

Madalyn Quinlan  
Office of Public Instruction  
January 17, 2005

EXHIBIT 9  
DATE 01/18/2005  
HB 2

House Bill 2 – Joint Appropriations Subcommittee on Education

**Decision Package: NP-62 Student Education Information System**

For more than a decade now, the Office of Public Instruction has worked on automating its data collection and information management systems. The automation of these systems has allowed us to:

- Exchange data efficiently with school districts;
- Reduce errors by building edit checks into the programs to prevent the submittal of erroneous, invalid or incomplete data;
- Eliminate duplicate data collections; and
- Analyze and release data and information sooner.

While we have been able to speed up the data collection and analysis process, we have not fundamentally changed the process. In many cases, we have automated and improved a paper process. The Office of Public Instruction is at a cross-roads with its information systems. We have stretched our existing processes to be as efficient and integrated as possible, but it is time for a fundamental change in our information processes and systems.

**How have expectations changed?**

I would like to give you a series of examples to demonstrate how the world of education data has changed in the past decade.

*Refer to **How have expectations changed regarding education and data-driven decision-making?***

As you can see, the nature of the questions has become much more complex. We are no longer focused on averages for a group of students. Now and in the future, we are and will be focused on subgroups of students and disaggregating the data to determine how better meet the needs of all students. Good educators have always wanted to know if the programs and services that we are offering our students are effective. With current technologies we have the ability to measure the effectiveness of our education strategies, to assess student progress, to make adjustments to our educational services, and to measure again whether the adjustments lead to increased student achievement.

## **Why are we experiencing this increased demand of information? Is it NCLB?**

NCLB, with its focus on subgroups of students, has certainly created an increased demand for data. Many of the questions in the *How have expectations changed?* handout are related to NCLB. But, the expectations of educators, policymakers, parents, and the public have changed as well. Montana schools spend more than \$1 Billion annually to educate our K-12 students. As the legislature struggles to define a basic system of quality public schools, it is a sound investment to allocate resources to improve our knowledge and understanding of the outcomes of our education system. Now that the technology is available to efficiently and securely exchange data between schools and the state, while maintaining the confidentiality of individual student records, we have the opportunity to greatly improve the quality of our decision-making based on valid and reliable data.

In 2003, the Montana Office of Public Instruction contracted with Intelligence Consulting to assist OPI in the development of a planning document for the design and implementation of an Education Data Warehouse and a Student Record System. The document was completed in June 2004.

Refer to *Montana's Education Reporting System*.

The 37-page planning document describes the concept of a Data Warehouse and its benefits. The document also describes the 12 Steps for Implementation of a Student Record System.

- What is a Data Warehouse? (refer to p. 4 of MERS)
- What is a Student Record System? (refer to p. 8 of MERS)

## **How will this benefit schools?**

Many schools in Montana are ahead of the Office of Public Instruction in terms of investing in student information systems. All of the 7 Class AA systems, and many of the Class A, have purchased and/or contracted for such systems. In the Northwest and SouthCentral regions of Montana, consortiums of school districts are developing student information systems. They have urged OPI to move forward in the development of a statewide system. Many are fearful (with some justification) that they may have to alter the systems that they are currently implementing once a statewide

system comes on board. They are eager for the state education agency to develop policies and standards for these systems.

The implementation of a education data warehouse at the state level, including features that allow for more efficient data exchanges, will make the local systems that districts are building more valuable. An example... One individual in the Great Falls School District reported to OPI that she spent more than 7 hours entering disaggregated enrollment data into OPI's electronic report form this fall. If that same data could have been extracted from the Great Falls SIS, the district would have saved significant staff time and would not need to be concerned about data entry errors. Multiply this example by 350+ school systems, and you begin to see the efficiencies that could be realized.

**Is OPI confident that we can do this project?**

I have told you about our 12 step program, now I would like to tell you about our support system. In the summer 2004, OPI joined a consortium with 20 other states called the Decision Support Architecture Consortium, a consortium sponsored by the Council of Chief State School Officers. As a member of the consortium, we have benefited from the expertise of national experts in education data systems. Consultants to the consortium have assisted OPI in developing a "gap analysis" to identify what's lacking in our information systems, in understanding the larger context that we operate in as we develop a student record system and in developing cost estimates.

Refer to *Decision Support Architecture Consortium Framework*

This framework shows the core processes in the center; these are processes that are core to every state education agencies. Around the core processes are the information systems that support the core processes. While OPI plans to start with the Student ID Management & Record Collection, our planning process needs to assess how this system fits into the entire agency operations.

Through the DSAC, National Center for Education Statistics, and information sharing with other states, OPI has access to advisors and experts to assist us with Montana's education data systems.

This proposal is an opportunity for the Montana legislature to assist our educational system and decision-making process for at least 15 years to

come (an probably longer) by creating a system of reusable, longitudinal data. We ask for your support of this important request.