

## 17-210 Learning Management System (Canvas)

We have completed our audit of the Learning Management System (Canvas). This audit was performed at the request of the UTHealth Audit Committee and was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing*.

### BACKGROUND

In an effort to identify the best learning management system to serve UTHealth's needs, Academic Technology consulted with students and faculty from each school in a pilot project in 2014. The project resulted in the selection of the Canvas application, which replaced the Blackboard application. Implemented in 2016, Canvas is a cloud-based application that delivers course content and provides an interactive learning environment for all UTHealth students.

### OBJECTIVES

The objective of this audit was to determine whether controls over the Canvas application are adequate and functioning as intended.

### SCOPE PERIOD

The scope period was September 1, 2016 to June 28, 2017.

### METHODOLOGY

The following procedures were performed:

- Obtained a list of users with administrative access and assessed for appropriateness and adequate separation of duties. Selected a random sample of users with administrative access and obtained evidence of approval by the appropriate party.
- Selected a random sample of daily User Access Token reports and verified review/approval by LMS Administrators. Selected a random sample of user-generated tokens and verified automated emails were sent to students with instructions for protection and deletion.
- Obtained the most recent Service Organization Controls (SOC 2) report on the Canvas vendor/cloud sub-vendor, reviewed for control deficiencies, and assessed reasonableness of remediation activities. Verified UTHealth security assessment was performed on the Canvas vendor/cloud sub-vendor and assessed the disaster recovery plan for reasonableness.
- Selected a random sample of daily Learning Tools Interoperability (LTI) reports and verified review/approval by LMS Administrators. For a random sample of LTIs that disclose FERPA data, verified that a FERPA agreement is in place.
- Obtained and assessed the vendor contract, service agreement, and FERPA agreement for reasonableness.
- Obtained evidence that Canvas policies and procedures exist.

17-210 Learning Management System (Canvas)

**AUDIT RESULTS**

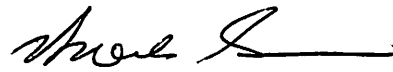
A&AS identified areas of improvement related to access management for Canvas:

- Two users with inappropriate and/or conflicting administrative access were noted.
- The System Owner (or designees) does not perform a periodic review of administrative access.

**NUMBER OF PRIORITY & HIGH FINDINGS REPORTED TO UT SYSTEM**

None.

We would like to thank the staff and management within the Academic Technology organization who assisted us during our review.



Brook Syers, CPA, CIA, CISA, CFE  
Senior Audit Manager - Information Technology

**MAPPING TO FY 2017 RISK ASSESSMENT**

<b>Risk (Rating)</b>	R.7 Critical applications do not function as intended (High) R.37 FERPA data is disclosed via third party apps (High) R.38 Sharing of accounts in the Canvas system (Moderate)
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**AUDITING & ADVISORY SERVICES ENGAGEMENT TEAM**

<b>Audit Manager</b>	Brook Syers, CPA, CIA, CISA, CFE
<b>Auditor Assigned</b>	Lieu Tran, CISA
<b>End of Fieldwork Date</b>	July 12, 2017
<b>Issue Date</b>	August 15, 2017

- Copies to:**  
 Audit Committee  
 Dr. Michael Blackburn  
 Eric Solberg  
 Richard Miller  
 Amar Yousif  
 Dr. William Weems

17-210 Learning Management System (Canvas)

<p><b>Issue #1</b></p>	<p>Section 6.2.6 of the <i>IT Access Control Policy</i> (ITPOL-004) states:</p> <ul style="list-style-type: none"> <li>• Owners or their designees must review access lists regularly to ensure access privileges are appropriate. Timeframe for access list review should be established based on documented risk management decisions.</li> </ul> <p><i>Canvas Policy - Administration of Canvas</i> (Canvas LMS - C004) details the following user types for administrative access:</p> <ul style="list-style-type: none"> <li>• Account Admins (LMS Administrators)</li> <li>• Subaccount Administrators (LMS Advisory Team)</li> <li>• Faculty Observers</li> <li>• Subaccount Coordinators</li> <li>• Subaccount Designers</li> </ul> <p>A&amp;AS noted a periodic review of Canvas administrative access is not performed by the System Owner (or designees) to ensure access privileges are appropriate.</p> <p>A&amp;AS obtained a list of users with Canvas administrative access and assessed for appropriateness and adequate separation of duties. We noted two users with inappropriate and/or conflicting administrative access. A&amp;AS verified the inappropriate access was terminated during fieldwork.</p>
<p><b>Recommendation #1</b></p>	<p>We recommend the System Owner (or designees) perform a periodic review of Canvas administrative access to ensure access privileges are appropriate.</p>
<p><b>Rating</b></p>	<p>Medium</p>
<p><b>Management Response</b></p>	<p>The Office of the EVP &amp; Chief Academic Officer, in partnership with the Office of Academic Technology, will develop a scheme to delegate periodic access reviews to persons in positions to judge the appropriateness of root and school level access and present it to the System Owner for approval.</p>
<p><b>Responsible Party</b></p>	<p>Eric Solberg, Vice President, Academic &amp; Research Affairs Dr. William Weems, Assistant Vice President for Academic Technology</p>
<p><b>Implementation Date</b></p>	<p>October 15, 2017</p>