Montana Legislative Audit Division
Performance Audit Summary

The Collection and Use of Graduate and Dropout Data June 2006

Introduction

The Legislative Audit Committee prioritized a performance audit of Montana high school graduate and dropout rates to examine the requirements associated with the calculations and their use. The overall intent was to determine the effect and cause of any deviations from established requirements. The scope of this audit focused on three activities: the current process of compiling data on graduate and dropout students, how the implementation of a new student information management system affects the process, and how graduate and dropout data is used.

We established four main objectives:

- Determine if guidelines and definitions provided by OPI are designed to create consistent, accurate data on high school graduates and dropouts.
- Determine if schools consistently follow guidelines and definitions for reporting graduates and dropouts.
- Determine if the new student information management system will provide comparable and uniform information on graduates and dropouts.
- Determine if data on high school graduates and dropouts is used by educational stakeholders for the purpose of making informed decisions.

Background

Although supervision and control of schools is dispersed among different entities, the Superintendent of Public Instruction administers the majority of services to students and teachers in over 400 school districts, as well as compiles data from schools. Based on both state and federal requirements, the Office of Public Instruction (OPI)'s Division of Measurement and Accountability obtains student graduate and dropout numbers, which schools/districts submit each fall.

Federal Requirements

The federal No Child Left Behind Act (NCLB) (PL 107-110), enacted in 2002, holds states and the schools under their jurisdictions accountable for student performance. While student achievement must be the principal indicator of performance under NCLB, statewide accountability systems are also required to incorporate one additional academic outcome. At the secondary level, this "other academic indicator" is required by NCLB to be the high school graduate rate. States are required to set goals for themselves, and then each school and district is to meet these goals through various performance indicators.

Calculations of Graduate Data

Although NCLB requires states to submit graduate data, it does not mandate how it is collected or calculated. The National Center for Education Statistics (NCES) suggests states use a Leaver-Based Graduation Rate. This definition follows groups of students throughout their four years of high school to calculate a graduation rate. Montana, along with 31 other states, currently uses this definition.

Calculations of Dropout Data

NCLB does not require states to directly report dropout rates. However, the annual number of dropouts is needed to calculate the "federal" graduation rate. Montana collects dropout data from schools for local and state analysis as well. Montana uses an annual dropout rate. This rate is established by dividing the annual enrollment by the number of dropouts in a given year. The NCES recommends this method for calculating dropout rates. It produces the lowest rate of any method since it is only a snapshot of one year.

School Visits

The Montana High School Completer and Dropout Data Collection Handbook instructs schools on how to collect/input data to OPI for graduates and dropouts, as well as provides information on calculating dropout and graduation rates. We visited 14 schools around the state to observe and interview school personnel on how they use the OPI handbook and apply student status coding procedures. We compared OPI data to documentation maintained by the schools on the number of reported student graduates, dropouts and completers. ***In all 14 schools visited, 100 percent of the data reviewed at the schools was consistent to that reported by OPI.***

Examples of Inconsistency

Even though numbers are reported consistently we found inconsistencies in the manner in which status codes were applied to students (i.e. what constitutes a graduate, completer and dropout). Schools have different interpretations on how and when to apply OPI student status

codes. In 9 out of 14 schools visited, we found inconsistencies. For example, some schools categorize a student passing a General Education Development (GED) test as a completer, regardless of where they took the test. OPI, in accordance with NCLB, requires students to pass a GED test through a program administered by the school district in order to be coded as a completer. A student who passes a GED test through another entity other than the school district should be coded a dropout.

The Office of Public Instruction should establish a quality assurance system that includes: on-site technical assistance training on status code procedures and requirements, and random verification of student status coding and data submitted.

Documentation Needed for District Approved GEDs and Home School Students

There are also some limitations to OPI guidelines. OPI guidelines do not require verification of home school students and GED test recipients from the district. Although OPI's handbook states a home-schooled student or a GED test recipient within the district is not a dropout, audit work showed variation on the level of confirmation schools require for a student in these categories. In order for data to be accurate, OPI must be able to distinguish between students who drop out, get a GED, or who transfer to another school or home school. ***Montana school districts already require documentation of transcripts for students transferring among other public schools; the same standard could apply to documentation of home schooling or the entity that issued a GED test.***

OPI's Plan for Improving Data Collection and Accuracy

OPI began exploring the creation of a comprehensive educational reporting system in 2003. The goal was to develop an infrastructure for the educational community to gather school data via the Internet, manage and secure the data, and make the data accessible to decision makers. In 2004, OPI contracted with an independent consultant to survey schools on the data currently collected and the systems they use to manage data. One of the most important findings of the consultant's survey was that the majority of respondent districts were more than ready to see OPI move forward and initiate data improvements.

In 2005, OPI requested funds to implement the student information management system. The legislature appropriated $2.8 million for the purpose of a new statewide K-12 education data system and approved four full time staff. Most recently, OPI assembled an evaluation team. The team met on regular occasions, discussing and conducting research on similar systems and, eventually, discussing the request for proposal (RFP) for the creation and implementation of the new system.

The New System

The new system will have three main components:

- Student information, including student identifier and data elements,
- Special education data,
- An electronic data warehouse.

OPI will begin initial implementation in the fall of 2006 by assigning a student identifier to each student enrolled in public school, K-12. OPI will still collect data on the number of graduates and dropouts, but with the student identification component it will be possible to roll up the data and look at overall numbers or drill down to see the status of one particular student.

Human Element Still Exists

The new student information system will improve OPI's current data collection and compilation in various ways, but individuals will still decide which status code to enter for a student. If individuals are not using student status codes consistently among schools, the new student information system will not provide comparable data.

Data is Integral to Decision-Making

Educational stakeholders in Montana agree graduate and dropout data is an integral piece of information, specifically at the state level. They consider it to be an important tool in efficient decision-making and public reporting. Educational stakeholders believe the public has a right to know the number of students graduating and have access to that data. The importance of paying attention to students who are at risk of dropping out is also important. The number of individuals in prison and on social welfare without a degree is high. The expense on the back end of "at-risk" kids is much more than if efforts would focus on the problem while they are in school.

Accessibility and Use of Data

Section 10.55.603, ARM, states the assessment of educational programs and their effectiveness should be examined through assessment results as well as graduate and dropout numbers. Audit work found no formal plan for educational stakeholders and the public to access and analyze data stored in the new system. The RFP does request the system have an interactive querying tool to enable data driven decision-making. ***A more comprehensive system that provides various means to access data would be more effective.***

For a complete copy of the report (06P-11) or for further information contact the Legislative Audit Division at 406-444-3122; e-mail to lad@mt.gov; or check the web site at http://leg.mt.gov/audit.