

FRAUD EDUCATION: A MODULE-BASED APPROACH FOR ALL BUSINESS MAJORS

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ABSTRACT

Every two years, the Association of Certified Fraud Examiners produces a Report to the Nations on Occupational Fraud and Abuse. The most recent report reveals several trends including the type of frauds being perpetrated, profiles of perpetrators, and industries hardest hit by occupational frauds. Although many accounting programs are now including courses in financial fraud as part of their curricula, students in other business majors could also greatly benefit from learning about the impact of fraud on businesses. Using the Report to the Nations as a guide, this paper identifies trends in occupational fraud and suggests a method for integrating fraud prevention and detection education into the undergraduate curricula of non-accounting business majors.

JEL: M10, M40

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INTRODUCTION

In the last decade, due to many high-profile fraud scandals (e.g., Enron, WorldCom, Tyco, etc.), the landscape for fraud and business activities has drastically changed. To combat the potentially disastrous repercussions of individuals engaging in fraudulent activities, the United States has seen the introduction of several initiatives. These include the Sarbanes-Oxley Act of 2002, the creation of the Public Company Accounting Oversight Board, and the increased importance of audit committees, all of which create new levels of accountability and responsibility for management and accountants in detecting and preventing fraud. With respect to education, the American Institute of Certified Public Accountants (AICPA) strongly suggests that an understanding of fraud and business risk (i.e., risk analysis) is one of the core competencies needed by all students entering the accounting profession (see <http://www.aicpa.org/interestareas/accountingeducation/resources/pages/corecompetency.aspx>).

Furthermore, many colleges and universities have responded to these accounting scandals and the call made by the AICPA by including within their curricula some training with respect to identifying and understanding fraudulent activities. Some colleges and universities, use standalone fraud or forensic accounting courses, while other schools choose to make this a component in an auditing class. However, accountants and auditors are not necessarily the only parties that should have knowledge of fraud, nor should they be the only ones trained to detect it. A report released in 2012 by the Association of Certified Fraud Examiners (hereafter, the ACFE report) shows strong support for this argument. The 2012 report compiles detailed information collected on 1,388 cases of occupational fraud investigated by Certified Fraud Examiners between January 2010 and December 2011.

One significant finding of this report is that organizations tend to rely too much on external audits conducted by accountants to detect fraud. Specifically, while these audits are the most frequently used control mechanism, they rank poorly with respect to actually detecting fraud and limiting losses (ACFE report, 5). In other words, the external auditor's role is actually relatively minor with respect to finding and controlling fraud. Instead, the report recommends that all employees—not just the accountants—

should be trained to understand and detect fraud, and finds that organizations with training programs tend to have fraud detected sooner and smaller overall losses, compared to organizations without such training.

Therefore, because employee education may be the most useful tool in detecting fraud, the purpose of this paper is to provide an outline that will allow all business majors—not just those in accounting—to be exposed to modules in learning about and detecting fraud but without requiring the creation of an additional standalone fraud course. To begin, we suggest that all business majors should be exposed to a module on corruption within a business law class. Then, using the ACFE report as a guide, courses within each business major should include a relatively short module that focuses on the education and detection of fraud schemes that are prevalent within that particular area of business.

The value of all business students receiving fraud education is twofold. First, introducing students to fraud education in their academic careers will give them a competitive advantage in the job market and potentially save their future employers both time and money on employee education. Second, training all future employees early could allow companies to prevent and detect fraud sooner. The ACFE report states that organizations lose approximately 5% of their revenues to fraud every year, with an estimated annual loss of \$3.5 trillion when applied to the 2011 estimated Gross World Product (ACFE report, 8), and that frauds tend to last a median of 18 months before being detected (13). Taken altogether, if all students receive education on fraud, this may lead to fraud being detected and reported sooner and saving their future employers a significant amount of dollars. The remainder of this paper will review literature concerning fraud and its pedagogy, further examine information found in the ACFE report, discuss the most common fraud schemes, and present suggestions on how to incorporate fraud education across various business disciplines.

LITERATURE REVIEW

Fraud occurs when an employee abuses employer trust for personal gain, or more formally, “The use of one’s occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization’s resource or assets (ACFE report, 6).” In the media, fraud is often reported as being perpetrated by CEOs at large, publicly traded companies, who manipulate financial reports in order to defraud investors and creditors. Perhaps the most well known examples of fraudulent activity are of companies such as Enron or WorldCom, in which management deliberately defrauded its investors. However, the idea that fraud is only perpetrated by high-level executives who prepare misleading financial statements is actually false. Evidence against this misconception is found in one of the most comprehensive sources of data on fraud—the aforementioned ACFE report, published biannually by the Association of Certified Fraud Examiners. For the 2012 report, data was collected from 1,388 cases of fraud that were investigated by fraud examiners worldwide during 2010 and 2011.

After analyzing the data, the ACFE report summarizes and provides a breakdown of information, including the most common types of fraud, organizations in which fraud is the most prevalent, magnitudes of fraud by type, and characteristics of fraudsters. Despite the high profile coverage in business newscasts, the ACFE report finds that these types of financial statement fraud are relatively uncommon (only 7.6% of reported cases). In contrast, by far the most common fraud cases reported are asset misappropriations, defined as thefts and misuse of cash and other assets (86.7% of reported cases). The next most common fraud scheme is corruption (33.4% of reported cases), defined as a violation of duty to gain a benefit, for example, bribery or conflicts of interest (ACFE report, 11). It is noteworthy to mention that the percentages are greater than 100%, due to some fraud cases reporting more than one type of fraudulent activity. The ACFE report also provides evidence that one cannot assume that only high-level management in publicly traded companies will perpetrate fraud. For example, fraud can occur in any type of organization: publicly traded companies (28.0%), privately owned companies (39.3%), government (16.8%), and not-for-profit (10.4%, ACFE report, 25). Fraud can occur in entities of any size:

those with less than 100 employees (31.8%), between 100 and 999 employees (19.5%), between 1,000 and 9,999 (28.1%), and larger than 10,000 (20.6%, ACFE report, 26). Fraud is also not unique to upper management, as perpetrators were found in many departments, including accounting (22.0%), operations (17.4%), sales (12.8%), upper management (11.9%), customer service (6.9%), purchasing (5.7%), warehouse and inventory (4.2%), and others (ACFE report, 52). Fraud is perpetrated by employees at any level (ACFE report, 39) and any amount of tenure with the company (ACFE report, 49).

Research has also provided similar support that fraud is not perpetrated only by high-level managers looking to defraud investors. For example, Holtfreter (2005) finds that while high-status executives may be more likely to engage in financial statement manipulation, middle-class offenders tend to engage more often in asset misappropriation or corruption. Beasley et al. (2000) report that revenue recognition schemes are more common among technology companies, while asset misappropriation is more common in financial service companies. In sum, fraud can occur anywhere and be perpetrated by anyone, and it is not appropriate to assume it usually happens among managers in large, publicly traded companies.

Fraud education has become very important to accounting majors. In the wake of many high-profile accounting scandals, one of the core competencies outlined by the American Institute for Certified Public Accountants for future accountants is an understanding of fraud and business risk. Pedagogical research also stresses the importance of including fraud education for accounting majors (e.g., Peterson 2004, Rezaee 2004, Bierstaker et al. 2006), and many papers offer various suggestions on how to incorporate these components into accounting curriculum (e.g., Seda and Kramer 2008, Curtis 2008, Heitger and Heitger 2008, Kranacher et al. 2008, Pearson and Singleton 2008). Research also delves into how to structure fraud classes for accounting students, and a number of different approaches have been recommended. For example, Peterson (2003) suggests using cases and videos while Amernic and Craig (2004) propose exploring the rhetorical and ideological nature of accounting and its history. Albrecht et al. (2009) and Ramamoorti (2008) advocate including psychological and sociological aspects of fraud to address both behavioral and financial components, and Wilks and Zimbelman (2004) discuss including game theory and strategic reasoning concepts.

Many institutions have responded to the call for more education among accounting majors. Seda and Kramer (2008) issued a survey to accounting academics, and report that among the 150 respondents, 34% have a curriculum that offers a course on forensic accounting or fraud, and an additional 34% indicate that forensic accounting is integrated throughout traditional accounting and auditing courses. Meier et al. (2010) investigate websites of 171 AACSB accredited schools and find that 20 offer at least one course in forensic accounting, 27 offer courses in fraud, and four offer courses in both. While an inclusion of fraud education can be beneficial to the accounting major, strong evidence exists that this is not enough to effectively curtail fraudulent activities. One reason for this is because of a common misconception held by the public—that it is the responsibility of the accountant, specifically the external auditor, to discover all fraudulent activity (often referred to in accounting literature as the “expectations gap”, e.g., Zikmund 2008, Lee and Ali 2008, Hassink et al. 2009, Bailey 2010, Bedard et al. 2012).

However, according to the Securities Exchange Commission, the external auditor’s main role is not to look for fraud. Instead, the auditor “...examines the company's financial statements and provides a written report that contains an opinion as to whether the financial statements are fairly stated and comply in all material respects with GAAP (Generally Accepted Accounting Principles)” (<http://www.sec.gov/investor/pubs/aboutauditors.htm>). Taken together, this indicates a general expectation that if fraud exists the external auditor will discover it, even though that is not the role of the auditor or the purpose of the audit. Evidence in the ACFE report also supports that this is a common misperception. Specifically, the report finds that external audits are the most relied on method for detecting fraud, but ultimately were responsible for detecting only 3.3% of the actual cases (ACFE report, 15); furthermore, they “...ranked poorly in limiting overall fraud losses...and their usefulness as a means

of uncovering fraud is limited” (5). Instead, the most common and effective method of detecting fraud early is the anonymous tip (43.3%), followed by reviews by management (14.6%). This being the case, it is reasonable to assume that fraud could have been discovered even sooner if more employees were trained to detect and recognize fraudulent activities. In fact, one of the strongest recommendations made by the ACFE report is for all internal employees to be trained to detect fraud:

“Targeted fraud awareness training for employees and managers is a critical component of a well-rounded program for preventing and detecting fraud... our research shows organizations that have anti-fraud training programs for employees, managers and executives experience lower losses and shorter duration frauds than organizations without such programs in place. At a minimum, staff members should be educated regarding what actions constitute fraud, how fraud harms everyone in the organization and how to report questionable activity (5).”

In summary, fraud can occur in many different forms in any type of organization. While significant progress has been made in training accountants to detect fraud, companies are still losing trillions on a global scale due to fraudulent activities. Therefore, introducing fraud education into the curriculum for all business majors will be extremely beneficial—not only will it potentially save employers training costs, but also provide future employees with prized skills and abilities and may result in avoiding thousands or even millions of dollars in losses for their respective organizations.

METHODOLOGY

The purpose of this section is to introduce a method that could be used to provide fraud education to all business majors, without needing to create a standalone course. We first propose that a module on corruption be included in a business law class. Then, we suggest that professors in various disciplines could use the ACFE report as a guide to discover which types of fraud are the most prevalent within that particular major, and include a module on those fraud schemes within a class required by students majoring in that discipline. Explanation for this particular proposal can be gleaned by exploring the ACFE report in more detail. First of all, according to the ACFE report (5), asset misappropriation is by far the most commonly reported fraudulent activity (86.7% of companies), followed by corruption (33.4%), and finally financial statement fraud (7.6%)—note that the percentages add up to more than 100% because in many cases, more than one category of fraud was discovered. However, asset misappropriation (theft and misuse of cash and other assets) is a very broad category. To aid in understanding, the ACFE provides a list of the more common subcategories within asset misappropriation, as well as the frequency of occurrence and median losses, which is replicated in Table 1.

For example, the first row discusses the most common cash receipt scheme—skimming—which is defined as “any scheme in which cash is stolen from an organization before it is recorded on the organization’s books and records” (ACFE report, 12) and was reported by 14.6% of the cases. The remaining rows discuss the other prevalent asset misappropriation schemes: cash larceny, billing, expense reimbursement, check tampering, payroll, cash register disbursements, misappropriation of cash on hand, and non-cash misappropriations.

Furthermore, the ACFE report provides an analysis of the five departments in which fraud is most prevalent (not including accounting), and within those departments, which of the eleven fraud categories—corruption, the nine asset misappropriation subcategories, and financial statement fraud—is the most common. This information is partially replicated in Table 2 (up to the top seven schemes). For example, an analysis of the day-to-day operations shows that of all cases of fraud discovered within this department, 32.8% involved corruption, followed by billing schemes (24.1%), expense reimbursement (19.4%), non-cash misappropriations (17.7%), skimming (12.9%), misappropriation of cash on hand (11.6%), and cash larceny (11.2%).

Table 1: Description and Frequency of Various Asset Misappropriation Schemes, As Reported By The 2012 Association Of Certified Fraud Examiners *Report To The Nations*

Category	Description	Percent of All Cases	Median Loss
Skimming	Schemes Involving Theft of Cash Receipts Any scheme in which cash is stolen from an organization before it is recorded on the organization's books and records	14.6%	\$58,000
Cash Larceny	Any scheme in which cash is stolen from an organization after it has been recorded on the organization's books and records	11.0%	\$54,000
Billing	Schemes Involving Fraudulent Disbursements of Cash Any scheme in which a person causes his or her employer to issue a payment by submitting invoices for fictitious goods or services, inflated invoices or invoices for personal purchases	24.9%	\$100,000
Expense Reimbursements	Any scheme in which an employee makes a claim for reimbursement of fictitious or inflated business expenses	14.5%	\$26,000
Check Tampering	Any scheme in which a person steals his or her employer's funds by intercepting, forging or altering a check drawn on one of the organization's bank accounts	11.9%	\$143,000
Payroll	Any scheme in which an employee causes his or her employer to issue a payment by making false claims for compensation	9.3%	\$48,000
Cash Register Disbursements	Any scheme in which an employee makes false entries on a cash register to conceal the fraudulent removal of cash	3.6%	\$25,000
Misappropriation of Cash on Hand	Other Asset Misappropriation Schemes Any scheme in which the perpetrator misappropriates cash kept on hand at the victim organization's premises	11.8%	\$20,000
Non-Cash Misappropriations	Any scheme in which an employee steals or misuses non-cash assets of the victim organization	17.2%	\$58,000

This Table is replicated using information presented on page 12 in the 2012 Association of Certified Fraud Examiners Report to the Nations. The report collected data on 1,388 cases investigated by fraud examiners during 2010 and 2011. The sum of the percentages of all cases is greater than 100 percent because many cases included more than one type of asset misappropriation.

Table 2: Frequency of the Top Seven Fraud Schemes within Departments with a High Occurrence of Fraud, As Reported by the 2012 Association of Certified Fraud Examiners *Report to the Nations*

Day-to-Day Operations	Sales	Upper Management/ Executive	Customer Service	Purchasing
Corruption (32.8%)	Corruption (31.2%)	Corruption (53.5%)	Corruption (20.7%)	Corruption (68.4%)
Billing (24.1%)	Non-Cash Misappropriation (22.4%)	Billing (32.7%)	Non-Cash Misappropriation (19.6%)	Billing (35.5%)
Expense Reimbursement (19.4%)	Skimming (18.2%)	Expense Reimbursement (21.4%)	Skimming (13%)	Non-Cash Misappropriation (19.7%)
Non-Cash Misappropriation (17.7%)	Expense Reimbursement (15.3%)	Financial Statement Fraud (20.8%)	Misappropriation of Cash on Hand (13.0%)	Expense Reimbursement (6.6%)
Skimming (12.9%)	Billing (14.7%)	Non-Cash Misappropriation (15.7%)	Cash Larceny (10.9%)	Skimming (3.9%)
Misappropriation of Cash on Hand (11.6%)	Cash Larceny (11.2%)	Skimming (15.1%)	Billing (7.6%)	Payroll (3.9%)
Cash Larceny (11.2%)	Misappropriation of Cash on Hand (9.4%)	Misappropriation of Cash on Hand (13.8%)	Expense Reimbursement (7.6%)	Financial Statement Fraud (3.9%)

This Table is created using information presented on page 55 in the 2012 Association of Certified Fraud Examiners Report to the Nations. The report collected data on 1,388 cases investigated by fraud examiners during 2010 and 2011. The reported percentages are the frequency of that particular fraud category of all fraud cases within that specific department. The sum of the percentages within each department is greater than 100 percent because many cases included more than one type of fraud within that department.

As an analysis of Table 2 shows, after separating the asset misappropriation schemes into subcategories, corruption is the most common throughout each of the departments analyzed. Because corruption is so predominant, we propose that all business majors should be exposed to education on corruption. An ideal place for this exposure would be in a business law class, for reasons that will be discussed in the next section. Once students have been exposed to the concept of corruption, then classes within respective majors could include a component on fraud that outlines the fraud schemes that are the most prevalent within careers related to that major. For example, after examining Table 2, marketing professors could

include a module on the most common frauds within sales departments (e.g., non-cash thefts, skimming, expense reimbursement, billing, and cash on hand thefts). Majors that tend to produce CEOs and CFOs (e.g., management or finance) could learn about the schemes common to upper management. Operations majors could learn about schemes found in production and purchasing. Other majors that do not necessarily lend themselves to one of the departments found in the report (e.g., information systems, entrepreneurship, and business administration) could learn about the schemes most prevalent in day-to-day operations. The remainder of this section will include a discussion on the corruption module for inclusion in the business law class, followed by suggestions on incorporating fraud education modules within various majors.

Business Law / Corruption Module

Corruption schemes occur when an employee “...misuses his or her influence in a business transaction in a way that violates his or her duty to the employer in order to gain a direct or indirect benefit” (ACFE report, 10). Because 34% of all the reported cases involved corruption, and because it is the most common scheme within each occupational area, the business law course would be an ideal time to expose all business students to recognizing corruption. According to Miller and Crain (2011), over 97% of AACSB colleges and universities have a required business law component as part of their business core, which is typically met with a single three-semester credit hour course or its equivalent. The required law course in many cases has a 200-level prefix, generally indicating that the course is designed to be taken during the sophomore year of study. However, in a review of several leading business law texts (e.g., Clarkson et al. 2009, Kubasek et al. 2011, Mallor et al. 2010, and Melvin 2011), fraud is often only discussed in the context of legal or equitable defenses to contracts or negotiable instruments (i.e. fraud in the inducement or fraud in the factum). Corruption and other forms of occupational fraud, if covered, are typically limited to a cursory description of several types of white-collar crime and may include mail or wire fraud, bribery, embezzlement and computer crimes.

Therefore, we recommend that the business law course could include a module on corruption. It could begin with a description of corruption schemes. Examples include conflicts of interest (purchase and sales schemes), bribery and extortion (coercing an employee to act a certain way under either the promise of a reward or the threat of punishment, respectively), and receiving or giving illegal gratuities. The course could also include review of selected cases, and the ACFE website recommends use of *Bribery and Corruption Casebook: The View from Under the Table* (2012, edited by Wells and Hymes), a collection of various corruption cases. In order to lay the groundwork for further study with respect to fraud in each student’s chosen major, the business law class could also include a discussion of the “fraud triangle.” Typically introduced to accounting majors in an auditing class, the fraud triangle is a tool designed to assist individuals in understanding and detecting the potential for fraudulent activities. The fraud triangle has three sides—perceived pressure, perceived opportunity, and rationalization—and the basic idea is that when each of these “sides of the triangle” are present, a fraud is most likely to occur. Perceived pressure comes in the form of an individual need to engage in fraud, which can be either financial or nonfinancial. Common examples include pressure from coworkers or supervisors, personal greed or financial problems, or a desire to report results and activities in a more favorable light. Perceived opportunity occurs if a situation arises that leads an employee to believe that a fraud would be successful (e.g., infrequently examined cash records or other internal control weaknesses).

For the final leg of the fraud triangle—rationalization—Ramamoorti (2008) suggests that studying the psychology and sociology of rationalizing fraud could be valuable tools in understanding why fraud occurs. For example, one popular rationalization is the notion that the company owes more to the employee (i.e., the employee is not properly rewarded for his or her work). Another example is the “Robin Hood Rationalization,” occurring when the employee believes that there is a higher purpose behind the fraud that makes committing fraud acceptable. Yet another rationalization is that the act is not

really fraud because it is only temporary (e.g., the employee is not really “stealing” cash because he/she plans to replace it later). In summary, as stated by the ACFE report, all employees should be trained to understand and recognize fraud. By beginning with a business law course, two objectives will be met. First, because corruption is the most common type of fraud within many different departments in an organization, all students will receive knowledge that will be useful, regardless of their chosen major. Second, discussing the fraud triangle will lay the foundation for later in their academic careers, when they will be exposed to more specific types of fraud that are the most prevalent in their chosen majors, as discussed next.

Fraud Education Modules

After business majors have been exposed to the topics of fraud and corruption through their business law course, including a module in their specific majors that discusses common frauds would be beneficial in training future employees to detect fraud. Our proposal is that selected intermediate or upper level courses within specific majors should include brief modules discussing the most common fraud within the respective discipline. The reason for placing the fraud modules in intermediate or advanced courses is twofold. First, this ensures that the students have already taken the business law class and been exposed to preliminary education on corruption and the fraud triangle. Second, education on recognizing, detecting, and preventing fraud within their specific disciplines would likely be more useful after students receive a significant amount of foundational content pertinent to their respective major.

As mentioned previously, professors can use the ACFE report as a guide to determine which fraud schemes are the most prevalent within their respective fields (e.g., a marketing professor could include a module that discusses some of the more common fraud schemes within the sales department). Table 2 shows the most common frauds within five different departments. According to the information in Table 2, some schemes are common throughout all of these departments, most notably: billing, skimming, expense reimbursements, and non-cash asset misappropriations. Furthermore, these four are also the most common asset misappropriation schemes found throughout a company, as shown by Table 1. Each of these will be briefly discussed in turn, followed by suggestions on how to explore the schemes in the fraud education modules. Billing schemes are one of the most common types of fraud found throughout an organization. As shown by Table 1, billing schemes account for 24.9% of all cases and the median reported loss is \$100,000. A billing scheme is defined as occurring when “a person causes his employer to issue a payment by submitting invoices for fictitious goods or services, inflated invoices or invoices for personal purposes” (ACFE Report, 12).

Because many businesses disburse hundreds or even thousands of checks within a relatively short time period, employees can attempt to engage in various billing schemes. One example is if an employee were to create a fictitious dummy company, and have that company submit invoices to their employer for payment. Alternatively, an employee could collude with an individual at another company, and have that other company submit an invoice for services that were never actually provided. These invoices can be for relatively innocuous services that were never actually provided, such as carpet cleaning, catering, or repairs to company cars; basically, expenses that are relatively common and not likely to raise any questions or trigger extensive review. In the first example, the perpetrators open bank accounts for the dummy or shell companies, list themselves as signers on the dummy company’s accounts, and then simply endorse the checks from their employers when they arrive. In the collusion example, the individual at the other company cashes the checks and shares the money with the colluding employee.

Skimming occurs when cash is stolen before it has been recorded on the company’s books. As shown in Table 1, skimming accounted for 14.6% of frauds and the median loss was \$58,000. This may take the form of a cashier not recording (or under-recording) a sale and pocketing the cash (or the difference). A related form of fraud can also include stealing from the cash register, or entering in a refund to a customer

that never existed and pocketing the cash. Expense reimbursements also provide opportunities for fraudulent activities and as evidenced by Table 1, account for 14.5% of all fraud schemes resulting in median losses of \$26,000. An example of an expense reimbursement scheme would be an employee taking a business trip and overstating the amount of reimbursable expenses. Another example would be purchasing a personal item but charging it to the company as a business expense for reimbursement.

Another comparatively common fraud as indicated in Table 1 is non-cash asset misappropriation (accounting for 17.2% of reported cases and resulting in median losses of \$58,000). These schemes include two main categories: theft and misuse. Theft of assets is a problem many companies face. For example, by its nature, inventory is typically handled by many employees—inventory clerks, warehouse personnel, shipping clerks, and sales and floor personnel. With so many individuals handling inventory, it could be relatively easy for an employee to steal without risk of being detected. Another way theft can occur is if employees order more materials than necessary from a supplier and keep the excess themselves. A third example is if an employee were to take excess leftover raw materials when the manufacturing process is complete.

Misuse of assets is also a problem companies may face. Examples include individuals using company vehicles to run personal errands, or using company supplies and printers to print personal items. These examples can become especially problematic if the employees do not see these activities as wrong, but instead as a socially acceptable workplace practice. Another misused company asset could be proprietary information. Employees who have access to information on a company's projects or customers could potentially sell this information to competitors, or use it themselves to start up their own businesses.

Ultimately, for business students to effectively understand fraud, they first need to learn about the various schemes and how they can be committed by those working in their business disciplines. After professors define and give examples of various schemes, we recommend a more in-depth discussion on how the fraud could be perpetrated within that particular discipline as well as recommended control mechanisms that could decrease the likelihood of fraud. For example, operations or supply chain majors could spend time exploring the importance of supervisory review of all costs attributable to a product or operation, as well as creating inventory control points as an effective tool to establish responsibility for the safeguarding of inventory. Sales and marketing students need to be advised of the temptation and common occurrence of rationalizing the padding of expense accounts, and how to properly review reimbursement requests. Students in information systems management could study the risk associated with misuse of sensitive information.

Once students have received education about the types of fraud most prevalent in their chosen discipline, the next step is to include a discussion on how to detect various fraud schemes. For example, if one wanted to create a discussion of warning signs and suggestions to control non-cash asset misappropriations, a possible topic could be windows of time for delivery. To illustrate, many companies have standard windows of time when products are shipped or received in order to allow for proper supervision and record keeping. However, if one notices that some items are entering or leaving at unusual times, this could be a warning sign that someone might be taking advantage of less scrutiny and fewer individuals being around to engage in a fraud. A control mechanism could be to place cameras over delivery docks and in the warehouse, or require electronic logs that record the exact time and amount of product changing hands. Another example could be discovering that certain employees have excessive interactions with specific suppliers or customers. Under normal circumstances, businesses attempt to spread their sales and purchases among numerous suppliers or customers to decrease the risk of adverse financial outcomes should a supplier or customer go out of business. Additionally, transactions above a certain percentage threshold must be reported in the annual report. If transactions with specific suppliers or customers grow in unexplainable frequency or magnitude, it may indicate that collusion or bribery may

be occurring. A regularly examined record of transactions sorted by customer or vendor (and illustrated in graphic format) will call attention to unusual trends and justify investigation.

A third example could be discovering an unusually high production of waste, scrap, or byproduct. When inventory is used inefficiently, it is often attributed to faulty material, employee error, or unexpected decrease in product demand. It is possible that some employees might intentionally be working inefficiently or reporting higher scrap or waste than actually occurred, in order to steal assets. Charting production inefficiencies by workstation, shift, and days of the week or month will help to identify the source of the waste; additionally, exact records for how the excess is accounted for and disposed of should be maintained. By no means are these the only examples of non-cash asset misappropriation, and non-cash asset misappropriation is not the only fraudulent activity, but discussions like the examples given above could be very valuable in training future employees about frauds within their respective majors. Once students learn about fraud schemes that are the most common in their respective fields, to be better prepared to spot fraud, we also recommend a short discussion on red flags with respect to the individual engaging in fraudulent activities. The ACFE report (57) finds that in 81% of reported fraud cases, the perpetrator engaged in at least one (frequently more than one) “red flag” behavior.

Within the asset misappropriation schemes, the most commonly reported behaviors among perpetrators were: living beyond one’s means (35.6%), having financial difficulties (27.1%), unusually close associations with vendors or customers (19.2%), having control issues and being unwilling to share duties (18.2%), having divorce or family problems (14.8%), having a “wheeler-dealer attitude” (14.8%), and frequently being irritable (12.6%). Education about warning behaviors can be helpful, and further discussions can often be found in fraud textbooks. For example, Albrecht et al. (2009) suggests that engaging in fraud creates stress, which in turn prompts many of these unusual and observable behaviors, and suggests other red flags such as: insomnia, drinking and drug use, difficulty relaxing, lack of pleasure in things usually enjoyed, inability to look people in the eyes, defensiveness, and unusual belligerence, among others. Frequently arriving early or staying late can be a warning sign; despite the fact that sometimes these employees may receive praise for their work ethic, it also may give them opportunity to access inventory and records when no one else is around.

Overall, the ways in which fraud can be perpetrated is limited only by the imagination of the fraudster, but the workplace circumstances listed above provide examples of how any employee could detect and have reason to report suspected fraudulent activity. Learning about these red flags would likely be most useful to those majoring in human resources and/or management, as they might be the ones best suited to observe behaviors. However, to increase employee diligence, it would be beneficial for all majors to learn about these typical “red flags.” The ACFE report recommends that employees should be on the lookout for these types of behaviors: “These red flags...will not be identified by traditional internal controls. Managers, employees, and auditors should be educated on these common behavioral patterns and encouraged to consider them—particularly when noted in tandem with other anomalies—to help identify patterns that might indicate fraudulent activity” (5).

Ultimately, professors within each discipline should discuss the way these schemes are most likely to be perpetrated within their respective area of study, and there are many resources one can use to explore the various schemes in order to conform to a discussion within the individual majors. For example, the ACFE website (<http://www.acfe.com/fraud-resources.aspx>) and the Appendix of this paper provide a list of potential sources for review in order to custom-create a fraud module within the respective disciplines.

Assessment

All effective business programs regularly assess their curricular components in various ways, but ultimately, academics and their accrediting bodies want to be certain that the instruction methods are

appropriate and students are benefitting from both the content and the delivery of course material. Most programs want their students to be able to demonstrate knowledge, skills, and abilities in conceptual content, research and analysis, written communication, and verbal expression. Depending on what the instructor or department wishes to achieve, assessing the effectiveness of including fraud education modules in the business law course and in courses related to a specific major could take on a variety of forms. Students' conceptual abilities after receiving fraud education can easily be determined by tabulating the results of multiple choice, matching, and other objective questions on tests. To assess analytical skills, written communication, and/or verbal expression, the instructor could assign either a real world or a hypothetical case provided by books, current events, or movies. Both analytical skills and written communication could be developed by requiring students to write an essay or answer a series of questions, for example, how the fraud triangle was represented in a fraud case. Verbal expression (and analytical skills) could be determined by requiring students to engage in individual or small group presentations on assigned cases. These presentations can take the form of debates, mock interviews, individually prepared responses, and individual or group presentations.

As an example, assume an instructor for a finance class wishes to include a module on fraudulent activities relating to the insurance industry. After teaching fundamental insurance concepts, the professor could introduce various fraud schemes that can occur within that industry. Then, students could be asked to watch the film *Double Indemnity*. On a test, they could be asked objective questions regarding who was the policy owner, who was the beneficiary, who was the insured, etc. The film could then be used as a case where students are asked to write a short essay identifying the elements of the fraud triangle as they appeared in the film. Individuals or groups of students could be asked to give a short presentation on fraud statistics as they pertain to the insurance industry, based on information in the most recent ACFE report. By including this array of assignments, the students would have 1) gained a familiarity with key concepts regarding insurance, 2) engaged in analysis and research, and 3) demonstrated both written and verbal communication skills while learning both the key concepts of insurance and how insurance is subject to fraud. Each business program will need to determine to what degree it wants its students to understand how to prevent and detect fraud, as well as how it will incorporate learning assessment after the module is complete. However, with the wide array of resources available, incorporating fraud education and assessing its effectiveness can be easily tailored to the needs of the individual professor or department.

CONCLUSION

As indicated by the ACFE report, companies who educate all of their employees (and not just the accountants) in fraud tend to experience fewer losses and detect fraud sooner than companies who do not implement such programs. However, by providing fraud education while these future employees are still students has the potential to save companies significant amounts in training costs and losses due to fraud. The purpose of this paper was to provide a recommendation on how to implement fraud education at the college level without the need to create a standalone fraud course. By including a module in business law on corruption and the fraud triangle, and a module in an intermediate or advanced level course about fraud schemes most prevalent in the students' selected major.

As with any suggested changes to course curricula, there are some potential difficulties. First and foremost, adding new content to already crowded curricula is never easy. However, faculty who wish to discuss fraud are not limited to needing to review and recite potentially dry or intimidating textbook material. There are a multitude of resources besides textbooks that could be used to facilitate discussion and generate ideas. For example, the ACFE website (<http://www.acfe.com/fraud-resources.aspx>)—besides posting the ACFE report—includes a multitude of resources, including: books, manuals, videos, and articles on fraud detection and prevention, and modules on how to spot weaknesses within a company. Other websites can also provide training materials, research results, and other helpful resources.

Faculty could also use local, national, and international news stories as real-world examples of fraud in a variety of industries and disciplines to generate ideas for class discussion. Books and movies—both fiction and non-fiction—can be great ways to engage students in the “who, what, when, where, and why” aspects of white-collar crime. Even cartoons can prompt a fruitful class discussion. A list of potential resources is presented in the Appendix.

Another potential difficulty with the current proposal is that we recommend two levels of fraud education: first corruption and the fraud triangle in a business law class, and then modules on specific frauds in higher-level classes specific to a student’s major. While we believe that this is the ideal approach, it should not be assumed that this is required. Fraud education, even if it comes from only the business law course or only a module in the student’s major, could still be very valuable. Finally, it is worth mentioning that our recommendations are only one suggestion. There are undoubtedly other methods that could be used to introduce all business students to fraud education. Future research could be aimed at exploring tangible and measurable results of our proposal and/or others to ultimately determine the most effective educational methods. In summary, the ACFE report states that employee education may be the most crucial tool in detecting and reducing fraud, and training in detecting and controlling fraud should not be limited to only accounting majors. Therefore, we believe that if educators incorporate our suggestions (discussing corruption in the business law course and then including modules on recognizing and detecting common fraud schemes in the respective business majors), it is possible that students will receive valuable skills that will save employers thousands or even millions of dollars in the long run.

APPENDIX

Appendix A: Supplemental Fraud Teaching Resources

DOCUMENTARIES:	Length	Release Date	Disciplinary Relevance
Unraveled	84 min	2011	Management/Organizational behavior, finance, accounting
Inside Job	109 min	2010	Economics, finance, accounting, marketing, real estate, banking, management/organizational behavior
The Smartest Guys in the Room	110 min	2005	Economics, finance, accounting, marketing, banking

FRONT LINE VIDEOS:	Length	Release Date	Disciplinary Relevance
The Untouchables	55 min	2013	Accounting, law, finance
Money, Power, and Wall Street	3 hrs, 47 min	2012	Economics, law, finance, management/organizational behavior
The Warning	55 min	2009	Economics, finance, management/organizational behavior
Breaking the Bank	55 min	2009	Finance, banking, economics
The Madoff Affair	55 min	2009	Finance, accounting, economics, management/organizational behavior
Black Money	54 min	2009	Economics, law, international business
Inside the Meltdown	56 min	2009	Economics, finance, banking, law, accounting, management/organizational behavior

FILMS:	Length	Release Date	Disciplinary Relevance
Double Indemnity	75 min	1973	Insurance, marketing, finance, management/organizational behavior, law, human resources
The Counterfeiters	99 min	2007	Economics, management/organizational behavior
Wall Street	126 min	1987	Finance, investing, marketing, law, management/organizational behavior
Wall Street: Money Never Sleeps	123 min	2010	Finance, law banking, investing, management/organizational behavior
Catch Me If You Can	141 min	2002	Management/organizational behavior, marketing, law, human resources
Boiler Room	120 min	2000	Finance, marketing, management/organizational behavior, law, human resources
Owning Mahoney	103 min	2003	Banking, management/organizational behavior, law, human resources

CARTOONS, COMICS, ETC:	Content
www.cartoonstock.com	General business cartoons
www.stus.com	General fraud cartoons, comics
www.offthemark.com	General fraud cartoons, comics
www.cartoonistgroup.com	General fraud cartoons, comics, illustrations
www.grantland.net	General fraud cartoons, comics
www.glasbergen.com	Insurance fraud cartoons, comics

WEBSITES:	Commentary on Content
www.stopfraud.gov	Financial Fraud Enforcement Task Force report; established by executive order by President Obama in November 2009; 2010 was their first year report; initial report includes some data and statistics; website includes links to various types of fraud, explanations of types of fraud, etc.
www.krolladvisory.com	Global Fraud Reports - now in the 6th edition; excellent resource for types of fraud being committed around the world; appropriate resource for an international business course; laid out in "article format" so instructor can focus on just one or two sections of the report; older editions of the report are open access; the most current edition requires a subscription; also refers to data provided by Economist Intelligence Unit
www.kpmg.com	Who Is the Typical Fraudster? Excellent resource containing very current information; provides foundational information appropriate for general business classes and check-sheets to determine if the organization is susceptible to fraud; students and instructors will find this document relevant and easy to understand
www.pwc.com	Global Economic Crime Surveys include charts, graphs, demographic data, and geographic info; in its 6th edition; most recent report focuses on cybercrime but includes information on other types of fraud as well - asset misappropriation, corruption, bribery, etc.; good charts
www.ey.com	Global Fraud Survey now in the 12th edition; not quite as user friendly as the resources listed above; most recent issue has a strong focus on board of directors and high-level management
www.acfe.com/fraud-resources.aspx	Contains a wide variety of resources including books, manuals, videos, articles, etc.

BOOKS	Author	Date	Publisher	Pages
Provenance: How a Con Man and A Forger Rewrote the History of Modern Art	Salisbury and Sojo	2010	Penguin	352
Octopus: Sam Israel, the Secret Market, and Wall Street's Wildest Con	Lawson	2012	Crown	368
History of Greed: Financial Fraud from Tulip Mania to Bernie Madoff	Sama	2010	Wiley	398
No One Would Listen: a True Financial Thriller	Markopolos	2010	Wiley	376
The Wizard of Lies	Henriques	2011	Times Books	448
The Art of the Steal: How to Protect Your Business...	Abagnale	2002	Broadway	225
Stolen Without a Gun	Pavlo, Jr. and Weinberg	2007	Etika	312
The Bribery and Corruption Casebook: The View from Under the Table	Wells and Hymes	2012	Wiley	385

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