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Missouri State Auditor

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ELEMENTARY AND
SECONDARY
EDUCATION

High School
Graduation Rates



High school graduation rates reported by some Missouri schools, as well as the statewide rates reported to the federal government by the Department of Elementary and Secondary Education (DESE), are unreliable and inaccurate

State and federal laws require Missouri schools to report high school graduation rates each year. Because this information is relied on by parents, educators and policy makers, this audit reviewed whether reported graduation rates were accurate and reliable.

DESE calculated high school graduation rates based on inaccurate data reported by schools

DESE used data reported by schools to calculate 2004 high school graduation rates for local and national reporting purposes. However, that information did not include data on approximately 19,000 of the 75,000 students who started ninth grade four years earlier. (See page 7)

Schools had incorrectly classified students as transfers or did not retain proper documentation

Our review of transfer records at 11 schools disclosed student departures had not been properly documented and/or classified. Our review of school records for the 2,653 students classified as transfers showed transcript request forms were on file for 57 percent of those students; however, these schools had no documentation available for 11 percent of the students. While school personnel had notations indicating the school where another 29 percent of the students had transferred, no transfer request forms had been received and/or retained. Documentation showed the remaining 3 percent of the students had dropped out instead of transferred. (See page 7)

Noncompliance with record retention requirements contributes to problem

Discussions with school personnel at the 11 schools disclosed personnel at only 1 school had been aware of record retention requirements. One school, due to decreased storage space, shredded all transfer records except for those from the 2004 school year. Another school stored all transfer records for each year in separate boxes, however boxes from school years 2000 through 2003 could not be located for our review. None of the schools could locate all transcript requests for students that exited the school prior to graduation. (See page 8)

New system under development could help schools track students

Missouri is currently developing the Missouri Student Information System (MOSIS) to help local schools and districts track individual students for testing purposes. Once installed in all of the Missouri public schools it will have the capability to track and identify students in pre-kindergarten to twelfth grade. This system should also allow DESE to verify high school graduation rates calculated by individual schools and to more accurately report statewide high school graduation rates in compliance with federal law. DESE has not developed a plan to fully implement the MOSIS and does not anticipate fully implementing the student tracking capabilities until 2008. (See page 8)

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Abbreviations

NCLB	No Child Left Behind Act
RSMo	Missouri Revised Statutes
GED	General Educational Development
NGA	National Governor's Association
DESE	Department of Elementary and Secondary Education
MOSIS	Missouri Student Information System



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Honorable Matt Blunt, Governor
and
Members of the General Assembly
and
D. Kent King, Commissioner
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State and federal laws require Missouri schools to report high school graduation rates each year. Because this information is relied on by parents, educators and policy makers, we focused review objectives on whether the high school graduation rates reported by Missouri schools, as well as statewide rates reported to the federal government, have been accurate and reliable.

The results of our work questions the accuracy of high school graduation rates reported by Missouri schools as well as the statewide rate reported to the federal government. We found the Department of Elementary and Secondary Education (DESE) used inaccurate data reported by schools to calculate the high school graduation rates used for local and national reporting purposes. We also found schools:

- classified students as transfers when they should have been recorded as dropouts,
- classified students as transfers without supporting documentation,
- are not required to receive documentation before classifying students as withdrawing to home school, and
- counted students who participated in a General Educational Development (GED) Option Program as graduates.

Our audit was conducted in accordance with applicable standards contained in *Government Auditing Standards* issued by the Comptroller General of the United States, and included such procedures as we considered necessary in the circumstances. This report was prepared under the direction of John Blattel. Key contributors to this report were John Luetkemeyer, Norma Payne, Kelly Davis, and Andria Hendricks.

A handwritten signature in black ink that reads 'Claire McCaskill'.

Claire McCaskill
State Auditor

Introduction

On January 8, 2002, President George W. Bush signed the No Child Left Behind Act (NCLB). The calculation and reporting of high school graduation rates is a component of the public reporting and accountability provisions of the NCLB. The NCLB requires all states to choose a methodology to calculate their high school graduation rates.¹

According to state law,² a school accountability report card must be produced for each public school district and each public school building in a school district. The purpose of the report card is to provide educational statistics and accountability information in a standardized and easily accessible form. The information reported includes the high school dropout and graduation rates. In 2004, Missouri high schools graduated 56,119 students from the public school system, and Missouri reported a graduation rate of about 86 percent. Missouri schools reported high school graduation rates ranging from a low of 45 percent to a high of 100 percent.

The data needed to compile the annual report card is reported by schools via a web based Core Data Collection System. The data reported is supposed to account for the progression of students entering the ninth grade through graduation. The data collected includes the beginning enrollment, transfers in, transfers out, dropouts, retentions, and graduates. DESE uses the information to calculate each high school's dropout and graduation rates for local and national reporting requirements.

There are three primary methods currently being used in the United States to calculate high school graduation rates. Missouri is one of 30 states (including the District of Columbia) using the National Center for Education Statistics method. The National Center for Education Statistics method used by Missouri is similar to the state law which defines the graduation rate as: "The quotient of the number of graduates in the current year as of June thirtieth divided by the sum of the number of graduates in the current year as of June thirtieth plus the number of twelfth graders who dropped out in the current year plus the number of eleventh graders who dropped out in the preceding year plus the number of tenth graders who dropped out in the second preceding year plus the number of ninth graders who dropped out in the third preceding year."³

¹ NCLB Sec. 1111(b)(2).

² Section 160.522, RSMo.

³ Section 160.011, RSMo.

In Missouri, school attendance is mandatory for children between the ages of 7 and 16. However state law also allows parents to educate their child at home.⁴ Home school students are not counted as dropouts.⁵

During 2003, Missouri began the GED Option Program. Participation in the program is voluntary for the schools and the students. DESE guidance allows Missouri schools with students receiving a passing score on the GED test and complying with the other requirements of the GED Option Program to award these students a diploma and count them as high school graduates.⁶

The GED Option Program has 25 requirements to successfully complete the program. These requirements include:

- Students must be at least 17 years old and at least one year behind their cohort.
- Students must attend a minimum of 15 hours of academic instruction per week.
- Students must take the Missouri Assessment Program tests appropriate for their age/grade level.
- Students must pass the United States and Missouri Constitution tests.
- Students must participate in appropriate counseling and life-skills training to assist them with job-readiness, financial management and independent living skills.

Inaccurate High School Graduation Rates Are a National Problem

Various studies have concluded incorrect, unreliable, and overstated high school graduation rates have been a problem in schools across the nation.⁷ These studies cite various factors affecting the accuracy of high school graduation rates. These factors included unreliable student transfer and dropout records, lack of integrated information systems that can verify whether students that left one school attended another high school, student mobility, whether states audit or otherwise verified student data, and whether school staff have been adequately trained. Thirty-six states reported that 80 percent to 97 percent of their high school students graduated on

⁴ Section 167.031, RSMo.

⁵ Missouri Department of Elementary and Secondary Education, *CORE Data Collection System Manual*, Version 17, Revised July 2005, p. 172.

⁶ http://dese.mo.gov/divcareer/ged_option.htm

⁷ Daria Hall, *Getting Honest About Grad Rates: How States Play the Numbers and Students Lose*, The Education Trust, June 2005. Christopher B. Swanson, *The New Math on Graduation Rates*, The Urban Institute, July 2004. Christopher B. Swanson, *The Real Truth about Low Graduation Rates, An Evidence-Based Commentary*, The Urban Institute, August 2004. United States Government Accountability Office, *No Child Left Behind Act, Education Could Do More to Help States Better Define Graduation Rates and Improve Knowledge about Intervention Strategies*, September 2005.

time, while 11 reported rates less than 80 percent and four did not report. The Education Trust performed a series of analyses showing high school graduation rates are closer to 70 percent.⁸ The National Governor's Association (NGA) formed a task force to deal with issues related to high school graduation data.

Missouri's methodology to calculate high school graduation rates uses student dropout data as one of its key components. National studies have found dropout data is unreliable, as schools often do not know whether students transferred or dropped out.⁹ In these instances, many schools assume students transferred, resulting in inaccurate dropout reporting and high school graduation rates. One study¹⁰ notes there are other respected methods that do not rely on suspect student dropout data to analyze high school graduation rates. This study used a methodology known as the Cumulative Promotion Index. This methodology compares the number of tenth graders in one year to the number of ninth graders in the previous year to estimate the percentage of ninth graders promoted. The same calculation is performed for the other high school grades and the four ratios are multiplied to arrive at an estimated graduation rate.

In 2000, 75,355 Missouri students entered the ninth grade and in 2004 57,660 (77 percent) students graduated, a 9 percent difference from Missouri's reported statewide high school graduation rate of 86 percent.

Scope and Methodology

To determine whether high school graduation rates reported by Missouri schools and the statewide rate reported to the federal government were accurate and reliable, we examined the documentation used by DESE to calculate these rates. We also examined supporting documentation for students who exited the 2004 graduating class at 10 randomly selected schools throughout the state and from another school that had been identified as being a leader in accurately classifying student departures. We reviewed various national studies to learn more about issues associated with accurate reporting of high school graduation rates, and obtained further information on reporting systems currently being developed in the state of Washington to better track students. Finally, we examined departmental and local school policies and procedures to determine whether adequate documentation existed to verify student transfers, and students withdrawing

⁸ Daria Hall, *Getting Honest About Grad Rates: How States Play the Numbers and Students Lose*, The Education Trust, June 2005.

⁹ See footnote 7.

¹⁰ The National Governor's Association, *graduation counts*, July 2005.

to home school; and how schools reported students receiving a diploma through the GED Option Program.

In order to gain assurance to the accuracy of data in the Core Data Collection System used to calculate high school graduation rates, we performed data validation procedures. However, we found a significant percentage of students were not properly accounted for in this system. As a result, information in the Core Data Collection System was not sufficiently reliable for the purposes of this report. Therefore, we developed recommendations to better ensure high school graduations are accurately calculated and reported.

We requested comments on a draft of our report from the Commissioner of the Department of Elementary and Secondary Education. We conducted our work between December 2004 and October 2005.

High School Graduation Rates Reported by Schools Are Often Inaccurate

High school graduation rates reported by local schools, as well as statewide rates reported by the Department of Elementary and Secondary Education (DESE) to the federal government, are often unreliable and inaccurate. This situation occurs primarily because, (1) DESE report calculations are based on erroneous data provided by schools that failed to account for many students, and (2) schools often record students as transfers even though required documentation was not available and retained.

DESE Calculated High School Graduation Rates Based on Inaccurate Data

DESE used data reported by schools to calculate 2004 high school graduation rates for local and national reporting purposes. However, that information did not include data on approximately 19,000 students. Based on data submitted by 489¹¹ high schools, in 2000 approximately 74,471 students started the ninth grade in those high schools, with an additional 44,692 transferring in during the next 4 years of high school. Of these students, the schools reported 56,119 graduated, 8,923 dropped out, and 35,047 transferred, leaving 19,074 (16 percent) students unaccounted.

The NGA Task Force on State High School Graduation Data stated schools and districts must be held accountable for accurate data collection and reporting.

According to DESE officials, core data on student enrollment obtained at the beginning of the school year is an independent number and is not compared to the ending enrollment of the prior school year. In addition, the Core Data System does not contain an edit check to ensure information entered accounts for all students, and the information is not otherwise verified or audited by DESE. Currently, DESE has no penalty provisions for schools that submit inaccurate data.

Student Transfer Records Lacking or Inaccurate

Our review of transfer records at 11 schools disclosed student departures had not been properly documented and/or classified. Our review of school records for the 2,653 students classified as student transfers showed transcript request forms were on file for 1,510 (57 percent) of those students; however, these schools had no documentation available for 300 (11 percent) students. While school personnel had notations indicating the school where another 764 (29 percent) students had transferred to, no transfer request forms had been received and/or retained. Documentation

¹¹ Our analysis did not include schools that were classified as special education cooperatives, county juvenile detention centers, alternatives schools, gifted centers, residential treatment centers, area career centers, hospitals, special school districts, or schools for severely handicapped students. We also excluded two schools that converted to K-8 status and one school that started reporting in 2003.

showed the remaining 79 (3 percent) students had dropped out instead of transferred.

The Core Data Manual and DESE training materials define a transfer student as a student who leaves and whose records are transferred to any other educational setting. In addition, a NGA study¹² recommended transfers from one school to another be documented with a transcript request from a receiving school and any student without this information be recorded as a non-graduate or dropout. The task force felt this recommendation would give the schools an incentive to find the students and accurately determine their status which is important to ensure the graduation calculation is correct.

Noncompliance with record retention requirements contributes to problem

Discussions with school personnel at the 11 schools disclosed only 1 school had been aware of record retention requirements. One school, due to decreased storage space, shredded all transfer records except for those from the 2004 school year. Another school stored all transfer records for each year in separate boxes, however boxes from school years 2000 through 2003 could not be located for our review. None of the schools could locate all transcript requests for students that exited the school prior to graduation. Without adequate supporting documentation, the schools are unable to determine students were correctly classified.

Schools are required by the Secretary of State's records retention schedule to retain dropout, and student transfer documentation for ten years.¹³ Although the Secretary of State's records retention rule indicates what is required, DESE's Core Data Collection System Manual used by Missouri school districts does not refer to these record retention requirements.

New system could help schools track students

A recent national study identified the state of Washington as a leader in compiling accurate high school graduation rates. The state counts all students whose location is unknown as a dropout. Unless a formal transcript request is received from another school, or the student dies, any student who leaves school before completing with a regular diploma is a dropout.¹⁴ The state recently implemented the Core Student Record System, a statewide, student-level data system. The system assigns each student in the state a statewide unique student identification number. Regardless of how many times a student enters or exits the state school system the student will only

¹² The National Governor's Association, *graduation counts*, July 2005.

¹³ Secretary of State - Local Records Retention Schedule.

¹⁴ Daria Hall, *Getting Honest About Grad Rates: How States Play the Numbers and Students Lose*, The Education Trust, June 2005.

have one identifying number. This system allows schools to verify when students actually transfer to another school in the state, or exit the state school system.

Missouri is currently developing the Missouri Student Information System (MOSIS) to help local schools and districts track individual students for testing purposes. Once installed in all of Missouri public schools it will have the capability to track and identify students in pre-kindergarten to twelfth grade. This system should also allow DESE to verify high school graduation rates calculated by individual schools and to more accurately report statewide high school graduation rates in compliance with the NCLB. However, to date DESE has focused on using this system to better track student test scores, and has not considered the student tracking capabilities of this system to calculate high school graduation rates to be a high priority. DESE has not developed a plan to fully implement the MOSIS and does not anticipate fully implementing the student tracking capabilities due to funding issues until 2008.

Documentation Is Not Required for Home School Students

Some schools tested had no documentation for students withdrawing to home school because state law does not require such documentation. Four of nine schools that had students withdraw to home school did not maintain any documentation. The five remaining schools maintained written statements for some students from parents or guardians that they were withdrawing their children to home school.

The school with the largest population of students that were coded as withdrawing to home school mailed the parent or guardian a letter that stated, "we assume you have decided to home school your child...if this is not the case, please notify the guidance office" when students were absent for 10 or more days. The other ten schools we tested classified students who had been absent for periods ranging from 8 to 15 consecutive days as a dropout.

Without notification students are withdrawing to home school, schools are not able to accurately verify these students are not dropouts.

GED Students Are Counted as Graduates

DESE guidance as documented on its website allows Missouri schools with students receiving a passing score on the GED test and complying with the other requirements of the GED Option Program to award these students a diploma and count them as high school graduates. These students are being counted as graduates even though a recent NGA study concluded students earning credentials by passing a GED test should be not be counted as a

high school graduate per the NCLB regulations.¹⁵ In addition, these students are not required to obtain as many credit hours, or meet the requirements that other high school students must meet to be considered a high school graduate. Table 2.1 shows statistics we compiled from data provided by the DESE:

Table 2.1: GED Option Program Statistics

Category	2003	2004	2005
Districts Approved	130	204	204
Districts Reporting Program Results	58	66	59
Districts Issuing Regular Diploma	34	43	40
Districts Issuing Alternative Diploma	24	23	19
Students Enrolled	978	1,274	1,653
Students Passing GED	308	686	915

Source: DESE GED Option Program

The GED Option Program was designed to allow students who might not have otherwise stayed in school the opportunity to do so. DESE officials indicated the GED Option Program is not just a "GED" program because it has other requirements the student must satisfy to complete the program.

Conclusions

The results of our work question the accuracy of high school graduation rates reported by Missouri schools. These rates cannot be relied upon by parents, educators, and policy makers because DESE used inaccurate information reported by schools for calculation and reporting purposes. This information was erroneous primarily because schools did not account for many students transferring to the school system, and because students were classified as transfers even though required documentation was not available at the schools.

Missouri is currently implementing a new system that if used to its full potential, would allow DESE and schools to better track individual students and more accurately report the status of students exiting schools. However, DESE does not anticipate this system being fully implemented until at least 2008 due to current funding limitations.

We also found state law does not currently require parents and guardians who choose to home school their children to notify the local school. As a result, schools often are unable to obtain adequate supporting documentation students withdrew to home school.

¹⁵ The National Governor's Association, *graduation counts*, July 2005.

Missouri currently allows students who graduate through the GED Option Program to be counted as high school graduates. These students are not required to meet the requirement of other high school graduates and the NCLB regulations prohibit counting GED students as high school graduates.

Recommendations

We recommend the Commissioner of the Department of Elementary and Secondary Education:

- 2.1 Develop systems and procedures to ensure information submitted by schools accurately accounts for all students. In this regard, we recommend DESE ensure the timely implementation of the MOSIS.
- 2.2 Establish procedures to verify schools accurately classify students who depart prior to graduation. In addition, DESE should emphasize current policies and regulations that require transcript request forms to be received, filed, and retained before a student is classified as a transfer.
- 2.3 Revise policies that allow GED Option Program students to be classified as high school graduates.

We recommend the General Assembly:

- 2.4 Pass legislation requiring persons who home school students to file written documentation with the local school.

Agency Comments

The department will take these recommendations under advisement.