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State Auditor

An Audit Report on

Enrollment Reporting by Texas Public Community, State, and Technical Colleges

September 2009

Report No. 10-006



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Overall Conclusion

Texas public community, state, and technical colleges' errors in contact hour¹ data for the 2010-2011 base year (the Summer 2008, Fall 2008, and Spring 2009 semesters) were below the 2 percent error rate allowed by the General Appropriations Act (81st Legislature). Therefore, no adjustments to the colleges' appropriations are necessary as a result of errors in the colleges' reported contact hour data.

Identified errors in contact hour data totaled approximately \$1,080,000 in net over-funding of contact-hour-based appropriations (see text boxes). All identified errors fell below the 2 percent allowable error rate. Contact-hour-based formula funding appropriations to all colleges for the 2010-2011 biennium total \$2,036,238,125.

Enrollment Testing

The State Auditor's Office conducted on-site audits at eight colleges. All Texas public community, state, and technical colleges were asked to self-report any known errors in contact hour data.

Testing of contact hour data included collecting data reported to the Higher Education Coordinating Board (Coordinating Board), testing that data against data in colleges' student information systems, and examining controls at the colleges to determine whether data is collected and reported correctly.

Enrollment Audit Overview

The General Appropriations Act (81st Legislature), Rider 8, page III-191, specifies that the accuracy of contact hour data that Texas public institutions of higher education submit for use in formula funding is subject to audit by the Texas State Auditor's Office.

The General Appropriations Act also specifies that: "The calculation of revised appropriation amounts shall allow each institution an error rate of up to 2 percent of the total contact hour formula appropriations to that institution for the biennium."

Over- and Under-funding

In analyzing contact hour funding, auditors identified contact-hour-based funding as Academic Education funding and Vocational/Technical Education funding. The amounts of these types of funding are determined based on qualifying contact hours reported by the colleges.

"Over-funding" occurs when a college reports more qualifying contact hours than it is entitled to report. This results in that college receiving more funding than it would have been allocated if those items had been reported correctly.

"Under-funding" occurs when a college reports fewer qualifying contact hours than it is entitled to report. This results in that college receiving less funding than it would have been allocated if those items had been reported correctly.

Summary of Information Technology Review

Auditors assessed the information technology (IT) controls over the colleges' student information systems and other automated processes used for enrollment

¹ A contact hour is a measurement of the number of hours that students receive instruction.

reporting. Auditors evaluated general IT controls, including access to student data, password management, and controls over the transmission of enrollment data to the Coordinating Board. Auditors also evaluated application controls, including input controls, process controls, and output controls.

Auditors identified issues related to controls over the student information systems and the reliability of certain colleges' enrollment data. To minimize risks, auditors communicated details about these issues separately in writing to the colleges.

Summary of Objectives, Scope, and Methodology

The objectives of this audit were (1) to enhance accountability for enrollment reporting by reviewing self-reported enrollment data from Texas public institutions of higher education and auditing the accuracy of the base year data used for formula funding and (2) to report on the use of distance education as a component of state-funded enrollment hours.

The scope of this audit included the colleges' contact hour data for the 2010-2011 base year (the Summer 2008, Fall 2008, and Spring 2009 semesters). Each college is allowed up to a 2 percent error rate for enrollment-based appropriations related to the variables audited at that college. Auditors also selected eight colleges for on-site audits based on a risk assessment. Auditors did not audit the accuracy of colleges' self-reported errors or the distance education programs at the eight colleges visited.

The audit methodology consisted of conducting interviews; collecting and reviewing information; and performing tests, procedures, and analyses against predetermined criteria. Auditors obtained the colleges' reported information from the Coordinating Board and audited the accuracy of enrollment reporting.

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Detailed Results

Chapter 1

Errors in Colleges' Contact Hour Data Were Within the Allowable Error Rate

Identified errors in contact hour data totaled approximately \$1,080,000 in net over-funding of contact-hour-based appropriations. All identified errors were below the 2 percent allowable error rate.

The State Auditor's Office conducted on-site fieldwork at eight colleges that were selected based on a risk assessment (see text box for a list of the eight colleges).

Colleges Selected for On-Site Audits

- Alamo College District-Northwest Vista College.
- Central Texas College District.
- Dallas County Community College District.
- Navarro College.
- South Texas College.
- Tarrant County College District.
- Texas Southmost College.
- Tyler Junior College.

Auditors conducted interviews, tested reports, and obtained detailed data from the student information systems to further analyze the accuracy of these colleges' contact hour reporting.

Auditors identified several errors², all of which fell below the 2 percent allowable error rate. Specifically:

- Alamo College District-Northwest Vista College under-reported two courses. When projected to the student population, these errors resulted in approximately \$419,000 in under-funding, or 0.29 percent of this college's 2010-2011 appropriations.
- Central Texas College District incorrectly reported an unfunded student as being funded for one course. For another course, it also reported for funding a student who had dropped a course prior to the census date.³ When projected to the student population, these errors resulted in approximately \$275,000 in over-funding, or 0.65 percent of this college's 2010-2011 appropriations. The Central Texas College District did not consistently charge a three-peat course fee⁴, and one student's residency was reported incorrectly. These errors do not have an effect on the amount of formula funding the college may receive.
- Navarro College over-reported one course. When projected to the student population, this error resulted in approximately \$19,000 in over-funding,

² Auditors tested a sample of students and projected the error rates identified during testing across all students for the three terms comprising the 2010-2011 base year (the Summer 2008, Fall 2008, and Spring 2009 semesters). Auditors did not project the colleges' self-reported errors because it was assumed that the colleges reported all known errors.

³ The census date is the date by which a college must certify a student's enrollment to the Higher Education Coordinating Board. Generally, this is the 12th class day during a regular term semester.

⁴ Colleges are allowed to charge a fee for courses being taken for a third or more times because these are not submitted for formula funding.

or 0.06 percent of this college's 2010-2011 appropriations. Navarro College also reported nine students' classification levels incorrectly. The incorrect reporting of students' classification levels does not have an effect on the amount of formula funding the college may receive.

- Texas Southmost College over-reported the number of students for three courses by one student. When projected to the student population, these errors resulted in approximately \$76,000 in over-funding, or 0.27 percent of this college's 2010-2011 appropriations. It also did not consistently report the tuition status for two students taking dual credit courses. This reporting inconsistency does not have an effect on the amount of formula funding the college may receive.
- South Texas College incorrectly reported nine classification levels and two residency codes. These errors do not have an effect on the amount of formula funding the college may receive.
- Tyler Junior College incorrectly reported four students' classifications, four students' tuition statuses, and one student's residency. These errors do not have an effect on the amount of formula funding the college may receive.
- Tarrant County College District incorrectly reported three students' classification levels and one student's residency. These errors do not have an effect on the amount of formula funding the college may receive.

While conducting on-site audits at the eight colleges, auditors also identified issues related to controls over the student information systems and the reliability of certain colleges' contact hour data. Weaknesses identified at some colleges included:

- A lack of written policies and procedures for management of access to student information systems.
- User access not being promptly removed for former employees or employees whose job duties no longer require them to have access.
- Weak password controls that did not (1) require adequate password complexity, (2) force users to change passwords regularly, (3) allow for the expiration of passwords, or (4) allow users to change their own passwords.
- Not consistently archiving enrollment reporting data. This increases the risk that data could be overwritten without an adequate audit trail to determine what data was changed.

Auditors communicated specific details about these weaknesses separately in writing to each college.

The State Auditor's Office asked colleges to self-report any known errors in contact hour data.

Table 1 lists the colleges' enrollment errors, including errors found in testing and self-reported data. Specifically:

- Forty-seven colleges (82 percent) over-reported contact hours that totaled approximately \$1,433,000 in funding. The largest over-reporting, which was at Central Texas College District for the two errors discussed earlier, resulted in over-funding of approximately \$362,000 (which consists of the errors identified during auditor testing totaling \$275,000 and other self-reported errors totaling \$87,000), or 0.85 percent of that college's 2010-2011 appropriations.
- One college (2 percent), Alamo College District, under-reported contact hours that totaled approximately \$353,000 in funding (which consists of the errors identified during auditor testing totaling \$419,000 in under-funding and other self-reported errors totaling \$66,000 in over-funding), or 0.24 percent of that college's 2010-2011 appropriations.
- Nine colleges (16 percent) reported that they identified no errors.

Table 1

Community, State, and Technical Colleges' Contact Hour Data Error Amounts ^a (Includes Both Self-reported Errors and Errors Identified by Auditors)			
College/District	Maximum Allowable Error Amount (Two Percent of Total 2010-2011 Biennium Appropriations)	Total 2010-2011 Biennium Self-Reported Errors and Errors Identified Auditors	Errors as a Percentage of Total 2010-2011 Biennium Appropriations
Colleges That Over-Reported Contact Hour Data (Note: Over-reporting results in over-funding)			
Alvin Community College	\$ 338,268	\$ 6,551	0.04%
Amarillo College	686,131	3,354	0.01%
Angelina College	336,289	166	0.00%
Austin Community College	1,881,136	18,237	0.02%
Brazosport College	234,026	166	0.00%
Central Texas College District	847,317	361,830	0.85%
Cisco Junior College	225,501	6,520	0.06%
Clarendon College	106,902	4,239	0.08%
Coastal Bend College	272,640	1,711	0.01%
College of the Mainland	254,282	444	0.00%
Collin County Community College District	1,273,376	19,787	0.03%
Dallas County Community College District	3,997,073	152,835	0.08%

Community, State, and Technical Colleges' Contact Hour Data Error Amounts ^a
(Includes Both Self-reported Errors and Errors Identified by Auditors)

College/District	Maximum Allowable Error Amount (Two Percent of Total 2010-2011 Biennium Appropriations)	Total 2010-2011 Biennium Self-Reported Errors and Errors Identified Auditors	Errors as a Percentage of Total 2010-2011 Biennium Appropriations
Del Mar College	746,347	7,114	0.02%
El Paso Community College District	1,345,967	5,907	0.01%
Frank Phillips College	113,797	19,221	0.34%
Grayson County College	297,625	26,733	0.18%
Hill College	290,631	659	0.00%
Houston Community College System	2,813,485	15,912	0.01%
Howard County Junior College District	476,472	6,348	0.03%
Kilgore College	502,784	834	0.00%
Lamar Institute of Technology	375,660	881	0.00%
Lamar State College-Orange	239,845	1,405	0.01%
Laredo Community College	514,031	955	0.00%
Lee College	411,388	468	0.00%
Lone Star College System	2,464,634	18,433	0.01%
McLennan Community College	563,507	2,000	0.01%
Midland College	411,701	11,351	0.06%
Navarro College	606,332	73,965	0.24%
North Central Texas Community College District	420,395	3,196	0.02%
Odessa College	338,951	886	0.01%
Panola College	153,044	384	0.01%
Paris Junior College	370,896	1,678	0.01%
San Jacinto College	1,555,340	17,396	0.02%
South Plains College	604,402	4,241	0.01%
South Texas College	1,222,748	271,078	0.44%
Southwest Texas Junior College	308,181	809	0.01%
Tarrant County College District	2,118,815	70,330	0.07%
Texarkana College	372,068	630	0.00%
Texas Southmost College	559,313	214,187	0.77%
Texas State Technical College-Harlingen Campus	854,719	4,627	0.01%
Texas State Technical College-Waco Campus	1,123,732	12,895	0.02%
Texas State Technical College-West Texas Campus	472,867	7,221	0.03%
Tyler Junior College	726,304	7,066	0.02%

Community, State, and Technical Colleges' Contact Hour Data Error Amounts ^a
(Includes Both Self-reported Errors and Errors Identified by Auditors)

College/District	Maximum Allowable Error Amount (Two Percent of Total 2010-2011 Biennium Appropriations)	Total 2010-2011 Biennium Self-Reported Errors and Errors Identified Auditors	Errors as a Percentage of Total 2010-2011 Biennium Appropriations
Vernon College	235,874	259	0.00%
Victoria College, The	272,643	9,367	0.07%
Weatherford College	329,365	34,347	0.21%
Wharton County Junior College	340,195	4,360	0.03%
TOTAL OVER-REPORTING COLLEGES	\$ 35,006,999	\$ 1,432,983	
College That Under-Reported Contact Hour Data (Note: Under-reporting results in under-funding)			
Alamo College District	\$ 2,905,369	\$ 353,389	0.24%
TOTAL UNDER-REPORTING COLLEGES	\$ 2,905,369	\$ 353,389	
Colleges That Reported No Errors and for Which Auditors Did Not Identify Any Errors			
Blinn College	\$ 948,287	\$ 0	0.00%
Galveston College	189,174	0	0.00%
Lamar State College-Port Arthur	302,695	0	0.00%
Northeast Texas Community College	169,280	0	0.00%
Ranger College	83,592	0	0.00%
Temple College	331,004	0	0.00%
Texas State Technical College-Marshall Campus	150,382	0	0.00%
Trinity Valley Community College	477,514	0	0.00%
Western Texas College	160,470	0	0.00%
TOTAL ALLOWABLE ERROR AMOUNT FOR COLLEGES THAT REPORTED NO ERRORS	\$ 2,812,398	\$ 0	

^a The totals in this table were rounded to the nearest dollar.

Distance Education Is a Component of State-funded Enrollment

All eight colleges that auditors visited offer students distance education opportunities. Some colleges have worked together to form the Virtual College of Texas, which allows students to enroll at one college and take courses from other colleges throughout Texas. Seven of the eight colleges offer a degree through distance education. Auditors obtained information from each college regarding their distance education programs; however, auditors did not audit the distance education programs.

Background Information

Title 19, Texas Administrative Code, Section 4.103, defines distance education as a course in which the majority of the instruction occurs when the students and instructor are not in the same physical setting. A course is considered to be offered by distance education if students receive more than one-half of the instruction at a different location than the instructor. The course may be formula-funded or offered through extension, and it may be delivered to on-campus students and to those who do not take courses on the main campus.

Title 19, Texas Administrative Code, Section 4.107, allows institutions of higher education to submit for formula funding the following types of academic credit courses:

- Distance education courses delivered to Texas and non-Texas residents located on-campus or at another location in Texas.
- Distance education courses delivered to Texas residents located out of state or out of the country.
- Study-abroad courses.
- Study-in-America courses.

The colleges visited offer distance education courses in multiple ways. These include:

- Web-based or Internet broadcast courses.
- Courses offered on interactive video, videotape, DVD, or other type of electronic media.
- Off-campus, face-to-face courses.
- Courses offered through broadcast television or videoconferencing.
- Hybrid courses, which are combinations of some of the above methods and may also include on-campus, face-to-face components.

To reduce the risk that the tests or work submitted for distance education courses were completed by someone other than the enrolled student, the colleges assign distance education students unique identification numbers or names and passwords that they must use to log in to online courses. Some colleges also require students to take exams on campus or to use a proctored testing site. Some use various forms of software to detect plagiarism or to prevent students from accessing unauthorized Web sites or programs during examinations.

The State Auditor's Office attempted to compare distance education programs across the eight colleges. However, the colleges do not collect the same information in the same ways, and some information was not available. Table 2 on the next page lists summary information about the distance education offerings at the eight colleges visited.

Table 2

Summary of Distance Education Offerings at the Eight Colleges That Auditors Visited							
College	Methods Used to Offer Distance Education	Number of Course Sections Offered ^a	Number of Courses Offered ^b	Total Contact Hours Reported ^c	Number of Degree or Certificate Programs Offered ^d	Number of Subject Areas Offered ^e	Number of Students in Tested Sample with at Least One Distance Education Course ^f
Alamo College District-Northwest Vista College	Online; Hybrid (online and face-to-face)	486	102	22,464	None	35	5
Central Texas College District	Online; Two Way Interactive Video; Multiple or Other Electronic Media (CD, SD Card)	7,467	233	2,031,056	41	29	27
Dallas County Community College District	Television; Online	Information Not Available	Information Not Available	956,816	46	Information Not Available	7
Navarro College	Online	200	90	753,492	60	Information Not Available	11
South Texas College	Online; Telecourse	Information Not Available	272	Information Not Available	8	43	2
Tarrant County College District	Instructional Television; Online; Videoconferencing	Information Not Available	189	2,013,360	22	36	9
Texas Southmost College	Online; Videoconferencing	Information Not Available	162	Information Not Available	16	11	3
Tyler Junior College	Online; Telecourses via Television/ Video; Hybrid (combination of the above methods and/or face-to-face)	861	177	843,360	35	35	17

^a The Number of Course Sections Offered is the total number of sections offered for a course by distance education. There may be multiple sections offered per course.

^b The Number of Courses Offered is the total number of courses offered by distance education.

^c The Total Contact Hours Reported is the total number of contact hours offered by distance education. This number is the sum of the number of contact hours for each course section offered.

^d The Number of Degree or Certificate Programs Offered is the total number of degree or certificate programs available using distance education.

^e The Number of Subject Areas Offered is the total number of different subjects for which a distance education course is offered.

^f During testing, auditors identified the students who were taking at least one distance education course.

Appendices

Appendix 1

Objectives, Scope, and Methodology

Objectives

The objectives of this audit were:

- To enhance accountability for enrollment reporting by:
 - ♦ Reviewing self-reported enrollment data from Texas public institutions of higher education.
 - ♦ Auditing the accuracy of the base year data used for formula funding.
- To report on the use of distance education as a component of state-funded enrollment hours.

Scope

The scope of this audit included the colleges' contact hour data for the 2010-2011 base year (the Summer 2008, Fall 2008, and Spring 2009 semesters). Each college is allowed up to a 2 percent error rate for enrollment-based appropriations related to the variables audited at that college. Auditors also selected eight colleges for on-site audits based on a risk assessment. Auditors did not audit the accuracy of colleges' self-reported errors or the distance education programs at the eight colleges visited.

Methodology

The audit methodology consisted of conducting interviews; collecting and reviewing information; and performing tests, procedures, and analyses against predetermined criteria. Auditors obtained the colleges' reported information from the Higher Education Coordinating Board (Coordinating Board) and audited the accuracy of enrollment reporting using the following procedures:

- Tested the accuracy of the information provided by the colleges to the Coordinating Board by comparing the information reported by colleges to the data in the colleges' student information systems. The testing was designed to cover the necessary information for enrollment reporting, such as whether the student was enrolled by the census date, whether tuition was paid by the official payment date, the number of semester credit hours and contact hours reported per student, the number of students reported for a course, and other student information (classification, residency, and tuition status).

- Identified and assessed the access controls and the output processes for the systems providing information for enrollment reporting. These systems included the student information and reporting systems.
- Determined whether the primary factor (contact hours) used as the basis of the formula funding appropriations by the 81st Legislature was consistent with (1) the number of hours in the Coordinating Board's database and (2) the number reported by individual colleges.
- Reviewed colleges' self-reported errors in contact hours.
- Calculated funding adjustments (if any) due to inaccurately reported contact hours.

Criteria used included:

- The General Appropriations Act (81st Legislature).
- Texas Education Code, Chapters 51, 54, 61 and 130.
- Title 19, Texas Administrative Code, Chapters 4, 9, 10 and 13.
- The Coordinating Board's *Reporting and Procedures Manual for Texas Community, Technical, and State Colleges*.

Project Information

Audit fieldwork was conducted from April 2009 through August 2009. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The following members of the State Auditor's staff performed the audit:

- Jennifer Brantley, CPA (Project Manager)
- Robert Bollinger, CPA, CFE (Assistant Project Manager)
- Erin Cromleigh
- Michael Gieringer, CFE
- Michele Pheeny
- Jeremy Schoech
- Lisa Thompson

- Charles P. Dunlap, Jr., CPA (Quality Control Reviewer)
- Verma Elliott, MBA, CIA, CGAP (Audit Manager)

Statewide-Enrollment Data

Enrollment steadily increased for public higher education institutions from the Fall 2004 semester through the Fall 2008 semester. Table 3 lists the statewide enrollment by type of higher education institution during this time period.

Table 3

Statewide Student Enrollment by Type of Higher Education Institution					
Type of Institution	Fall 2008	Fall 2007	Fall 2006	Fall 2005	Fall 2004
Public University	509,136	497,195	491,140	484,999	482,124
Independent College or University ^a	115,048	114,042	113,400	112,715	113,451
Public Two-year College ^b	617,507	587,244	575,712	566,071	557,373
Independent Two-year College	615	651	702	698	697
Public Health-related Institution	17,684	16,735	16,103	15,536	15,089
Independent Health-related Institution	2,737	2,759	2,757	2,783	2,671
Totals	1,262,727	1,218,626	1,199,814	1,182,802	1,171,405
^a Amberton University does not receive Tuition Equalization Grant (TEG) funds and is not included.					
^b Headcount enrollments in public two-year colleges include only students enrolled in credit courses.					

Source: Higher Education Coordinating Board Web site.

Copies of this report have been distributed to the following:

Legislative Audit Committee

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The Honorable Joe Straus III, Speaker of the House, Joint Chair
The Honorable Steve Ogden, Senate Finance Committee
The Honorable Thomas “Tommy” Williams, Member, Texas Senate
The Honorable Jim Pitts, House Appropriations Committee
The Honorable Rene Oliveira, House Ways and Means Committee

Office of the Governor

The Honorable Rick Perry, Governor

Entities mentioned in this report

Members of the Board of Regents and President of each college listed in this report



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