

Enterprise and Advanced Education

SUMMARY

DEPARTMENT

There are no new recommendations to the Department of Enterprise and Advanced Education in this report.

POST-SECONDARY INSTITUTIONS

We recommended that, similar to a recommendation made to certain post-secondary institutions in our February 2013 report, Athabasca University, University of Alberta, University of Calgary and University of Lethbridge improve systems to ensure compliance with legislation—see page 94.

ATHABASCA UNIVERSITY

We recommended that the university improve procedures to monitor access and security of information systems—see page 95.

We repeat our recommendation that the university develop a disaster recovery plan and capabilities—see page 96.

THE UNIVERSITY OF ALBERTA

The university implemented the prior year's recommendation related to information technology controls—see page 97.

THE UNIVERSITY OF CALGARY

The university implemented the following prior years' recommendations:

- information technology change management controls—see page 99
- secure access to PeopleSoft—see page 100

THE UNIVERSITY OF LETHBRIDGE

The university implemented our prior year's recommendation related to clear and complete research policies—see page 100.

INTERNAL CONTROLS—A REPORT CARD

This report includes an update on the report card on four universities' internal controls over financial reporting, together with comparative assessments from our 2012 and 2011 audits. Our next report will include the results of our audits at the colleges, technical institutions, MacEwan University and Mount Royal University.

We evaluated the following key indicators of effective financial processes and internal controls:

- the time it took institutions to prepare complete and accurate year-end financial statements
- the quality of draft financial statements we received, including the number of errors our audit found
- the number and type of current and outstanding recommendations

To govern effectively, boards need accurate and timely financial information throughout the year, not just at year-end. To manage effectively, management needs the same information. We see a direct correlation between a strong year-end process to prepare financial statements and the ability to prepare quality financial information throughout the year.

A university could have a yellow or red ranking, yet still receive an unqualified opinion, as management can correct errors and disclosure deficiencies during the audit process. The number of errors and disclosure deficiencies we find in the draft financial statements indicates how effective financial controls are for preparing accurate financial statements.

Effective control environments include clear policies, well designed processes and controls to implement and monitor compliance with policies and secure information systems to provide timely and accurate financial and non-financial information to manage and govern the institutions. Recommendations that are not implemented on a timely basis erode the effectiveness of the institution's control environment. Weak control environments impact the quality of decisions made by management and the board of governors. This can result in an institution not achieving its goals by operating in a cost effective manner and managing operating risks.

It is critical that the board of governors of post-secondary institutions hold management accountable for improving identified control weaknesses in a reasonable period of time. As the Minister of Enterprise and Advanced Education and the Lieutenant Governor in Council appoint the boards, the minister through the department, must also hold the boards accountable for their effective oversight of the institutions.

The report card

- ◆ Significant improvements are needed.
- ▲ Improvement is required, but not to the same extent as the red items. Yellow items may or may not be associated with a management letter recommendation. They represent areas where an institution can improve, as opposed to areas that require significant, immediate attention.
- We have not identified significant weaknesses in the control environment.

Institution	Financial statements preparation		Outstanding recommendations	Page reference
	Accuracy	Timeliness		
Athabasca University				94
2013	●	●	◆	
2012	●	●	◆	
2011	▲	●	▲	
University of Alberta				97
2013	●	●	●	
2012	●	●	▲	
2011	●	●	▲	
University of Calgary				99
2013	●	●	●	
2012	●	▲	▲	
2011	▲	●	◆	
University of Lethbridge				100
2013	●	●	●	
2012	●	●	●	
2011	●	●	●	

In concluding on our report card, we note the following:

Financial statement preparation

The four universities prepared their first financial statements under Canadian public sector accounting standards. As expected when standards change, we identified several issues and audit differences that institutions had to resolve. Despite these issues, we concluded that the universities generally had effective processes to implement the new standards and to prepare timely and accurate financial statements. We issued unqualified audit opinions on the financial statements of all four universities.

Outstanding recommendations

The University of Alberta, University of Calgary and University of Lethbridge implemented a number of prior years' recommendations during the year. However, these institutions continue to have outstanding recommendations that require management's commitment to implementing in the near future. In particular, the University of Lethbridge must make a priority our 2007 recommendation on implementing an information technology framework.

As a result of a current year recommendation on monitoring access and security of information systems, Athabasca University has nine outstanding recommendations on its control

environment. This includes our 2010 recommendation to improve information technology resumption planning and capability, which we repeat this year based on our assessment the university has had sufficient time to implement the recommendation given the significant risk to the university. As reported in our June 2013 report, the university also has a number of recommendations that require immediate attention, related to the implementation of its administrative systems renewal project. We conclude the university must significantly improve its internal control environment. The board of governors must make it a priority of management to implement these outstanding recommendations to achieve the university's objective of cost-effectively providing online learning to students.

FINDINGS AND RECOMMENDATIONS

POST-SECONDARY INSTITUTIONS

Matters from the current audit

Consistent with our recommendation to colleges and technical institutions,¹ we recommend that Athabasca University, University of Alberta, University of Calgary and the University of Lethbridge improve processes around legislative compliance. We acknowledge that all post-secondary institutions are working collaboratively to implement this recommendation for the sector as a whole.

Matters from prior audits

There are no other sector-wide recommendations.

ATHABASCA UNIVERSITY

SUMMARY

Matter from current audit

Access and security monitoring

Background

Monitoring and logging access to the university's critical systems, devices and information helps to ensure that access controls are working as expected and that security threats are promptly identified and corrected. Information security devices, business applications and systems have security features that can log different levels of events and activities. Timely reporting and continuous monitoring of these logs allow management to resolve and prevent inappropriate access and security violations.

¹ *Report of the Auditor General of Alberta—February 2013*, no. 7, page 60.

RECOMMENDATION 8: IMPROVE PROCEDURES TO MONITOR AND REPORT ACCESS AND SECURITY VIOLATIONS

We recommend that Athabasca University formalize its access and security monitoring procedures to:

- detect and assess security threats to critical information systems
- report access and security violations to senior management
- identify and resolve the root causes of security threats and violations

Criteria: the standards for our audit

The university should have a documented and effective control process to monitor and log information security and access violations. It should also ensure that its network operating systems, applications and other security devices are configured to prevent unauthorized access. Such processes should specify how management should report and remediate security violations.

KEY FINDING

The university has no formal documentation on monitoring activities or records of periodic review of access and security violations.

Our audit findings

The university logged and monitored access to its critical systems. However, we found no formal documented evidence of periodic review, escalation of access and security violations identified and remediation actions.

We found that the university is taking the following steps:

- Firewall logs are enabled and reviewed daily for security violations.
- Log watching utility is used to monitor web service logs. Such logs are reviewed periodically and notifications are sent to staff as needed.
- Active directory logging activities are enabled and logs are periodically reviewed.
- Access logs to forms and certain critical tables (for example, inserts/deletes to student's grades) are enabled. However, these logs are not reviewed consistently and are used for forensic purposes only.
- User login history is enabled for financial application. However, review of such logs is performed as needed.

In addition, senior management is not informed of any access and security violations.

Implications and risks if recommendation not implemented

Failure to actively monitor access and security violations may allow an intruder to probe for weaknesses or entry points to the university's financial information systems. Access and security violations may be undetected or not properly dealt with, causing potential security threats to the university's financial applications and information resources.

Matter from prior audits

Information technology resumption plan—recommendation repeated

Background

In 2010 we recommended² that Athabasca University:

- assess the risks and take the necessary steps to establish appropriate offsite disaster recovery facilities that included required computer infrastructure, to provide continuity of critical IT systems
- complete and test its existing disaster recovery plan, to ensure continuous services are provided in the event of a disaster

In 2011 the university performed a risk assessment on its IT resumption capability. The assessment confirmed the university would not be able to recover its critical student IT services from a catastrophic failure at their data centre in Athabasca. In 2012 the university initiated a project to update its recovery plans and capabilities.

The university relies heavily on its IT systems and infrastructure to deliver online student services, including course materials and course evaluations as well as daily corporate financial activities. Failure to recover promptly from a disaster affecting the data centre at the main campus in Athabasca would affect the university's ability to continue providing these services.

Disaster recovery is the process, policies and procedures needed to recover and continue technology services and infrastructure critical to an organization, after a natural or human-caused disaster. Disaster recovery planning is a subset of a larger process known as business continuity planning. It should include planning for resumption of applications, data, hardware, communications (such as networking) and other IT infrastructure. A well-designed and frequently tested disaster recovery plan (DRP) can better prepare the university to recover from a major outage or a total loss of its IT infrastructure, within an identified timeframe.

We repeat this recommendation given the significant risk to the university and the time since we originally made the recommendation.

RECOMMENDATION 9: DEVELOP DISASTER RECOVERY PLAN AND CAPABILITIES—REPEATED

We again recommend that Athabasca University:

- assess the risks and take the necessary steps to establish appropriate offsite disaster recovery facilities, that include required computer infrastructure, to provide continuity of critical IT systems
- complete and test its existing disaster recovery plan to ensure continuous services are provided in the event of a disaster

² Report of the Auditor General of Alberta—October 2010, no. 10, page 111.

Criteria: the standards we used for our audit

The university should have:

- a DRP that is based on risk assessment of critical IT services and business requirements for the continuity of these services
- a documented and effective backup and restoration plan or procedures for its critical information assets
- effective plans and means to test the DRP regularly using an offsite IT recovery facility
- effective procedures to assess the adequacy and completeness of the DRP after testing

Our audit findings

The university has started assessing the design considerations of a disaster recovery site hosted at another institution. The university continues to evaluate alternatives to establish a system recovery capability and is trying to improve the stability of its systems. The university is assessing disaster recovery scenarios and pilot test cases for its disaster recovery strategy. However, the risk of not being able to recover from a catastrophic failure at its data centre in Athabasca remains high until this recommendation is implemented.

Implications and risks if recommendation not implemented

Without a functional disaster recovery plan and appropriate recovery facilities and equipment, Athabasca University may not be able to systematically recover data or resume critical business and student services functions within the required timeframes.

THE UNIVERSITY OF ALBERTA**SUMMARY**

We recommended that the University of Alberta improve its systems to ensure compliance with legislation—see page 94.

The university implemented the prior recommendation related to information technology controls—see below.

FINDINGS AND RECOMMENDATIONS**Matter from prior audits****Information technology controls—implemented****Our audit findings**

The university implemented our 2009 recommendation³ to improve its information technology controls to:

- define and implement an effective university-wide IT governance program for critical IT systems
- develop comprehensive university-wide IT policies, procedures and standards to support an IT strategy for its critical systems
- implement effective control processes that ensure these policies, procedures and standards are monitored and consistently met throughout the university
- develop a university-wide plan to implement well-designed and effective IT security controls to support the university's information security policy framework

³ *Report of the Auditor General of Alberta—October 2009*, page 162.

IT governance program

The university defined and implemented an effective university-wide IT governance structure for critical IT systems by:

- creating two new committees—The IT advisory committee reviews proposals and makes recommendations to the IT enterprise committee. The vice provost for information technology chairs the IT enterprise committee, which includes vice presidents, associate vice presidents, deans and associate deans.
- approving an IT roadmap for 2012 to 2016—The roadmap discusses all the strategic business requirements that the university believes will help it meet the major technology trends of mobility, green computing, open data, operational excellence and best practices.

IT policies, procedures and standards

The university:

- implemented comprehensive and appropriate policies and procedures to support the university's enterprise resource planning system, which holds critical financial and student information (for example, finances, human resources and student records)
- established an IT enterprise committee, which oversees the IT control framework that the administrative and academic systems follow
- uses a central active directory to track the academic information system's assets and identified all the information assets across the university, to assess and manage their risks
- incorporated IT risk assessments in an institutional risk indicator summary, which ensures that the university is assessing its risk if some departments or faculties do not comply with the IT governance structure and IT control and security frameworks—In addition, the university has assessed its risk using COBIT to identify risk on individual and specific application systems.

The internal audit department has developed a plan to review policies, processes and standards. The plan includes information security management, policies and procedures for assessing development frameworks, emerging information management technologies risk assessments and continuous audits.

IT security controls

The university developed a university-wide plan to implement well-designed and effective IT security controls to support its information security policy framework. Since 2009, the university has established the position of an IT security officer who maintains and oversees the university's IT security program. The IT security officer established a university-wide IT security committee to develop a campus-wide IT security awareness training program and draft other security policies.

The university also:

- defined and implemented security policies for its central administrative and academic systems, to clarify roles and responsibilities
- implemented processes and controls to support its IT security policy framework—These include:
 - a policy for information technology use and management
 - an intrusion detection system, which monitors network traffic
 - privacy and security training and awareness programs
 - a purchased information security and privacy awareness training solution that the university will host as a training module
- documented requirements to demonstrate the effectiveness of security monitoring controls of backup, incident and intrusion logs

THE UNIVERSITY OF CALGARY

SUMMARY

We recommended that the University of Calgary improve systems to ensure compliance with legislation—see page 94.

The university implemented the following recommendations:

- information technology change management controls—see below
- secure access to PeopleSoft—see page 100

FINDINGS AND RECOMMENDATIONS

Matters from prior audits

Improve information technology change management controls—implemented

Our audit findings

The university implemented our 2011 recommendation⁴ to establish:

- an organization-wide IT change management policy with supporting procedures and standards
- processes to ensure the policy is consistently followed throughout the organization

For the sample of IT infrastructure and PeopleSoft system changes we examined, we found that the university followed its change management policy, procedures and standards and consistently documented test plans, test results and post-implementation reviews.

In addition, we reviewed the change advisory board’s meeting minutes and confirmed that it meets weekly to discuss, analyze and approve the changes requested to the university’s IT infrastructure and PeopleSoft system before the change is implemented.

⁴ *Report of the Auditor General of Alberta—November 2011*, no. 6, page 67.

Secure access to PeopleSoft—implemented

Our audit findings

The university implemented our 2011 recommendation⁵ to ensure access to its PeopleSoft system is secure and meets the university's security standards. This included:

- strong authentication and password requirements
- regular account review for all PeopleSoft accounts, including privileged and administrative access accounts, for need and appropriateness

Based on our user access testing, we determined that the university has:

- defined the term “privileged PeopleSoft user” and who needs this level of access in the system
- assessed all users in PeopleSoft and determined which accounts were privileged and needed stronger SecureID authentication (an additional two-factor form of authentication used to authenticate users' access to critical university information)
- configured the PeopleSoft system to require SecureID authentication for all privileged users

In addition, we verified that privileged PeopleSoft users were required to use the two-factor form of authentication through the use of SecureID password tokens.

Through its Innovative Support Services project, the university identified the access each employee should have according to their job role and function. This project also included a review of all functional access to PeopleSoft for need and appropriateness. The university periodically reviewed user access in 2011 and continues to perform annual reviews of user system access.

THE UNIVERSITY OF LETHBRIDGE

SUMMARY

We recommended that the University of Lethbridge improve its systems to ensure compliance with legislation—see page 94.

The university implemented our prior recommendation related to clear and complete research policies.

FINDINGS AND RECOMMENDATIONS

Matters from prior audits

Clear and complete research policies—implemented

Our audit findings

The university implemented our 2008 recommendation⁶ to improve systems to ensure that:

- financial research policies are current and comprehensive
- proper documentation is maintained for approving research accounts
- researchers, research administrators and financial services staff are aware of changes to financial policies and are properly trained to comply with the policies

⁵ *Report of the Auditor General of Alberta—November 2011, no.7, page 68.*

⁶ *Report of the Auditor General of Alberta—October 2008, page 227.*

In our November 2011 report,⁷ we reported that the Board of Governors approved an updated research policy titled, Research Roles and Responsibilities. This policy outlined responsibilities for monitoring compliance with research policies. The university also developed guidance for administering specific internal research grants. In addition, financial services monitored financial and reporting compliance with the financing agencies' requirements. The university also updated its research proposal form and updated the practical guide to conducting research at the university. We also noted for the items tested that proper documentation was maintained for approving research accounts.

This year, the university updated its research policy to clarify the differences between internally and externally funded research projects. It also made improvements to the research overhead charging policy to clarify the standard overhead rate the university should use on research projects. Furthermore, the university now maintains a centralized list of all granting agencies that prohibit research overhead charges, along with supporting research correspondence with the funding agencies. As a result, we consider this recommendation implemented.

OUTSTANDING RECOMMENDATIONS

DEPARTMENT

The following recommendations are outstanding and not yet ready for follow-up audits:

Improve financial reporting processes—October 2012, no. 16, p. 100

We recommend that the Department of Enterprise and Advanced Education improve its financial reporting processes by:

- training staff on the policies, processes and controls related to preparing the financial statements
- improving its monitoring and review processes to ensure accuracy of the financial information
- reducing its reliance on manual processes, to increase the efficiency and accuracy of financial reporting

Resolve outstanding sector accounting issues—October 2012, no. 17, p. 101

We recommend that the Department of Enterprise and Advanced Education work with the Office of the Controller and institutions to develop a process for efficient resolution of accounting issues in the post-secondary sector.

Develop strategic plan and accountability framework—July 2013, no. 6, p. 48

We recommend that the Department of Enterprise and Advanced Education, working with institutions and the Campus Alberta Strategic Directions Committee:

- develop and communicate a strategic plan that clearly defines the minister's expected outcomes for Campus Alberta, initiatives to achieve those outcomes, resources required and sources of funding
- develop relevant performance measures and targets to assess if the outcomes are being achieved
- publicly report results and the cost of achieving them
- review and clarify the accountability structures for governing collaborative initiatives

⁷ Report of the Auditor General of Alberta—November 2011, pages 71-72.

Develop processes and guidance to plan, implement and govern collaborative projects—July 2013, no. 7, p. 51

We recommend that the Department of Enterprise and Advanced Education, working with institutions and the Campus Alberta Strategic Directions Committee, develop systems and guidance for institutions to follow effective project management processes for collaborative initiatives.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Non-credit programs: Standards and expectations—April 2008, no. 1, p. 22

We recommend that the Department of Enterprise and Advanced Education:

- clarify its standards and expectations for non-credit programs and clearly communicate them to public post-secondary institutions
- work with institutions to improve the consistency of information that institutions report to the department

Non-credit programs: Monitoring—April 2008, no. 2, p. 23

We recommend that the Department of Enterprise and Advanced Education implement effective processes to:

- monitor whether institutions report information consistent with its expectations
- investigate and resolve cases where institutions' program delivery is inconsistent with its standards and expectations

Cross-Institution recommendations: Enterprise risk management—April 2010, no. 17, p. 158

We recommend that the Department of Enterprise and Advanced Education (through the Campus Alberta Strategic Directions Committee) work with post-secondary institutions to identify best practices and develop guidance for them to implement effective enterprise risk management systems.

MULTI-INSTITUTIONAL RECOMMENDATION

The following recommendation is outstanding and not yet ready for a follow-up audit:

Improve systems to ensure compliance with legislation—February 2013, no. 7, p. 60

We recommend that the post-secondary institutions⁸ implement systems to:

- understand what legislation they must comply with
- develop appropriate policies, procedures and controls to ensure compliance with legislation
- monitor and report non-compliance to senior management and board audit committees

⁸ As a result of our assessment, we made the following common recommendation to each of Alberta College of Art + Design, Bow Valley College, Keyano College, Lakeland College, Lethbridge College, MacEwan University, Medicine Hat College, Mount Royal University, NAIT, Olds College, Portage College, Red Deer College and SAIT. We also made a similar recommendation to NorQuest College, except that its board already receives a report on compliance with legislation. This does not include Grande Prairie Regional College and Northern Lakes College. As of the *Report of the Auditor General of Alberta—October 2013*, see page 94, this recommendation now also includes Athabasca University, University of Alberta, University of Calgary, and University of Lethbridge.

ALBERTA COLLEGE OF ART + DESIGN

The following recommendation is outstanding and not yet ready for a follow-up audit:

Improve internal controls at the bookstore—February 2013, no. 8, p. 62

We recommend that Alberta College of Art + Design improve its internal control systems for its bookstore operations by:

- properly segregating incompatible job duties
- improving its inventory count procedures and investigating discrepancies between inventory counts and inventory records
- resolving software deficiencies in its inventory management computer application

Improve controls over contracts—February 2013, no. 9, p. 64

We recommend that Alberta College of Art + Design improve controls over contracts by:

- developing, documenting and enforcing contract procedures
- standardizing contracts with templates that ACAD's legal counsel approves
- developing systems to track and monitor all contracts prepared by all its departments

Implement a disaster recovery plan—February 2013, no. 10, p. 65

We recommend that Alberta College of Art + Design implement and test a disaster recovery plan.

Implement proper purchase controls—February 2013, no. 12, p. 67

We recommend that Alberta College of Art + Design ensure purchases are appropriately supported by purchase requisitions and purchase orders, in accordance with its policies and procedures.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

**Periodic financial reporting—April 2010, p. 160
(Originally April 2008, p. 180)**

We again recommend that Alberta College of Art + Design improve its processes and controls to increase efficiency, completeness and accuracy of financial reporting.

Code of conduct, conflict of interest and fraud policies—April 2011, p. 72

We recommend that Alberta College of Art + Design:

- develop, implement and enforce policies for code of conduct and conflict of interest
- develop and implement a fraud policy that clearly defines actions, responsibilities, authority levels and reporting lines in case of fraud allegations

Improve risk management systems—March 2012, no. 3, p. 19

We recommend that the Alberta College of Art + Design:

- finalize its enterprise risk management framework document
- periodically update and manage the framework as it identifies new potential risks and opportunities
- enforce compliance with its risk management policy by requiring the president and CEO to periodically report the risks and mitigating strategies to the board

Strengthen controls over procurement cards transactions—February 2013, no. 11, p. 66

We recommend that Alberta College of Art + Design strengthen its processes over the authorization, review and approval of procurement card transactions.

Implement a change management policy and controls—February 2013, no. 13, p. 68

We recommend that Alberta College of Art + Design:

- implement its change management policy and control processes for all its IT assets
- obtain assurance that changes to the Banner application affecting its student information follow an appropriate change management process

ALBERTA INNOVATES—TECHNOLOGY FUTURES

The following recommendation is outstanding and not yet ready for a follow-up audit:

Improve project management governance and controls for new information systems—November 2011, no. 4, p. 65

We recommend that Alberta Innovates—Technology Futures improve its governance practices for the Corporate Information Systems project, by:

- establishing formal project management policies, processes, standards and controls for the Corporate Information System project
- establishing a project steering committee comprised of key stakeholders
- documenting and communicating the roles and responsibilities for all stakeholders, including the steering committee, board sub-committee and project sponsors
- updating the business case to set out the project's objectives that enables the steering committee to monitor and measure the project's progress
- formally assessing the impact of the project on other strategic business initiatives and periodically updating the assessment

ATHABASCA UNIVERSITY

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Improve conflict of interest procedures—October 2012, no. 19, p. 108

We recommend that Athabasca University update its policy and procedures, and implement a process for staff to annually disclose potential conflicts of interest in writing so the university can manage the conflicts proactively.

The following recommendations are outstanding and not yet ready for follow-up audits:

Information technology governance, strategic planning and project management: Improve governance and oversight of information technology—October 2010, no. 1, p. 21

We recommend that Athabasca University continue to improve its information technology governance by:

- developing an integrated information technology delivery plan that aligns with the university's information technology strategic plan
- requiring business cases for information technology projects that include key project information such as objectives, costs-benefit assessments, risks and resource requirements to support the steering committees' and executive committee's decisions and ongoing project oversight
- improving the coordination and communication between the information technology steering committees in reviewing, approving and overseeing projects

Information technology governance, strategic planning and project management: Improve portfolio and project management processes—October 2010, no. 2, p. 24

We recommend that Athabasca University continue to improve its portfolio management and project management processes for information technology projects by:

- clarifying and communicating the mandate and authority of the project management office
- setting project management and architectural standards, processes and methodologies, and training project managers on these
- monitoring and enforcing project managers' adherence to these standards, processes and methodologies
- tracking and managing project dependencies on scope, risks, budgets and resource requirements

Information technology governance, strategic planning and project management: Formalize information technology project performance monitoring and reporting—October 2010, p. 25

We recommend that Athabasca University formalize and improve its monitoring and oversight of information technology projects by:

- improving its systems to quantify and record internal project costs
- providing relevant and sufficient project status information to the information technology steering and executive committees, and summarized project information to the Athabasca University Governing Council Audit Committee
- completing post-implementation reviews on projects to verify that expected objectives and benefits were met and identify possible improvements to information technology governance, strategic planning and project management processes

Information technology governance, strategic planning and project management: Resolve inefficiencies in financial, human resources and payroll systems—October 2010, p. 27

We recommend that Athabasca University complete its plans to resolve the inefficiencies in its financial, human resources and payroll systems.

Implement enterprise risk management systems—October 2012, no. 18, p. 107

We recommend that Athabasca University implement an effective risk management system.

Formalize and improve change management planning—July 2013, no. 4, p. 35

We recommend that Athabasca University formalize its business change management plans to ensure its business operations, staff, faculty and students are adequately prepared for the implementation of its new administrative system.

Formalize and improve project management controls—July 2013, no. 5, p. 37

We recommend that Athabasca University ensure that a formalized project management and systems development methodology and approach are clearly defined, applied and available to all staff working on the project.

Establish information technology resumption capabilities—October 2013, no. 9, p. 96 (Originally October 2010, no. 10, p. 111)

We again recommend that Athabasca University:

- assess the risks and take the necessary steps to establish appropriate off-site disaster recovery facilities that include required computer infrastructure to provide continuity of critical information technology systems
- complete and test its existing disaster recovery plan to ensure continuous services are provided in the event of a disaster

GRANDE PRAIRIE REGIONAL COLLEGE

The following recommendations are outstanding and not yet ready for follow-up audits:

Improve conflict of interest procedures—February 2013, no. 14, p. 72

We recommend that Grande Prairie Regional College update its policy and procedures, and implement a process for directors and employees to annually disclose potential conflicts of interest in writing, so the college can manage the conflicts proactively.

KEYANO COLLEGE

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Improve general ledger processes—February 2013, no. 16, p. 78

We recommend that Keyano College improve accounting processes for the general ledger and stop relying on manual processes when creating its financial statements.

LETHBRIDGE COLLEGE

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Improve software patch policies and procedures—February 2013, no. 17, p. 81

We recommend that Lethbridge College implement an appropriate patch policy and procedures to update and protect the servers that host its enterprise resource planning system.

MACEWAN UNIVERSITY

The following recommendations are outstanding and not yet ready for follow-up audits:

Improve security of PeopleSoft computer system—March 2012, no. 2, p. 15

We recommend that MacEwan University improve the security of its PeopleSoft system to ensure that the university:

- uses the system to assign access permissions based on job roles, and properly limit access
- defines, monitors and enforces rules for segregation of duties
- authorizes and reviews logs of critical data changes
- provides appropriate oversight to maintain the integrity of security controls

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Systems over costs for internal working sessions and hosting guests—April 2010, p. 165

We recommend that MacEwan University:

- implement policies and guidance on appropriate expenses for events related to internal working sessions and for hosting guests
- follow its policies and processes for employee expense claims and corporate credit cards

Preserve endowment assets—April 2010, p. 170

We recommend that MacEwan University improve its endowment and related investment policies and procedures by:

- establishing and regularly reviewing a spending policy for endowments
- improving its processes to review its endowment related investments
- improving its reporting of investments and endowments to the audit and finance committee

Improve and implement university policies—April 2010, no. 18, p. 174

We recommend that MacEwan University improve its control environment by implementing or improving:

- a code of conduct and ethics policy and a process for staff to acknowledge they will adhere to its policies
- a process for staff to annually disclose potential conflicts of interest in writing so the university can manage them proactively
- a safe disclosure policy and procedure to allow staff to report incidents of suspected or actual frauds or irregularities
- a responsibility statement in its annual report to acknowledge management's role in maintaining an effective control environment

**Ensure contracts are signed before work begins—April 2011, no. 3, p. 75
(Originally November 2006, no. 9, p. 35)**

We again recommend that MacEwan University have signed contracts (interim or final) in place before projects start.

Improve financial business processes—March 2012, no. 1, p. 13

We recommend that MacEwan University improve its financial business processes by:

- establishing clearly documented processes and controls
- developing clear roles and responsibilities and communicating these to staff
- training staff on the policies, processes and controls relating to their roles and responsibilities
- implementing monitoring and review processes to ensure staff follow the policies, processes and controls

Limit use of a system/shared account—February 2013, no. 15, p. 73

We recommend that MacEwan University strengthen controls for posting financial transactions, so it can trace transactions to specific users.

MEDICINE HAT COLLEGE

The following recommendations are outstanding and not yet ready for follow-up audits:

Improve enterprise risk management systems—March 2012, no. 12, p. 31

We recommend that Medicine Hat College improve its risk assessment process by:

- documenting its assessment of risks for their impact and likelihood of occurrence
- prioritizing the key risks and clearly linking those risks to a program, operational plan or procedures designed to manage and monitor those risks
- formally reporting the key risks and mitigating actions to the board

Oversight by the board of governors—July 2013, no. 8, p. 62

We recommend that Medicine Hat College provide the Board of Governors with suitable and sufficient information regarding significant events and risks related to the college's international activities; and that the Board of Governors strengthen its processes to:

- ensure it is aware of significant risks the college faces
- monitor compliance of the college's international activities with the board's policies

Strategic and operational planning—July 2013, no. 9, p. 67

We recommend that Medicine Hat College implement systems to:

- clearly define the strategic and operational objectives for its international education activities
- provide business cases that assess the risks, benefits, costs and legal requirements before providing training in foreign countries
- set clear and measurable targets for planned outcomes
- periodically measure and report on progress towards achieving targets, meeting objectives and outcomes

Program management and monitoring—July 2013, no. 10, p. 72

We recommend that Medicine Hat College improve its management of its international education activities by:

- assessing and clearly defining the roles and responsibilities of its International Education Division
- implementing effective program delivery and quality assurance processes at its offshore campuses
- implementing an appropriate system of internal controls, financial reporting and accountabilities for its international education activities
- implementing contract management practices to ensure risks have been appropriately managed
- aligning the structure and management of the division to reflect these changes and to ensure adequate oversight

Improve controls over travel expenses—July 2013, no. 11, p. 77

We recommend that Medicine Hat College improve controls over travel expenses by enforcing its travel policy.

MOUNT ROYAL UNIVERSITY

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Improve year-end financial reporting—February 2013, no. 18, p. 82

We recommend that Mount Royal University review the adequacy of its financial statements closing process and improve its ability to produce timely and accurate financial statements.

NORQUEST COLLEGE

The following recommendations are outstanding and not yet ready for follow-up audits:

Improve controls over contracts—March 2012, no. 5, p. 23

We recommend that NorQuest College improve its controls over contract management.

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Improve controls over donations—March 2012, no. 6, p. 24

We recommend that NorQuest College improve its processes to manage donations.

Segregate incompatible job duties—February 2013, no. 19, p. 84

We recommend that NorQuest College segregate access within the payroll module.

Provide guidance on employee spending—February 2013, no. 20, p. 85

We recommend that NorQuest College:

- improve policies and guidance on appropriate expenses for travel and hosting internal working sessions and guests
- follow its policies and processes for employee expense claims and corporate credit cards

Improve computer access controls for accountability—February 2013, no. 21, p. 86

We recommend that NorQuest College improve its computer access controls to ensure accountability over its information systems.

Regularly maintain information systems—February 2013, no. 22, p. 87

We recommend that NorQuest College regularly maintain its information systems to reduce the risk of security weaknesses.

Improve financial internal controls—February 2013, no. 23, p. 88
(Originally March 2012, no. 4, p. 22)

We again recommend that NorQuest College improve its reconciliation of financial information, review of journal entries and documentation of these controls.

Improve quality control for year-end financial information—February 2013, no. 24, p. 89
(Originally March 2012, no. 7, p. 25)

We again recommend that NorQuest College improve its quality control processes for preparing its year-end financial information to improve efficiency and accuracy.

Segregate incompatible job duties—February 2013, no. 25, p. 90
(Originally April 2010, p. 186)

We again recommend that NorQuest College properly segregate incompatible job duties in its bookstore.

NORTHERN LAKES COLLEGE

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Define goals for preserving economic value of endowments—February 2013, no. 26, p. 92

We recommend that Northern Lakes College define its goals for the use and preservation of the economic value of endowment assets.

Improve controls over tuition revenue—February 2013, no. 27, p. 93

We recommend that Northern Lakes College improve controls over tuition revenue by implementing the following processes:

- review the approved fee schedule entered into the accounting system, to ensure completeness and accuracy
- review user access to the accounting system for tuition fees to ensure that roles and level of access are appropriately granted to individuals

Establish accounts receivable write-off policy—February 2013, no. 28, p. 94

We recommend that Northern Lakes College establish an accounts receivable write-off policy to ensure that balances are valid and appropriately valued.

OLDS COLLEGE

The following recommendations are outstanding and not yet ready for follow-up audits:

Improve systems on financial year-end reporting—February 2013, no. 29, p. 95
(Originally April 2011, p. 68; repeated March 2012, no. 8, p. 27)

We again recommend that Olds College further improve its processes and controls over year-end financial reporting.

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Improve segregation of privileged user access roles—February 2013, no. 30 p. 96
(Originally March 2012, no. 9, p. 28)

We again recommend that Olds College segregate privileged systems access from data entry responsibilities and business functions.

PORTAGE COLLEGE

The following recommendations are outstanding and not yet ready for follow-up audits:

Follow access controls and remove access promptly—March 2012, no. 13, p. 32

We recommend that Portage College ensure that employees follow its system user-access control procedures and that management promptly removes access privileges when staff leave.

Develop and test a business resumption plan—March 2012, no. 14, p. 33

We recommend that Portage College fully develop and test a business resumption plan to ensure that it can resume IT services in a reasonable time after a disaster.

Improve controls over bookstore inventory—March 2012, no. 15, p. 34

(Originally April 2011, p. 82)

We again recommend that Portage College improve the accuracy of its perpetual inventory system at the bookstore.

Improve information system change management—February 2013, no. 31, p. 98

We recommend that Portage College develop and implement formal change management policies and control procedures to ensure all changes to systems and applications within the computing environment are implemented in a consistent and controlled manner.

RED DEER COLLEGE

The following recommendation is outstanding and not yet ready for a follow-up audit:

Improve general computer control environment—February 2013, no. 32, p. 100

We recommend that Red Deer College improve its general computer control environment by:

- finalizing its risk assessment process and implementing a comprehensive IT control and governance framework for its key processes
- implementing appropriate security over information and information technology assets
- managing changes to computer programs
- testing its disaster recovery plan and then assessing its adequacy

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

Systems over costs for internal working sessions and hosting guests—April 2010, p. 167

We recommend that Red Deer College:

- implement policies and guidance on appropriate expenses for internal working sessions and hosting guests
- strengthen its processes to ensure staff follows its policies and processes for employee expense claims and corporate credit cards

SOUTHERN ALBERTA INSTITUTE OF TECHNOLOGY

Management has identified this recommendation as implemented—to be confirmed with a follow-up audit:

IT strategic plan—February 2013, no. 33, p. 101

We recommend that SAIT reassess and update its IT action plan. We further recommend that SAIT develop:

- a project plan with effective controls to ensure its plan is implemented on time and achieves SAIT's strategic objectives
- an effective process to identify, rank and prioritize all IT projects and update plans as needed

UNIVERSITY OF ALBERTA

The following recommendation is outstanding and not yet ready for a follow-up audit:

Improve controls over bookstore inventory—October 2012, no. 20, p. 110

We recommend that the University of Alberta:

- improve its controls to value the bookstore's inventory
- develop policies and processes to identify obsolete inventory in its bookstores and in storage
- develop processes to regularly review the cost of goods it holds in inventory

Management has identified these recommendations as implemented—to be confirmed with follow-up audits:

Systems over costs for internal working sessions and hosting guests—April 2010, p. 167

We recommend that the University of Alberta follow its policies and processes for employee expense claims and corporate credit cards.

UNIVERSITY OF CALGARY

The following recommendations are outstanding and not yet ready for follow-up audits:

Enterprise risk management—November 2011, no. 5, p. 67

We recommend that the University of Calgary adopt an integrated risk management approach to identify and manage the risks that impact the university as a whole.

Remove users' access privileges promptly—October 2012, no. 21, p. 112

We recommend that the University of Calgary:

- define an acceptable timeframe to disable or remove users from the application and the network
- document, communicate and consistently follow a process to deactivate users from the university's information technology systems within the defined timeframe

UNIVERSITY OF LETHBRIDGE

The following recommendation is outstanding and not yet ready for a follow-up audit:

Information technology internal control framework—October 2007, no. 21, vol. 2, p. 23

We recommend that the University of Lethbridge implement an information technology control framework.

