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# Changing the Course: Applying Sarbanes-Oxley to the Classroom

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# Changing the course

## Applying Sarbanes-Oxley to the classroom

By Maureen F. Mascha, CPA, Ph.D. and Michael D. Akers, CPA, Ph.D.

Sarbanes-Oxley (SOX) requires management of publicly-traded companies to assess the effectiveness of a company's internal control over financial reporting using a suitable recognized control framework developed by a body of experts. In the United States, the Committee of Sponsoring Organizations (COSO) of the Treadway Commission published "Internal Control-Integrated Framework."

Other frameworks have been developed outside of the United States. While such frameworks may be different from COSO, and can be used in an audit of internal control over financial reporting, the elements of these frameworks should resemble all of the themes of COSO. The COSO framework identifies three primary objectives of internal control: efficiency and effectiveness of operations, financial reporting, and compliance with laws and regulations. It also identifies five major components: control environment, risk assessment, control activities, information, and communications and monitoring.

AU 319, consideration of internal control in a financial statement audit, of the Public Company Accounting Oversight Board standard provides guidance on the independent auditor's consideration of internal control in an audit of financial statements in accordance with generally accepted auditing standards. The purpose of this article is to examine how SOX — specifically the COSO framework — is addressed in the accounting information systems and auditing and assurance courses at Marquette University.

## Accounting Information Systems (AIS) course

The AIS course is a required course for all accounting majors and is a prerequisite for the auditing and assurance course. The course is normally taken in the junior year. This course offers students with their first in-depth exposure to internal controls. As such, it employs the COSO enterprise risk model (ERM) in describing the necessary components to an effective internal control environment.

Students are introduced to SOX and learn of the major provisions of the Act, including its effect on internal control testing. Emphasis is placed on the distinction between general versus application controls, with appropriate examples provided. Students further expand their knowledge of internal control by learning about preventive, detective, and corrective controls and the effect of each type on the internal control environment.

### Classroom exercises

In order for students to obtain practical experience with internal control and exposure to how internal controls operate with transaction processing, various software tools are provided. For example, students work with applications in SAP to understand how contemporary complex ERP systems are controlled. Focus is based on input edit and processing controls in an online environment.

A follow-up exercise affords students the opportunity to obtain an understanding of how to “program” internal controls using the Access database software from Microsoft. Based on lessons learned using SAP, students are required to identify the necessary internal controls for select case studies describing small to medium accounting environments. Students are then tasked with deciding how to implement the internal controls using Access.

### Examinations

Throughout the course students are required to demonstrate their knowledge of internal control. This begins by having students identify the major activities for each transaction cycle and builds to a point where students should be familiar with the common threats for each transaction cycle (e.g., revenue, expenditure, payroll/HRM, etc.) and the preventive/

detective controls that can be used to mitigate the threats.

For the comprehensive final exam, students are required to demonstrate their knowledge of internal control tools by describing how SAP and/or Access can be used to implement various internal controls.

#### Auditing and assurance course

The auditing course is an elective course that is taken by those students interested in either sitting for the CPA exam or a career in auditing-internal or public. There are three specific ways that SOX and the COSO framework are examined:

- Classroom discussion and exam testing
- Examination of internal controls in a simulated audit engagement
- Practitioner roundtable discussion

#### Classroom discussion and exam testing

The impact of SOX on the accounting profession (now self-regulated as compared to monitoring by the profession prior to SOX) as well as the benefits and costs of such legislation on the financial markets are discussed in the first few weeks of the audit course.

About halfway through the term we have a detailed discussion of internal control that focuses on the following items: definition of internal control, objectives of internal control, components of COSO framework, audit procedures to gain an understanding of internal control, documentation of understanding, tests of control and risk assessment.

This process is revisited when we discuss the internal controls for both the revenue and expenditure cycles. The various aspects of internal control and controls in the revenue and expenditure cycles are tested in detail on the second and third exams. The comprehensive final exam usually includes a major essay question on internal control. Student feedback indicates that the combination of discussion and preparation of audit documentation enhances the understanding of internal controls.

#### Examination of internal control—simulated audit engagement

To complement the discussion of the internal controls in the revenue and

expenditure cycles students prepare audit documentation for a simulated audit. Students are required to document their understanding of internal controls in a flowchart using flowchart software.

Additionally, they must either identify strengths of the cycle and tests of controls to test those strengths or identify weaknesses and the types of errors or fraud that could result. Substantive testing for both cycles follows the completion of controls testing.

#### Practitioner roundtable discussion

Near the end of the semester a roundtable discussion is conducted using three audit partners or directors and a tax partner from public accounting firms. The auditing professor moderates the roundtable discussion by using questions that have been provided to the practitioners prior to the class.

The practitioners offer their insights regarding the impact of SOX by commenting on: impact of SOX on the financial markets, benefits and costs of SOX, areas of initial issues/concerns and areas of continuing issues/concerns, communications with board of directors and audit committees, tax issues and impact on tax departments of clients, differences between significant deficiencies and material weaknesses.

During the class students are provided time, and are expected, to ask the practitioners questions as the preparation of questions is an assignment. The practitioners have noted the high quality of the student questions.



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*Student feedback indicates that the combination of discussion and preparation of audit documentation enhances the understanding of internal controls.*