associates

▶ National Alliance for Public Charter Schools

▶ National Association of Secondary School Principals

▶ National Council for Accreditation of Teacher Certification

▶ National Education Knowledge Industry Association

▶ Pathways to College Network

▶ Postsecondary Electronic Standards Council

▶ Roads to Success

▶ The Southern Regional Education Board

For more information about the Data Quality Campaign, please visit www.DataQualityCampaign.org.