

Maryland

MARYLAND STATE DEPARTMENT OF EDUCATION

Project Start Date: 12/01/2005

Project End Date: 11/30/2008

Amount awarded: \$ 5,690,718

The Maryland State Department of Education (MSDE) currently maintains a data warehouse containing student accountability data without individual student record linking. There are separate databases that feed the data warehouse upon completion of cleansing, transforming, and ensuring the quality of the data. Two websites are used to distribute annual report card information to the community at the state, local school system, and individual school levels. In addition, a decision support site exists to support schools in making school improvement decisions and to disseminate information about content standards and assessments.

There are a variety of data collection processes taking place among the divisions at the Maryland Department of Education, and these data are collected from a variety of sources and mediums. There is an established file transfer process for local school systems to submit data using standardized formats, which is used for much of the data collected from school districts. Data received from local school systems are subjected to quality assurance procedures to assure the highest possible accuracy.

The State has been meeting federal compliance requirements by submitting the required data and reports, but the increased requirements have impacted the amount of additional data analysis that can be accomplished. While MSDE has looked into the establishment of a unique student identifier and a longitudinal database, implementation has been limited by a lack of funding and technical assistance. The awarding of a grant to develop a statewide longitudinal data system from the U.S. Dept. of Education's Institute of Education Sciences (IES) in November or 2005 provides an opportunity to build this system.

In a cooperative initiative, the Center of Technology Education at Johns Hopkins University and the Maryland State Department of Education have developed a longitudinal data system and an on-line Individual Education Plan (IEP) for Special Education students. This system is key to decision-making and instructional improvement because many of Maryland's schools are failing to make Adequate Yearly Progress (AYP) based on the achievement of the special education student group. Much of what was learned in the development of this system also will inform the development of the system for all students.

To further facilitate its commitment to high achievement and data-driven decision-making, Maryland needs to have a relational database linking all data elements for all students. The State needs the capacity to look at growth models, program effectiveness, and the effects of mobility. School staff and students would benefit from the ability to transfer records between schools more efficiently when students transfer, as well as track a student's status with reference to the State graduation requirements.

Statewide Longitudinal Data System Grant Program Work

The IES grant extends over a three-year grant period. During that time, MSDE, in partnership with the Center for Technology in Education (CITE) at the John Hopkins University, will plan and implement a longitudinal data system with an incremental approach that will meet the increased demands of the future. For the result to meet the needs of all, it is essential that the system is carefully planned with input from all stakeholders.

Year 1-Much of the first year will be spent in establishing the project office and personnel, and conducting a comprehensive needs assessment, which will focus first on the needs of the various Departments within MSDE to meet federal requirements. This needs assessment will also result in a data dictionary that will meet federal requirements and lead to the design of the data architecture and hardware architecture. At this same time, specifications for development of a unique student identifier generation system will be developed and implementation of a unique student identifier will be accomplished, ultimately resulting in the ability to link all student data records.

Year 2 will be a continuation of implementation, with the addition of evaluation components, report development and distribution, and professional development for users. It will also emphasize the expansion of methods to ensure the accuracy of data, the development and implementation of policy for data access, and security parameters. Key to the success of this phase is the development of definitions and calculation algorithms to ensure consistency across reports. Federal reporting will be automated to the fullest extent possible. Year 2 will begin the planning phase for local school system access, and a pilot with some school systems will begin. Finally, sustainability plans will be finalized and implementation of procurement will begin.

Year 3 will allow for the extension of system functions to local school systems after the policies, business rules, quality assurance, security and access methodologies are in place. School systems will receive support from the system in understanding student status, especially in regards to proficiency on the Maryland School Assessment and meeting graduation requirements. Regular processes to sustain the system will be implemented and a plan for continual staff development will be developed to support personnel changes.

System evaluation will be on-going to determine the system's quality and effectiveness in meeting the reporting and decision-making needs of stakeholders.

Outcomes Summary

- Increase accuracy and timeliness of local, state, and federal reporting.
- Improve teaching and student achievement.
- Improve instruction, enhance programs and services, and inform policy through the delivery of high-quality professional development and technical assistance to local school systems.
- Provide research and decision-making tools that leads to better understanding of educational issues and the implementation of effective strategies that comply with Federal, State, FERPA, and COMAR regulations for privacy.
- Improve programs and interventions for children through the use of analytic models.
- Share information and data across institutions within the state and across states.
- Sustain Maryland's statewide longitudinal data system.

Other Work Planned

MSDE will work with higher education to facilitate development of a Birth to Grade16 longitudinal data and reporting system to provide longitudinal records and research capabilities on the comprehensive Maryland educational experience. In addition, linking data with other educational data systems such as teacher certification, financial and budgetary planning, and long term student outcome data will be explored.