AUDIT AND ADVISORY SERVICES

Graduate School of Education
Audit
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April 22, 2011

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Dean Little:

We have completed our audit of the Graduate School of Education (GSE) as per our annual audit plan in accordance with the Institute of Internal Auditors’ Standards for the Professional Practice of Internal Auditing and the University of California Internal Audit Charter.

The purpose of this audit was to assess departmental systems of controls to assure sound business practices are in place to support operational effectiveness and efficiency including compliance with University policies as well as federal and state regulations.

Based upon our preliminary survey and risk assessment as well as input from management, we further refined the scope of this audit to focus on three specific risks areas:

1. Effort reporting by researchers,
2. Completion of requirements to satisfy receiving a teaching credential, and
3. Segregation of duties related to financial and information technology processes.

The effort reporting audit objective relates to whether effort reports were certified in accordance with campus policy. The scope for this objective was effort reports related to the reporting period January to June 2010 that were certified by employees other than those with first-hand knowledge of the individuals total work effort.

The teaching credential program audit objective relates to whether students who are recommended to the California Commission on Teacher Credentialing (CTC) for a teaching credential have satisfied all of their credential requirements. The scope for this objective were the students who satisfied credential requirements during the 2010 fall and spring semesters.

The segregation of duties audit objective relates to whether segregation of duties or other internal controls are in place for selected financial processes. The scope included the activities of cash handling (including petty cash funds), payroll and human resources, procurement (including p-card and travel and entertainment), and information technology.

Based upon our audit work, we observed that:

- With respect to our effort reporting audit objective, internal control practices appeared to effectively mitigate the risk that employees do not have a suitable means of verification of effort reporting when certification is completed by individuals other than those with first-hand knowledge of the individual’s total work effort.
With respect to our teacher credential program audit objective, internal control practices appeared to effectively mitigate the risk of error that a student receives a teaching credential when all the credential requirements are not satisfied.

With respect to our segregation of duties audit objective, segregation of duties or other internal controls appeared to be in place, for mitigating the risk of error or misconduct, for cash handling, payroll and human resources, and procurement.

There were segregation of duties issues that appear not to be mitigated through other internal controls within information technology. One employee within the Education Technology Services Center (ETSC) is responsible for database administration and system and security administration for GSE’s financial, credentialing, student services, and scheduling databases. The risk this condition leaves GSE vulnerable to is the risk of an insider threat because the operations of the database and the underlying infrastructure are supported by a single individual. This condition could potentially impact the integrity, availability, and reliability of the information and/or the function these databases support which could be disruptive to the department’s operations.

During the audit, management took corrective measures to mitigate this risk by transferring responsibility for backing up GSE’s databases to another employee within ETSC.

Please destroy all copies of draft reports and related documents. Thank you to the Graduate School of Education staff for their cooperative efforts throughout the audit process. Please do not hesitate to call on Audit and Advisory Services if we can be of further assistance in this or other matters.

Respectfully reported,

Wanda Lynn Riley
Chief Audit Executive

cc: Executive Vice Chancellor & Provost George Breslauer
Assistant Dean for Administration and Special Projects Lisa Kala
Senior Vice President Sheryl Vacca
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OVERVIEW

Purpose of the Audit

The purpose of this audit was to assess departmental systems of controls to assure sound business practices are in place to support operational effectiveness and efficiency including compliance with University policies as well as federal and state regulations.

Scope of the Audit

As part of our preliminary survey, we considered risks (inherent and residual) and controls associated with administrative processes including, but not limited to, student enrollment management, contract and grant administration, development, human resources, procurement, cash management, accounts payable, accounts receivable, payroll, fixed assets, financial budgeting and reporting, strategic planning, information technology, business continuity and legal compliance.

Based upon our preliminary survey and risk assessment as well as input from management, we further refined the scope of this audit to focus on three specific risk areas:

1. Effort reporting by researchers,
2. Completion of requirements to satisfy receiving a teaching credential, and
3. Segregation of duties related to financial and information technology processes.

We discuss these risk areas in more detail below.

Effort Reporting Audit Objective

The effort reporting audit objective relates to whether effort reports were certified in accordance with campus policy.

The scope for this objective was effort reports related to the reporting period January to June 2010 that were certified by employees other than those with first-hand knowledge\(^1\) of the individuals total work effort\(^2\). We selected a sample of such reports for review. There were a total of 102 effort reports for the reporting period of which 17 were certified by employees other than those with first-hand knowledge of the individual’s total work effort. Three effort reports of the 17 were selected as part of our sample.

Teacher Credential Program Audit Objective

The teaching credential program audit objective relates to whether students who are recommended to the California Commission on Teacher Credentialing (CTC) for a teaching credential have satisfied all of their credential requirements.

\(^{1}\)For example, principal investigators, supervisors, or co-principal investigators.

\(^{2}\)Total work effort means effort the individual incurred on federally sponsored projects, other sponsored projects, and non-sponsored activities. These are the three categories of effort in the effort report.
The scope for this objective was the 114 students who satisfied credential requirements during the 2010 fall and spring semesters:

- 22 for multiple subject credential (MSC),
- 22 for the single subject credential (SSC),
- 58 for the administrative services credential (ASC), and
- 12 for the pupil personnel credential in school psychology (PPC-SP).

Of the 114 total students, we selected 6 for our testing sample: 1 MSC, 2 SSC, 3 ASC, and 1 PPC-SP.\(^3\)

**Segregation of Duties Audit Objective**

The segregation of duties audit objective relates to whether segregation of duties or other internal controls are in place for selected financial and information technology processes.

The scope included the activities of cash handling (including petty cash funds), payroll and human resources, procurement (including p-card and travel and entertainment), and information technology. The audit approach was to inquire of management to identify where segregation of duties issues exists and assessment of the internal controls mitigating this risk.

**Background Information**

**Effort Reporting Audit Objective**

Extramural Funds Accounting policy for effort reporting, *Effort Reporting – Certifying Effort on Sponsored Projects Policy*, specifies that UC Berkeley prefers to have effort reports certified by a person with first-hand knowledge of the individual’s total work effort. However, effort reports can be certified by employees other than those with first-hand knowledge providing they have a suitable means of verification\(^4\).

**Teacher Credential Program Audit Objective**

The California Commission on Teacher Credentialing has approved the Graduate School of Education’s (GSE) program plans leading to the multiple subject, single subject, administrative, and pupil personnel credentials. Internal controls over these programs are shared between GSE central administration (i.e., Student Academic Services) and academic program offices.

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\(^3\) See the Background Information section below for further information regarding these credentials.

\(^4\) Suitable means of verification means supporting documentation that informs the certifier of the work being performed, including an understanding of the individual’s total work effort. Examples given in the policy of acceptable documentation constituting a “suitable means of verification” included time records and emails from the principal investigator.
The program offices indicated in the diagram above are responsible for verifying that the student has satisfied the credential requirements. The Credential Analyst, within Student Academic Services, is responsible for re-confirming the program office’s verification and then processing the recommendation in the CTC’s online application.

**Segregation of Duties Audit Objective**

Responsibility for cash receipts, payroll and human resources, and procurement (including p-card and travel and entertainment) is distributed between the Office of the Dean–Business Services Office and academic departments depending on the circumstances.

The Education Technology Services Center (ETSC) is responsible for GSE’s enterprise-wide information systems. GSE has a number of database systems used for managing their finances, the credential program, student services, and scheduling.

**Summary Conclusion**

**Effort Reporting Audit Objective**

Audit and Advisory Services (A&AS) observed that internal control practices appeared to effectively mitigate the risk that employees do not have a suitable means of verification of effort reporting when certification is completed by individuals other than those with first-hand knowledge of the individual’s total work effort.

**Teacher Credential Program Audit Objective**

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5For example, Academic Talent Development Program (ATDP), Bay Area Writing Project, and Berkeley Evaluation & Assessment Research Center (BEAR)
A&AS observed that internal control practices appeared to effectively mitigate the risk of error that a student receives a teaching credential when all the credential requirements are not satisfied.

*Segregation of Duties Audit Objective*

A&As observed that segregation of duties or other internal controls appeared to be in place for mitigating the risk of error or misconduct for cash handling, payroll and human resources, and for procurement. However, A&AS observed segregation of duties issues that were not mitigated through other internal controls within information technology.

A&AS observed that one employee within ETSC is responsible for database administration as well as system and security administration for GSE’s financial, credentialing, student services, and scheduling databases. This current risk condition leaves GSE potentially vulnerable to an insider threat (i.e., IT sabotage) because the operations of the database and the underlying infrastructure (i.e., servers) are supported by a single individual. This condition could potentially impact the integrity, availability, and reliability of the information and/or the function these databases support which could be disruptive to the department’s operations.

During the audit, management took corrective measures to mitigate this risk by transferring responsibility for backing up GSE’s databases to another employee within ETSC.
SUMMARY OF OBSERVATIONS & MANAGEMENT RESPONSE AND ACTION PLAN

Information Technology Segregation of Duties

Observation

Audit and Advisory Services (A&AS) observed that one employee within the Education Technology Services Center (ETSC) is responsible for database administration as well as system and security administration for the Graduate School of Education’s (GSE) financial, credentialing, student services, and scheduling databases. This current risk condition leaves GSE potentially vulnerable to an insider threat (i.e., IT sabotage) because the operations of the database and the underlying infrastructure (i.e., servers) are supported by a single individual. This condition could potentially impact the integrity, availability, and reliability of the information and/or the function these databases support which could be disruptive to the department’s operations.

Management Response and Action Plan

During the audit, management took corrective measures to mitigate this risk by transferring responsibility for backing up GSE’s databases to another employee within ETSC.