Rensselaer-Columbia-Greene Board of Cooperative Educational Services

Internal Controls Over Selected Financial Operations

Report of Examination

Period Covered:
July 1, 2006 — April 24, 2008

2009M-2

Thomas P. DiNapoli
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Dear Board of Cooperative Educational Services Officials:

A top priority of the Office of the State Comptroller is to help officials manage their resources efficiently and effectively and, by so doing, provide accountability for tax dollars spent to support operations. The Comptroller oversees the fiscal affairs of local governments statewide, as well as compliance with relevant statutes and observance of good business practices. This fiscal oversight is accomplished through our audits, which identify opportunities for improving operations and governance. Audits also can identify strategies to reduce costs and to strengthen controls intended to safeguard assets.

Following is a report of our audit of the Rensselaer-Columbia-Greene Board of Cooperative Educational Services, entitled Internal Controls Over Selected Financial Operations. This audit was conducted pursuant to the State Comptroller’s authority as set forth in Article V, Section 1 of the State Constitution, and Article 3 of the General Municipal Law.

This audit’s results and recommendations are resources for officials to use in effectively managing operations and in meeting the expectations of their constituents. If you have questions about this report, please feel free to contact the local regional office for your county, as listed at the end of this report.

Respectfully submitted,

Office of the State Comptroller
Division of Local Government
and School Accountability
The Rensselaer-Columbia-Greene Board of Cooperative Educational Services (BOCES) is an association of 23 school districts governed by an 11 member Board of Education (Board) elected by the boards of the component districts. The Board is responsible for the general management and control of BOCES financial and educational affairs. The District Superintendent is the chief executive officer of BOCES and is responsible, along with other administrative staff, for the day-to-day management of BOCES and for regional educational planning and coordination. According to the Education Law, the District Superintendent is an employee of both the appointing BOCES and the New York State Education Department and, as such, also serves as a representative of the New York State Commissioner of Education.

Scope and Objective

The objective of our audit was to evaluate BOCES’ internal controls over information technology security and cash disbursements for the period July 1, 2006 to April 24, 2008. Our audit addressed the following related questions:

- Are internal controls over information technology appropriately designed and operating effectively to adequately safeguard the IT assets and electronically-processed data?
- Are internal controls over cash disbursements appropriately designed and operating effectively to adequately account for expenditures?

Audit Results

BOCES officials had not established policies and procedures to adequately safeguard the IT system’s equipment and data. We found that BOCES has not developed a disaster recovery plan. In addition, BOCES does not control local administrator rights, review financial management system audit logs, or have adequate physical security over its IT assets. As a result, BOCES’ IT system, the data it holds, and its physical assets are at an increased risk of loss or abuse.

We examined a sample of 142 claims totaling $786,238 and, except for minor deficiencies that we discussed with BOCES officials, we found that claims contained sufficient documentation to support that they were valid and necessary BOCES expenditures.
Comments of BOCES Officials

The results of our audit and recommendations have been discussed with BOCES officials and their comments, which appear in Appendix A, have been considered in preparing this report. BOCES officials generally agreed with our recommendations and indicated they planned to initiate corrective action.
Introduction

Background

The Rensselaer-Columbia-Greene Board of Cooperative Educational Services (BOCES) is an association of 23 school districts governed by an 11 member Board of Education (Board) elected by the boards of the component districts. The Board is responsible for the general management and control of BOCES financial and educational affairs. The District Superintendent is the chief executive officer of BOCES and is responsible, along with other administrative staff, for the day-to-day management of BOCES and for regional educational planning and coordination. According to the Education Law, the District Superintendent is an employee of both the appointing BOCES and the New York State Education Department and, as such, also serves as a representative of the New York State Commissioner of Education.

BOCES employs approximately 550 employees and provides more than 250 educational and administrative services to its 23 component districts, which serve approximately 40,000 students. BOCES budgeted expenditures for the 2007-08 fiscal year were $61,902,218, which were funded primarily by charges to school districts for services, State and Federal aid, and grants.

Objective

The objective of our audit was to evaluate internal controls over cash disbursements and information technology (IT) security. Our audit addressed the following related questions:

- Are internal controls over information technology appropriately designed and operating effectively to adequately safeguard BOCES IT assets and electronically-processed data?

- Are internal controls over cash disbursements appropriately designed and operating effectively to adequately account for expenditures?

Scope and Methodology

We examined internal controls over cash disbursements and technology equipment and data security of BOCES for the period July 1, 2006 to April 24, 2008.

We conducted our audit in accordance with generally accepted government auditing standards (GAGAS). More information on such standards and the methodology used in performing this audit are included in Appendix B of this report.
Comments of BOCES Officials and Corrective Action

The results of our audit and recommendations have been discussed with BOCES officials and their comments, which appear in Appendix A, have been considered in preparing this report. BOCES officials generally agreed with our recommendations and indicated they planned to initiate corrective action.

The Board has the responsibility to initiate corrective action. Pursuant to Section 35 of the General Municipal Law, Section 2116-a (3)(c) of the Education Law, and Section 170.12 of the Regulations of the Commissioner of Education, a written corrective action plan (CAP) that addresses the findings and recommendations in this report must be prepared and forwarded to our office within 90 days. To the extent practicable, implementation of the CAP must begin by the end of the next fiscal year. For more information on preparing and filing your CAP, please refer to our brochure, *Responding to an OSC Audit Report*, which you received with the draft audit report. The Board should make the CAP available for public review in the District Clerk’s office.
Information Technology

BOCES uses information technology (IT) to initiate, process, record and report transactions. It also relies on its IT system for computer education, access to the Internet, electronic mail (e-mail) communication, processing and storing student data, maintaining financial records and reporting to State and Federal agencies. Therefore, the IT system and the data it holds are a valuable resource. If the IT system fails, the results could range from inconvenient to catastrophic. Even small disruptions in electronic data systems can require extensive employee and consultant hours to evaluate and repair. The pervasive use and complexity of computerized applications produce internal control risks such as unauthorized access to data, unauthorized or inadvertent changes to master files, and the potential loss of data.

BOCES can mitigate these risks through a combination of automated and manual controls including policies and procedures, and limiting user access to protect data from loss by intentional or unintentional manipulation. The system of internal controls should include a formal disaster recovery plan and systemic backup procedures to restore lost or damaged data as quickly as possible. Disasters include sudden, unplanned catastrophic events (e.g., fires, computer viruses, or inadvertent employee actions) that compromise the integrity and data of the IT system.

During our audit period, BOCES employed five network systems engineers, one network systems support aide, one computer repair technician, three programmers, and four data coordinators/analysts. BOCES also purchased network systems engineering support services from North Eastern Regional Information Center (NERIC). In addition, BOCES provides a great deal of IT-related services to the component school districts, such as network administration, computer setup, and help desk support.

Our audit found that BOCES officials had not established adequate control policies and procedures to safeguard the IT system’s equipment and data. Specific areas where internal controls need to be strengthened include policies and procedures, technology equipment, and data security. The lack of comprehensive Board-approved policies and procedures outlining the requirements for properly monitoring and safeguarding the IT system, and the lack of employees’ adherence to the regulations, increases the risk for instances of misuse or abuse, including unauthorized access to the system and data, potential losses of data and inappropriate transactions.
**Policies and Procedures**

BOCES officials are responsible for establishing policies and procedures to provide guidance for BOCES employees on all aspects of IT used at BOCES. Such policies should include, but not be limited to, acceptable use standards for computers, the Internet and e-mail, data safeguards, anti-virus protection, password security, remote access controls, physical access controls, data backup systems, and disaster recovery.

BOCES did not have formal IT policies in place during the audit period. However, the Board had an IT policy in draft form, and certain written procedures and regulations were communicated to employees. Overall, we found that the policies and procedures that were in place did not provide adequate controls over BOCES’ technology systems. For example, the procedures in place did not adequately address such areas as passwords, confidentiality, and the loaning of IT assets for in-house or off-site use. Further, the regulations require users to report security issues or concerns to their supervisors but do not provide definitions of security issues or concerns. The regulations also require the computer network coordinator to provide training to employees on the proper and effective use of the computer network and to provide additional training to employees supervising student computer network use. However, we found that the required training was never provided. BOCES officials told us they are working to address BOCES’ IT-related policies and procedures.

When adequate policies and procedures are not in place that outline BOCES’ requirements over its use of technology, BOCES employees have no formal guidelines, and BOCES’ IT system could be misused.

**Technology Equipment and Data Security**

**Disaster Recovery Plan** — BOCES’ internal control system should include a formal disaster recovery plan to address the possible loss of computer equipment and data and to establish procedures for recovery in the event of such a loss. The plan should detail the precautions to be taken to minimize the effects of a disaster (e.g., fire, extended loss of power, inadvertent or deliberate employee actions) and enable BOCES to either maintain or quickly resume its mission-critical functions. The plan should include a significant focus on disaster prevention. BOCES has not established a formal disaster recovery plan. Consequently, in the event of a disaster, BOCES personnel have no guidelines or plan to follow to help minimize the loss of equipment and data or guidance on how to implement data recovery procedures.

**User Access** — Administrator accounts give an individual unlimited access to a computer system. Therefore, administrator accounts should only be used when installing software or configuring system
parameters. At all other times, users should operate as restricted users (members of the users group). We found that all users operate with local administrator rights. This practice allows users full access to load software and change settings. BOCES did not have a policy limiting user access. As a result, BOCES’ data is at an increased risk of being subject to manipulation and errors.

**Audit Logs** — A computerized financial management system should provide a means of determining, on a constant basis, who is accessing the system and what transactions are being processed. Audit logs (commonly known as audit trails) maintain a record of activity by system or application process. The audit log should provide information such as: (1) the identity of each person who has accessed the system, (2) the time and date of the access, (3) what activity occurred, and (4) the time and date of logoff. Ideally, this audit log would be reviewed by management, or management’s designee, in order to monitor the activity of users who access the financial management system. This tool provides a mechanism for individual accountability, reconstructing events, and problem monitoring. We found that audit logs for the Business Office software program are not printed and, therefore, not reviewed. As a result, errors could occur and not be detected or corrected in a timely manner.

**Physical Security** — Maintaining adequate physical security over IT systems and assets helps to ensure that they are protected from loss and used effectively for their intended purpose. BOCES officials should establish security over IT systems and equipment by controlling access and by physically securing IT systems and assets. However, BOCES did not establish policies and procedures for securing assets such as laptop computers and digital cameras. Additionally, there were no policies or formal procedures addressing the loan of IT assets to BOCES staff. Various BOCES locations did have informal procedures over loans of IT assets, which included sign-out sheets. However, these procedures were not always followed. At one location, employees were allowed unsupervised access to the assets and were asked to use a sign-out sheet, but the sheets were not reviewed, and the use of assets was not formally monitored. At another location, employees informed us that a previous employee used to keep sign-out information on index cards, but currently, there is no procedure in place. On several occasions, we observed that a wiring closet, a storage room, and a server room were unlocked or propped open and unoccupied. Although our testing did not identify any missing assets, these control weaknesses increase the risk that BOCES’ assets could be lost due to theft or vandalism, service could be disrupted, and data could be compromised if unauthorized persons were to gain access to these locations.
According to BOCES officials, many of the weaknesses identified during the course of our audit were covered in the current IT plan. However, many elements of the plan had not yet been addressed in accordance with the plan’s scheduled deadlines. They included the development of a disaster recovery plan, the development and distribution of acceptable use policies for staff and students, and an assessment of needs for servers and supporting infrastructure.

When IT control weaknesses are identified and left unresolved, there is an increased risk that mistakes and abuse could occur, and essential IT data could be lost or destroyed.

**Recommendations**

1. The Board should adopt policies that communicate clear guidance for all aspects of BOCES’ information technology system.

2. BOCES officials should develop a disaster recovery plan.

3. BOCES officials should implement procedures over the administration of user accounts including establishing restricted user accounts for all users.

4. The Board should strengthen controls over the physical access of the IT system and assets.

5. BOCES officials should utilize the audit log function in the financial management system and designate an individual outside of the daily Business Office operations to review the audit logs.
Cash Disbursements

In general, the objectives of internal controls over cash disbursements are to ensure that every disbursement contains enough supporting documentation to determine that it complies with BOCES policies, and that the amounts represent actual and necessary BOCES expenses. Therefore, good internal controls over cash disbursements begin with adequate policies and procedures as well as management’s attitude and support for internal controls, and its regular monitoring of controls to make sure they are working effectively.

A good system of internal controls over disbursements requires that each disbursement contain documentation sufficient in detail to support the expenditure of taxpayer dollars. Effective controls over cash disbursements require, at a minimum, that each disbursement include documentation of administrative approval, a purchase order or claim form, original itemized invoice, vendor receipts, receiving documentation, and an indication of the business purpose of the disbursement. Reimbursements for expenses incurred by an individual should be supported with vendor receipts.

We examined a sample of 142 claims totaling $786,238 and, except for minor deficiencies that we discussed with BOCES officials, we found that claims contained sufficient documentation to support that they were valid and necessary BOCES expenditures.
APPENDIX A

RESPONSE FROM BOCES OFFICIALS

The BOCES officials’ response to this audit can be found on the following pages.
May 18, 2009

Robert H. Gibson
President

Edmund Brooke
Joseph Garland
John Hill
James Keegan
Edna Knabbe
Elin Lofredo
Marilyn Noonan
Carol Orvis
Pam Pucelle

Office of the State Comptroller
One Broad Street Plaza
Glens Falls, NY 12801

Dear [Redacted]:

We received your draft Report of Examination of Questar III BOCES for the period July 1, 2008 to April 24, 2008. As we indicated to you during our entrance conference and throughout your engagement with us – we welcome independent oversight and review of our policies, procedures and practices. We consider your findings and recommendations about how we can improve our policies and business systems to be integral elements of our commitment to be faithful stewards of the public’s resources.

During the risk assessment phase of the audit your staff reviewed all significant Questar III business cycles and ultimately decided to focus on the Cash Disbursement and Information Technology (IT) functions. We are pleased that there were no significant findings related to cash disbursements by Questar III for the period audited.

Generally, we agree with and accept your recommendations concerning Information Technology (IT). Before we implement your IT recommendations we need to carefully consider the cost vs. benefit of such implementation. The IT issues you identified are complex and have impact at the operational, fiscal and policy levels.

Over the years we have tried to improve our IT capacity based on the resources available. Questar III provides Information technology services to our employees with each of them provided an email account and internet access. Student access to information technology for instructional purposes occurs in each building and classroom we occupy. Keeping up with changes in technology is a challenge. It requires financial resources and adequate time to clearly identify and safely implement our technology needs. Our phone systems are currently being transitioned to a Voice Over Internet Protocol (VOIP) system. Additionally, in cooperation with the Northeast Regional Information Center (NERIC) serving as our network provider, Questar III offers distance learning and video conferencing capabilities to a number of our school districts.
Your report cites concerns about disaster recovery, user access, audit logs and physical security. All of these issues are addressed by the Questar III Technology Plan which we are currently implementing. We agree that we need to accelerate our implementation of our IT plan as resources become available. We have priced a disaster recovery system. The cost of such a system is approximately $50,000. Until we are able to afford this expenditure we are relying on the following compensating controls:

- Our computer network architecture was rebuilt two years ago to ensure that the standards we had adopted for maintaining a secure network would adhere to generally accepted standards. This includes procedures for the backup and retrieval of electronic data should a network system fail.

- Per your recommendations regarding Physical Security and Audit Logs, we are currently redesigning our system of internal controls to take into account your recommendations. We will also review, strengthen and more effectively communicate our IT policies.

- We are currently reviewing our policy with regard to user accounts administrative rights. Changes in the administrative rights of non-instructional staff will create some operational and capacity issues for us. We will design a solution that achieves a balance between your concerns and our operational needs.

Again, I want to thank you and your staff for your hard work and professionalism. If I may provide additional information please let me know.

Yours truly,

James N. Baldwin, J.D., Ed.D.
District Superintendent

CC: Board Members Questar III BOCES
APPENDIX B

AUDIT METHODOLOGY AND STANDARDS

Our overall goal was to assess the adequacy of the internal controls put in place by officials to safeguard BOCES assets. To accomplish this, we performed an initial assessment of the internal controls so that we could design our audit to focus on those areas most at risk. Our initial assessment included evaluations of the following areas: financial oversight, cash receipts and disbursements, purchasing, and payroll and personal services.

During the initial assessment, we interviewed appropriate BOCES officials, performed limited tests of transactions, and reviewed pertinent documents such as BOCES policies and procedures manuals, Board minutes, and financial records and reports. In addition, we obtained information directly from the computerized financial databases and then analyzed it electronically using computer-assisted techniques. This approach provided us with additional information about BOCES’ financial transactions as recorded in its databases. Further, we reviewed BOCES’ internal controls and procedures over the computerized financial databases to help ensure that the information produced by such systems was reliable.

After reviewing the information gathered during our initial assessment, we determined where weaknesses existed, and evaluated those weaknesses for the risk of potential fraud, theft and/or professional misconduct. We then decided upon the reported objectives and scope by selecting for audit those areas most at risk. We selected information technology and cash disbursements for further audit testing.

- We interviewed BOCES officials and employees to learn about the information technology controls in place at BOCES. We reviewed BOCES’ Information Technology Plan and physically observed IT procedures.

- We reviewed Board minutes for our audit period, BOCES’ policy manual and staff and employee handbooks, BOCES’ collective bargaining agreements and all applicable policies and procedures.

- We interviewed BOCES officials and employees to obtain information about cash disbursements. We reviewed claim packages and supporting documentation.

We conducted this performance audit in accordance with generally accepted government auditing standards (GAGAS). 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.
APPENDIX C

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