

John Keel, CPA State Auditor

An Audit Report on Performance Measures at Four Colleges in the Texas State Technical College System

June 2, 2006

Members of the Legislative Audit Committee:

The Texas State Technical College System (System) reported reliable results for 14 (70 percent) of the 20 performance measures audited for fiscal year 2005. The System reported performance measure results for its four colleges in Marshall, Waco, Harlingen, and West Texas. Specific results were as follows:

• The System reported reliable performance measures for two (40 percent) of the five measures audited at Texas State Technical College – Marshall.

Background

Entities report results for their key measures to the Legislative Budget Board's budget and evaluation system, which is called the Automated Budget and Evaluation System of Texas, or ABEST.

- The System reported reliable performance measures for three (60 percent) of the five measures audited at Texas State Technical College Waco.
- The System reported reliable performance measures for four (80 percent) of the five measures audited at Texas State Technical College Harlingen.
- The System reported reliable performance measures for each of the five measures audited at Texas State Technical College West Texas.

To improve the reliability of the performance measures it reports, the System should perform supervisory review of performance measure calculations and review data that has been entered into the Automated Budget and Evaluation System of Texas (ABEST) before it is released into ABEST. It should also develop written policies and procedures for documenting, calculating, reviewing, and reporting performance measures.

The State Auditor's Office assessed the accuracy of reported performance measures based on criteria identified in the *Guide to Performance Measure Management: 2000 Edition* (SAO Report No. 00-318, December 1999).

The attachment to this letter contains additional details on the performance measures tested, certification results, recommendations, and management's responses.

Phone: (512) 936-9500 Fax: (512) 936-9400 Internet: www.sao.state.tx.us Members of the Legislative Audit Committee June 2, 2006 Page 2

The System generally agrees with our recommendations, and we appreciate its cooperation during this audit. If you have any questions, please contact Verma Elliott, Audit Manager, or me at (512) 936-9500.

Sincerely,

John Keel, CPA State Auditor

Attachment

- cc: Members of the Texas State Technical College System Board of Regents
 - Dr. William E. Segura, Chancellor, Texas State Technical College System
 - Dr. J. Gary Hendricks, Vice Chancellor of Financial and Administrative Services, Texas State Technical College System
 - Dr. Francette Carnahan, Vice Chancellor of Educational Effectiveness, Texas State Technical College System
 - Mr. Randall Wooten, President, Texas State Technical College Marshall
 - Dr. J. Gilbert Leal, President, Texas State Technical College Harlingen
 - Mr. Michael L. Reeser, President, Texas State Technical College West Texas
 - Mr. Elton E. Stuckly, Jr. President, Texas State Technical College Waco
 - Mr. Johnathan Hoekstra, CPA, Director of Audits, Texas State Technical College System



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Attachment

Summary of Performance Measure Certification Results

Auditors tested the accuracy of the 20 key performance measures that Texas State Technical College System (System) reported for fiscal year 2005. The System reported reliable results for 14 (70 percent) of those performance measures.

The System reported the 20 performance measures for its four colleges in Marshall, Waco, Harlingen, and West Texas. Table 1 summarizes the certification results for each college's performance measures.

Table 1

Summary of Performance Measure Certification Results for Four Texas State Technical Colleges						
	Reliable		Unreliable			
College	Number of Key Measures Certified	Number of Key Measures Certified With Qualification	Number of Key Measures That Were Inaccurate	Number of Key Measures for which Factors Prevented Certification	Total Number of Measures Audited	Reliability Percentage
Texas State Technical College - Marshall (for details see Table 2)	0	2	3	0	5	40%
Texas State Technical College - Waco (for details see Table 3)	0	3	2	0	5	60%
Texas State Technical College - Harlingen (for details see Table 4)	0	4	1	0	5	80%
Texas State Technical College - West Texas (for details see Table 5)	0	5	0	0	5	100%
Total	0	14	6	0	20	
Percentage	0	70%	30%	0		70%

A measure is **Certified** if reported performance is within +/-5 percent of actual performance and if controls appear adequate to ensure accuracy for collecting and reporting performance data.

A measure is **Certified With Qualification** if reported performance is within +/-5 percent of actual performance but controls over data collection and reporting are not adequate to ensure continued accuracy.

A measure is **Inaccurate** when reported performance is not within +/-5 percent of actual performance or there are more than two errors in the sample tested.

Factors Prevent Certification when actual performance cannot be determined because of insufficient documentation and inadequate controls or when there is deviation from the measure definition and the auditor cannot determine the correct result.

Attachment An Audit Report on Performance Measures at Four Colleges in the Texas State Technical College System SAO Report No. 06-042 June 2006 Page 1

The System Should Improve its Reviews of and Policies and Procedures for Reporting Performance Measures

For all performance measures tested, the System does not have sufficient controls to ensure its reported performance measures are accurate. Specifically:

- The System does not perform supervisory review of performance measure calculations.
- The System does not review data that has been entered into the Automated Budget and Evaluation System of Texas (ABEST) before it is released into ABEST.
- The System does not have complete written policies and procedures documenting the calculation, review, and reporting of performance measures.

Lack of supervisory review and policies and procedures impairs the accuracy of reported performance measures and, because of this, none of the performance measures tested at any of the four colleges could be certified.

Recommendations

The System should:

- Implement a supervisory review process to ensure that the data entry, calculation, and reporting to ABEST of performance measure results are accurate.
- Develop and implement complete written policies and procedures for calculation, review, and reporting of performance measures.

Management's Responses

We agree with these recommendations. The Vice Chancellor for Educational Effectiveness will assume oversight responsibility for ABEST performance measure reporting and will be responsible for seeing that the recommendations are implemented. Complete written policies and procedures which include standards for accurate calculation and reporting will be in place prior to the November 1, 2006 ABEST reporting date. The policies and procedures will ensure that independent reviews are conducted and documented at the college and system levels prior to and after the data is entered into ABEST. The independent reviews will include multiple layers of controls including but not limited to:

- *Reconciliation of ABEST source data by college representatives; and*
- *Review and certification by both college and system representatives of ABEST reported data.*

The System Should Improve Specific Information Technology Controls

Application controls over information technology appear adequate to ensure that the data supporting the System's performance measures are accurate and reliable. However, there were weaknesses over general controls because the System did not have a documented business continuity plan as required by Title 1, Part 10, Texas Administrative Code, Section 202.24(5). According to the System, it conducted a test of business continuity procedures in April 2005, but it was unable to provide documented results of that test. Not documenting a business continuity plan and properly evaluating the results of testing that plan increases the risk that data could be lost.

The System does not review the automated programs used to calculate performance measures. As a result, the measure for the "Percent of First Time, Full Time, Degree or Certificate Seeking Student Graduated Within Three Years" was inaccurate for every college tested except Texas State Technical College- West Texas. Texas State Technical College - West Texas underreported this measure by 2.48 percent, which was within the plus or minus 5 percent range that is considered accurate.

Recommendations

The System should:

- Develop and document a business continuity plan.
- Document and evaluate the results of its tests of the business continuity plan.
- Review automated programs to ensure that automated calculations of performance measures are accurate.

Management's Responses

We agree with these recommendations. The TSTC System is currently developing a Disaster Recovery and Business Continuity Plan under the direction of the Associate Vice Chancellor for Administrative Services. The expected completion date for this plan is September, 2006. In developing the System Operations Information Technology components within the Disaster Recovery and Business Continuity Plan, the Vice Chancellor for Educational Effectiveness and Associate Vice Chancellor & CIO will form the TSTC System Operations Disaster Recovery Leadership Team which will consist of key leaders from functional areas in System Operations. This team will document and evaluate the results from the April 2005 disaster recovery test, develop business continuity plan, processes and procedures to enable TSTC System operations Information Technology Services Department to respond to a disaster so that critical business functions resume within a defined time frame, amount of loss is minimized, and stricken facilities and equipment are repaired or replaced as soon as possible. These plans will also define the steps and process for annual testing and documentation, on-going risk assessment and plan maintenance.

Performance Measure Certification Results for Texas State Technical College - Marshall

Table 2 presents performance measure certification results for Texas State Technical College - Marshall.

Table 2

Texas State Technical College - Marshall				
Related Objective or Strategy, Classification, and Description of Measure	Fiscal Year	Results Reported in ABEST	Certification Results	
A, Outcome, Percent of First Time, Full Time, Degree or Certificate Seeking Students Graduated Within Three Years	2005	26.47%	Inaccurate	
A, Outcome, Headcount Enrollment	2005	2,276	Certified with Qualification	
A, Outcome, Number of Associate Degrees and Certificates Awarded	2005	118	Inaccurate	
A, Outcome, Number of Minority Students Graduated	2005	29	Inaccurate	
A, Outcome, Administrative Cost as a Percent of Total Expenditures	2005	13.38%	Certified with Qualification	

A measure is Certified if reported performance is within +/-5 percent of actual performance and if controls appear adequate to ensure accuracy for collecting and reporting performance data.

A measure is **Certified With Qualification** if reported performance is within +/-5 percent of actual performance but controls over data collection and reporting are not adequate to ensure continued accuracy.

A measure is **Inaccurate** when reported performance is not within +/-5 percent of actual performance or there are more than two errors in the sample tested.

Factors Prevent Certification when actual performance cannot be determined because of insufficient documentation and inadequate controls or when there is deviation from the measure definition and the auditor cannot determine the correct result.

Percent of First Time, Full Time, Degree or Certificate Seeking Students Graduated Within Three Years

Results: Inaccurate Reported performance is not within +/-5 percent of actual performance or there are more than two errors in the sample tested. This measure was inaccurate because there was an error in the calculation method. Auditors determined that 22.16 percent should have been reported instead of 26.47 percent. This error occurred because the automated queries the System used to calculate this measure were inaccurate. For example, if a student started in January 2002 but did not graduate until August 2005, the query would have

included that student in the count; however, that is inaccurate because this measure should count only students who graduated within three years.

Recommendation

The System should ensure that only data consistent with the performance measure definition and methodology are reported.

Management's Responses

We agree with this recommendation and the Vice Chancellor for Educational Effectiveness will supervise the programming of a standard report that will consistently generate data according to the specifications of the performance measure for three-year graduation rates. Programming for this report will be completed, tested, and in production prior to the November 1, 2006 ABEST reporting date. The independent review process developed by the System will ensure that data is consistently reported for the performance measure definition and methodology.

Number of Associate Degrees and Certificates Awarded

Number of Minority Students Graduated

Results: Inaccurate Reported performance is not within +/-5 percent of actual performance or there are more than two errors in the sample tested. These measures were inaccurate because the System overreported the number of degrees and certificates awarded by 11.02 percent and the number of minority students graduated by 10.34 percent. These errors occurred because the System reported data that was later corrected by the college; however, the performance measure results were not updated.

Recommendation

The System should ensure that it reports performance measures that are based on finalized data or update reported performance measures after finalized data is available.

Management's Responses

We agree with this recommendation and the Vice Chancellor for Educational Effectiveness will include in the written policies and procedures for ABEST reporting a documented schedule for updating ABEST data in conjunction with the final certification of degrees and certificates awarded.

Headcount Enrollment

Administrative Cost as a Percent of Total Expenditures

Results: Certified With Qualification Reported performance is within +/- 5 percent of actual performance, but controls over data collection and reporting are not adequate to ensure continued accuracy. The reported results for these measures were accurate. However, these measures were certified with qualification because the System does not review calculations before they are entered and released into ABEST and does not have complete written policies and procedures for calculating results, conducting reviews, and reporting performance measure results into ABEST. To improve

accuracy, the System should implement the recommendations on page 2.

Performance Measure Certification Results for Texas State Technical College - Waco

Table 3 presents performance measure certification results for Texas State Technical College - Waco.

Table 3

Texas State Technical College - Waco				
Related Objective or Strategy, Classification, and Description of Measure	Fiscal Year	Results Reported in ABEST	Certification Results	
A, Outcome, Percent of First Time, Full Time, Degree or Certificate Seeking Students Graduated Within Three Years	2005	28.57%	Inaccurate	
A, Outcome, Headcount Enrollment	2005	7,005	Certified with Qualification	
A, Outcome, Number of Associate Degrees and Certificates Awarded	2005	950	Certified with Qualification	
A, Outcome, Number of Minority Students Graduated	2005	229	Inaccurate	
A, Outcome, Administrative Cost as a Percent of Total Expenditures	2005	7.30%	Certified with Qualification	

A measure is **Certified** if reported performance is within +/-5 percent of actual performance and if controls appear adequate to ensure accuracy for collecting and reporting performance data.

A measure is Certified With Qualification if reported performance is within +/-5 percent of actual performance but controls over data collection and reporting are not adequate to ensure continued accuracy.

A measure is **Inaccurate** when reported performance is not within +/-5 percent of actual performance or there are more than two errors in the sample tested.

Factors Prevent Certification when actual performance cannot be determined because of insufficient documentation and inadequate controls or when there is deviation from the measure definition and the auditor cannot determine the correct result.

Percent of First Time, Full Time, Degree or Certificate Seeking Students Graduated Within Three Years

Results: Inaccurate Reported performance is not within +/-5 percent of actual performance or there are more than two errors in the sample tested. This measure was inaccurate because there was an error in the calculation method. Auditors determined that 27.10 percent should have been reported instead of the 28.57 percent. This error occurred because the automated queries the System used to calculate this measure were inaccurate. For example, if a student started in January 2002 but did not graduate until August 2005, the query

would have included that student in the count; however, that is inaccurate because this measure should count only students who graduated within three years.

Recommendation

The System should ensure that only data consistent with the performance measure definition and methodology are reported.

Management's Responses

We agree with this recommendation and the Vice Chancellor for Educational Effectiveness will supervise the programming of a standard report that will consistently generate data according to the specifications of the performance measure for three-year graduation rates. Programming for this report will be completed, tested, and in production prior to the November 1, 2006 ABEST reporting date. The independent review process developed by the System will ensure that data is consistently reported for the performance measure definition and methodology.

Number of Minority Students Graduated

Results: Inaccurate Reported performance is not within +/-5 percent of actual performance or there are more than two errors in the sample tested. This measure was inaccurate because the number of minority students graduated was incorrect for 7.7 percent of the items auditors tested. Texas State Technical College - Waco did not adequately review data entry of student application information to ensure that application information was entered accurately. For example, some students were counted as minorities when they were not classified as minorities on

their applications. In addition to these data entry errors, several applications were not available to support the reported performance measure results.

Recommendation

The System should ensure the data received from Texas State Technical College - Waco has been reviewed and is accurate before compiling that data.

Management's Responses

We agree with this recommendation and the Vice Chancellor for Educational Effectiveness will work with TSTC Waco management to develop and implement a documented process for the input and review of student data to ensure data integrity. Headcount Enrollment

Number of Associate Degrees and Certificates Awarded

Administrative Cost as a Percent of Total Expenditures

Results: Certified With Qualification Reported performance is within +/- 5 percent of actual performance, but controls over data collection and reporting are not adequate to ensure continued accuracy. The reported results for these measures were accurate. However, the measures were certified with qualification because the System does not review calculations before they are entered and released into ABEST and does not have complete written policies and procedures for calculating results, conducting reviews, and reporting performance measure results into ABEST. To improve

accuracy, the System should implement the recommendations on page 2.

Performance Measure Certification Results for Texas State Technical College - Harlingen

Table 4 presents performance measure certification results for Texas State Technical College - Harlingen.

Table 4

Texas State Technical College - Harlingen				
Related Objective or Strategy, Classification, and Description of Measure	Fiscal Year	Results Reported in ABEST	Certification Results	
A, Outcome, Percent of First Time, Full Time, Degree or Certificate Seeking Students Graduated Within Three Years	2005	26.61%	Inaccurate	
A, Outcome, Headcount Enrollment	2005	9,535	Certified with Qualification	
A, Outcome, Number of Associate Degrees and Certificates Awarded	2005	560	Certified with Qualification	
A, Outcome, Number of Minority Students Graduated	2005	493	Certified with Qualification	
A, Outcome, Administrative Cost as a Percent of Total Expenditures	2005	8.41%	Certified with Qualification	

A measure is **Certified** if reported performance is within +/-5 percent of actual performance and if controls appear adequate to ensure accuracy for collecting and reporting performance data.

A measure is **Certified With Qualification** if reported performance is within +/-5 percent of actual performance but controls over data collection and reporting are not adequate to ensure continued accuracy.

A measure is **Inaccurate** when reported performance is not within +/-5 percent of actual performance or there are more than two errors in the sample tested.

Factors Prevent Certification when actual performance cannot be determined because of insufficient documentation and inadequate controls or when there is deviation from the measure definition and the auditor cannot determine the correct result.

Percent of First Time, Full Time, Degree or Certificate Seeking Students Graduated Within Three Years

Results: Inaccurate Reported performance is not within +/-5 percent of actual performance or there are more than two errors in the sample tested. This measure was inaccurate because there was an error in the calculation method. Auditors determined that 25.03 percent should have been reported instead of 26.61 percent. This error occurred because the automated queries the System used to calculate this measure were inaccurate. For example, if a student started in January 2002 but did not graduate until August 2005, the query

would have included that student in the count; however, that is inaccurate because this measure should count only students who graduated within three years.

Recommendation

The System should ensure that only data consistent with the performance measure definition and methodology are reported.

Management's Responses

We agree with this recommendation and the Vice Chancellor for Educational Effectiveness will supervise the programming of a standard report that will consistently generate data according to the specifications of the performance measure for three-year graduation rates. Programming for this report will be completed, tested, and in production prior to the November 1, 2006 ABEST reporting date. The independent review process developed by the System will ensure that data is consistently reported for the performance measure definition and methodology.

Headcount Enrollment

Number of Associate Degrees and Certificates Awarded

Number of Minority Students Graduated

Administrative Cost as a Percent of Total Expenditures

Results: Certified With Qualification Reported performance is within +/- 5 percent of actual performance, but controls over data collection and reporting are not adequate to ensure continued accuracy. The reported results for these measures were accurate. However, the measures were certified with qualification because the System does not review calculations before they are entered and released into ABEST and does not have complete written policies and procedures for calculating results, conducting reviews, and reporting

performance measure results into ABEST. To improve accuracy, the System should implement the recommendations on page 2.

Texas State Technical College - West Texas

Table 5 presents performance measure certification results for Texas State Technical College – West Texas.

Table 5

Texas State Technical College - West Texas				
Fiscal Year	Results Reported in ABEST	Certification Results		
2005	35.14%	Certified with Qualification		
2005	8,068	Certified with Qualification		
2005	424	Certified with Qualification		
2005	124	Certified with Qualification		
2005	8.69%	Certified with Qualification		
	Fiscal Year 2005 2005 2005 2005 2005	Fiscal Year Results Reported in ABEST 2005 35.14% 2005 8,068 2005 424 2005 124		

A measure is **Certified** if reported performance is within +/-5 percent of actual performance and if controls appear adequate to ensure accuracy for collecting and reporting performance data.

A measure is **Certified With Qualification** if reported performance is within +/-5 percent of actual performance but controls over data collection and reporting are not adequate to ensure continued accuracy.

A measure is **Inaccurate** when reported performance is not within +/-5 percent of actual performance or there are more than two errors in the sample tested.

Factors Prevent Certification when actual performance cannot be determined because of insufficient documentation and inadequate controls or when there is deviation from the measure definition and the auditor cannot determine the correct result.

Percent of First Time, Full Time, Degree or Certificate Seeking Students Graduated Within Three Years

Headcount Enrollment

Number of Associate Degrees and Certificates Awarded

Number of Minority Students Graduated

Administrative Cost as a Percent of Total Expenditures

Results: Certified With Qualification Reported performance is within +/- 5 percent of actual performance, but controls over data collection and reporting are not adequate to ensure continued accuracy. The reported results for these measures were accurate. However, the measures were certified with qualification because the System does not review calculations before they are entered and released into ABEST and does not have complete written policies and procedures for, calculating results, conducting reviews, and reporting

performance measure results into ABEST. To improve accuracy the System should implement the recommendations on page 2.

Objectives

The audit objectives were to determine whether the System (1) is accurately reporting performance measures to ABEST and (2) has adequate control systems in place over the collection and reporting of its performance measures.

Scope

The audit scope covered selected performance measure results reported by the System for fiscal year 2005. Auditors also reviewed controls over the submission of data used in reporting performance measures and traced performance measure information to the original source documents.

Methodology

The audit methodology included selecting measures to audit, auditing results for accuracy and adherence to the measure definitions, evaluating controls over the performance measure certification process and related information systems, and testing samples of source documentation.

Project Information

Auditors conducted fieldwork from March through April 2006. This audit was conducted in compliance with generally accepted government auditing standards.

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

- Jennifer Wiederhold (Project Manager)
- Ron W. Cornelius, CPA
- David Dowden
- Michael Gieringer, MS-HCA
- Lauren L. Godfrey
- Bruce Lawrence
- Jennifer Lehman, MBA
- Mary Ann Wise, CPA
- Kelly Vogler
- J. Scott Killingsworth, CIA, CGFM (Quality Control Reviewer)

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