Asset Misappropriation Schemes: Short Cases for Use in the Classroom

Constance M. Lehmann*

As educators of future fraud examiners and auditors, we are challenged to provide innovative teaching approaches with realistic illustrations of typical fraudulent activities detected by fraud and forensic professionals/auditors during an audit. To provide the most realistic conditions, these illustrations should be open-ended and unstructured, as are many real-life situations. For example, fraud auditors are often called in after a tip has been reported or an irregularity has been noted. The auditor must then investigate where the system broke down to allow the fraudulent activity to occur undetected, and try to determine the amount of potential or actual losses.

The ACFE 201 Report to the Nations on Occupational Fraud and Abuse (the Report) (ACFE, 201) discusses the various types of fraud schemes that have been investigated worldwide by Certified Fraud Examiners (CFEs). In their summary of findings, the ACFE indicates:

- The most common type of fraud schemes investigated involved asset misappropriation
- The types of businesses most often damaged by fraud include those in the financial, public and manufacturing sectors
- Having anti-fraud procedures (e.g., anonymous hotlines for reporting tips, and clearly stated policies on what constitutes fraudulent activity) in place reduces the cost and duration of fraud schemes

---

*The Author is Associate Professor at University of Houston-Clear Lake.

1 Note that the Sarbanes-Oxley Act (2002) has sections addressing the necessity for organizations to provide employees with a means for reporting fraud without fear of retaliation—specifically, sections 301, 806, and 1107. These are meant to encourage employees to report suspicious activities without fear of retribution.
Most of the fraudulent activities occur in accounting, operations, sales, customer service, and purchasing areas, with the schemes costing the organization the most if the scheme is perpetrated by levels of management with the ability to override or ignore controls (e.g., executive level management).

Although the Report finds that the vast majority of fraud schemes are detected by tips (36.1%), by management review (14%) or by accident (12.8%), auditors (especially internal auditors) have a fiduciary responsibility to recognize and report potential opportunities for fraudulent activity in operations and business processes as part of their audits. The percentage of frauds detected by internal auditors dropped from 16.5% of the reported frauds in the 2010 Report to 9.9% of the reported frauds in the 2012 Report. As we train future auditors and CFEs, we must provide them with the analytical skills to identify areas with potential risk for fraud and give them examples of realistic situations where they might have to be “creative” in their recommendations to reduce the opportunities for fraudulent activities to occur. The Fraud Triangle (described in publications such as Crumbley, Heitger & Smith, 2015) describes the three elements that, if present, “enable” fraudulent activity. These elements include “perceived opportunity” (i.e., allowing for the concealment of the committed fraud), “perceived pressure” (e.g., financial pressure due a family member’s illness, behavioral problems such as compulsive gambling, or pressures from bonus plan structure), and “rationalization” (wherein the fraudster has a convoluted “logic” as to why what they are doing is not a crime). Since pressure is difficult to detect (without tips) and the evidence for rationalization is often indirect, the cases presented here address the “opportunity” element of the Fraud Triangle, because the best deterrence to fraud is the perception of detection (Peterson and Zikmund 2004).
External auditors should also be aware of areas of potential fraudulent activity (although they detected fraud in only 4.8% of the cases in the 2012 ACFE Report). For example, SAS 99 (AICPA 2001) requires the external audit team to assess (and document the discussion of) areas where potential fraudulent activity and/or the misstatement of financial information could occur, while SAS 109 (AICPA 2007) requires the auditor to assess the potential for material misstatement of the financial statements by their clients.

To focus discussion of the cases presented here, occupational fraud is defined by the ACFE as:

*The use of one’s occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization’s resources or assets* (ACFE 2012, page 6)

To compound matters for the investigator, the fraudster has an advantage when he or she manages to conceal the fraudulent activity, since the fraudster knows better than anyone how to get around any controls in place—better than any outsider. To try to tip the scales in favor of our future CPAs and CFEs, the short cases here are meant to develop the students’ skills in identifying potential fraud risk exposures and in developing recommendations to reduce those risks in realistic situations. The cases discuss areas/industries where fraud often occurs (i.e., financial, construction, service, and retail sectors). Students tend to develop better critical thinking skills when placed in a situation where the “textbook” answers are not always possible to apply, and creative compensating control recommendations might be needed (e.g., a small business with too few people to properly segregate cash handling activities).

I. CASE MATERIALS
Case 1: Retail Business: Billing Schemes/Personal Purchases

Detecting and Deterring Fraud

Shortly after Travis got promoted as a store manager at a local Zip-In convenience store, he had an opportunity to fill in at another Zip-In convenience store where Amanda was the store manager. While Amanda was on her mandatory 2-week vacation, Travis took care of all her day-to-day operations, including the filing of paperwork. While catching up on some month-end reporting, Travis found that reconciliations of the weekly money order sales had not been done in 8 months. He also found some errors in the reports that Amanda sent to the corporate office right before she left on her vacation. Travis contacted Amanda about the errors that he found. Amanda said she would take care of the problem when she returned from vacation. Following company fraud reporting procedures, Travis also reported the errors to his supervisor. The supervisor asked Travis to investigate the suspicious activities.

Travis’ investigation revealed that Amanda was using some of the money orders sold in her store to pay her personal bills, including the rent on her house. The money orders are pre-numbered and are stored in the vault of the store. Travis performed an audit on the money-order number sequence, and found gaps in the sequence. The missing money orders caused the cash register to be short which caused the corporate office to be suspicious, although no follow-up was done until Travis reported his suspicions while Amanda was on vacation. The corporate office started investigating Amanda’s paperwork and found the money orders she used to make rent and other credit card payments were cashed by a regional manager, Joe, at the corporate office. It was determined that Amanda was renting a house from Joe. After it was confirmed that Amanda was using company funds for personal use, she was fired and was prosecuted. Further investigation was required as to Joe’s involvement in the fraudulent activities.
Case 1: Questions

1. What were the “red flags” for potential fraud that Travis noticed?
2. What controls were in place that helped Travis discover the fraudulent activity?
3. What improvements would you recommend to keep this type of activity from occurring?

Case 2: Banking and Financial Institutions: Theft of Cash on Hand/Theft of Cash Receipts

Cash Safeguards

The bank branch under review, located close to the US-Mexico border, has 8-10 tellers working under the supervision of a head teller and an assistant manager. The policy states that tellers should have a maximum of $5000 in their drawer at the end of the day. During the day, the tellers receive deposits in local currency and in foreign currency (specifically, euros and pesos), they cash and deposit checks, and they process loan payments and cash withdrawals. While cashing checks or processing cash withdrawals, the tellers verify the signature of the customer with the signature in the system, or they compare the signature with the signature on the customer’s driver’s license or other government-issued picture identification.

The tellers have the authority to cash checks of up to $5000 without having a supervisor review the transaction. The bank gets very busy when it opens and right before closing, especially on Mondays, Fridays, and Saturdays, so sometimes the head teller will give a teller the override code if she is busy working her own cash drawer. At the end of the day, the tellers check their individual cash balances in the system and verify that with a count of the actual cash in their drawers. The system also provides a check total, which should agree to the total checks in the teller’s bin. Each teller verifies the cash transaction report with individual checks, deposit slips, and withdrawal slips in order to make sure that the deposits and withdrawals are made
from the correct customer account. They also cross-check the currency exchange rate and applied processing fees. If a drawer is short/over, the record of the teller and out of balance amount is kept in a log by the Branch Manager.

Every Thursday morning, one of the supervisors counts the cash drawer of each teller before they begin to wait on customers, and verifies it with what the system says should be in the drawer. If the cash drawer limit of $5000 is exceeded, the excess cash is handed over to the supervisor. A record of the transfer of the cash from teller to supervisor is kept by both individuals, with the signatures on the cash transfer slip indicating verification of the transferred amount. The cash box of each teller is locked with dual keys, with one key held by the teller and the other key by the supervisor. The cash boxes are then locked in the vault room. The vault room also has dual lock system; one key is maintained by the supervisor and the other key is maintained by the Branch Manager. At times after the tellers lock their cash box, they leave them unattended and rush home. However, it is the duty of the teller to make sure his/her cash box is locked in the vault room. The next morning the tellers come together with their supervisor to collect their cash boxes.

**Case 2: Questions**

1. Identify the red flags/risks in these procedures which could provide opportunities for fraudulent activity.

2. What controls are in place to mitigate these risks?

3. Suggest recommendations to improve the teller operations to minimize the opportunity for fraudulent activity.

**Case 3: Construction/Service Industry: Fraudulent Disbursements**
Floors 4 U Inc., a private company based in south Texas, does business with several area school districts by renovating their wood, synthetic, and epoxy floors (e.g., gymnasium floors). The company employs about 25 workers and has been in business for over 30 years. Most workers specialize in one of the three divisions; wood, synthetic or epoxy. However if work is slow in their appointed area, employees will go to another area to help. The company handles most of its business when schools are closed during the summer. During the summer months, employees generally work 70 to 80 hours per week. One month after the school year begins, business for Floors 4 U Inc. starts to slow down and sometimes employees work 20 or fewer hours per week.

Many of the employees of Floors 4 U are relatives or friends of the owners. The owners realize that during the slow season, most of the workers will have problems paying their bills if they are not paid for 40 hours a week. Among the workers, there is a silent agreement to be less productive during the slow times in order to have enough work to fill forty hours a week. Therefore, if a job should take two days, the employees find ways to make it last a whole week. Since the jobsites are outside the local area and away from the corporate offices and immediate supervision, employees have been reported showing up for late for work, taking longer lunch breaks, and leaving early. Also, during busy season, many of the employees have to work on two or three different jobsites on the same day. The warehouse manager is not able to keep up with the demand from the various jobsite locations for materials and equipment. Shipment of materials such as varnish, sacks of grout, or cans of epoxy paint need to be picked up and delivered to various locations throughout the day. Students are hired to help during the summer—some at the warehouse, and some at the onsite job locations.
The company is small and does not have a fleet of company trucks available; only the operations manager and the warehouse manager have company trucks. Employees have to use their personal vehicles to get to the job sites and transport what they need for the job. Employees must determine how to transport the required equipment and materials to the jobsites. Some of them ask the operations manager or the warehouse manager to take the equipment and materials to the job sites. Some employees use their personal trucks to take the equipment, but others have small cars; big equipment such as sanders, buffers or table saws do not fit in their vehicles. As the workers might have to work on multiple jobsites during the day, the operations manager has difficulty monitoring the logistics to have the correct materials and equipment at the correct jobsite. This process slows down the work and leads to frustration among workers during the busy summer months, as they must wait for items to be delivered that are needed to complete their job tasks. Some workers leave the larger pieces of equipment at the jobsites because the items cannot be hauled back to their homes or to the corporate office at the end of the day.

To add to the difficulty of efficiently completing jobs, some employees have to be pulled off jobs because they have more experience in other systems, resulting in the necessity of leaving the equipment and materials in another person’s custody (further muddying accountability). Often employees have to buy new equipment or materials from Home Depot. In these cases, the receipts are turned in to the accounting clerk for reimbursement.

By the end of the most recent summer, it was found that more than $10,000 worth of equipment was lost or otherwise unaccounted for; in some cases, there were too many of a certain type of tool available, and in other cases, there were too few of a certain type of tool available. Also, the accounting clerk has complained that employees buy whatever they want during the busy season and sometimes there is no way to determine whether or not what they
bought was necessary. There are rumors that employees buy equipment or tools (selling them later to friends), and that they buy items such as ceiling fans for their own personal use, turning in receipts that lack itemized descriptions of purchased items (such as credit card statements) for reimbursement.

You have been hired by the owners to recommend controls to minimize losses due to improper purchases and reimbursements. Management has also asked for your recommendations for better tool inventory management, and recommendations to discourage the abuses of reported hours worked during the slow season.

**Case 3: Questions**

1. Identify some of the “red flags” for fraudulent activity in this case.
2. What internal controls can be implemented to improve inventory control, and to avoid lost equipment, suspicious receipts or other fraudulent activity?
3. How would you discourage the abuses of hours worked during the slow season?

**Case 4: Small Business: Inventory, Accounts Receivable, and Accounts Payable Risks**

**Implementing Anti-Fraud Controls**

Mr. Gustafson, the owner of the body shop, has been in business for five years. His business has been growing steadily for the past two years. He believes that he will have to hire more employees before the end of the year to be able to have all vehicles brought into the shop repaired and delivered to the customers in a timely manner. He also wants to address some accounting issues pointed out by a friend who is an auditor, specifically, the lack segregation of duties in Mr. Gustafson’s small business. Therefore, Mr. Gustafson would like to evaluate his staff and their duties so he can assess whether he needs to hire more people or simply needs to
reorganize their duties/tasks. He has five employees. Three of them work in the shop: the painter, the body repairman and the helper. The other two employees work in the office. One of the office employees is responsible for duties related to accounts payable and the other is responsible for duties related to accounts receivable. Mr. Gustafson is aware of the issues that can arise from having one person in control of tasks that may overlap. However, given that he has only five employees, he has divided the tasks as follows:

- **George, the painter** gives estimates and enters the sales orders into the system. He has also the ability to override any prices because when he inspects a vehicle, he can identify the extent of the damage accurately. However, every time he changes the prices he gets approval from the owner, but this is usually done after the fact, as the owner has other body shop locations and is not available all the time.

- **Ronald, the body repairman** creates the purchase orders for all the materials that are needed to repair the vehicles; he also receives all the materials needed to perform the repairs. As a favor to the owner, he discards of all the scrap metal such as fenders, bumpers and any other damaged parts removed from the damaged vehicles.

- **Christian, the all-around helper** is in charge of inventory and is allowed to make adjustments to prices or quantities as necessary in the inventory records. Because Mr. Gustafson has been advised by his auditor friend that someone should sign off on any adjustment transactions to the inventory, he has decided to review all the paperwork once the physical count of inventory has taken place and the adjustments are made. After his review, Mr. Gustafson approves/initialeds the inventory adjustment transactions.
• **Jere, the Accounts Receivable** clerk updates the customer master file by entering new customer data, creating the customer invoices, issuing credits memos and/or voiding/canceling any invoices as necessary. She also collects payments from customers and insurance companies, depositing these collections daily at the bank. She has also custody of the petty cash, and performs the reconciliations of petty cash and the bank account.

• **Henry, the Accounts Payable** clerk updates the vendor master file and enters new vendor data, receives vendor invoices and codes them for payment. Once invoices are reviewed by the owner, Henry vouches (compares) them with related receipts and applies any received discounts/credits. Henry issues invoices due for payment every two weeks. The owner reviews and signs all checks.

**Case 4: Questions**

1. Identify and list any potential “red flags”/risks that may contribute or make it easier to commit fraud.

2. Recommend solutions to correct and/or reduce the risks discussed in the previous question

**II. CASE LEARNING OBJECTIVES AND IMPLEMENTATION GUIDANCE**

These cases have been used in a graduate-level IT Auditing course and an MBA financial accounting course at one university. The cases have also been used another university in conjunction with a fraud detection CPE course for CPAs. Courses such as AIS, auditing, fraud auditing, and even basic MBA accounting courses often discuss aspects of how and where fraudulent activity can occur in the context of risk analysis and controls while performing an
evaluation of a business unit or process. The cases presented here can assist the instructor in illustrating examples of situations where some red flags for potential fraudulent activity can be identified.

**Learning Objectives**

The objectives of these cases require the students read and analyze the situation described in the case and either independently (or in small groups) do the following:

1. Identify and recognize potential fraud risk in the described business activities
2. Identify any internal or anti-fraud controls currently in place
3. Develop recommendations for control improvements to mitigate the identified risks
4. Participate in the class discussion of the case, or turn in the required written responses (as assigned by the instructor)

**Benefits of Utilizing These Cases**

These cases provide a number of benefits to the students. The purpose of the cases is to elevate students’ awareness of the potential weaknesses in a given scenario by requiring that they identify where fraudulent activity could occur in a given situation. In addition, if the cases are worked in small groups, the student can develop skills in identifying areas for potentially fraudulent activities due to weak or non-existent controls, while gaining new insights through the feedback provided by their group members. These cases are open-ended in order to encourage the users to visualize the situation and identify the weaknesses and risk exposures in the business process. Longer, more complex cases are sometimes too prescriptive and limit the creativity of the solutions to identified exposures. Research has shown that students can apply the skills they learn while working short cases in their jobs (Aggarwal and Khera 1978). The short cases also
address Bloom’s Taxonomy (Bloom et al. 1956) in the levels of synthesis of the material, analysis of the solutions, and application of the knowledge gained outside of the classroom.

While cases that discuss “known” historical frauds (e.g., Enron) are also useful to the development of an understanding of how and when fraud occurs, the cases presented here are meant to help students develop the skills necessary to evaluate a situation for potential fraudulent activities (i.e., \textit{a priori}). With the cases presented here, the students do not “know” the answers, as they are evaluating a situation to determine where (not necessarily \textit{if}) fraud could (or has) occur(\textit{ed}). SAS 99 requires that the entire audit team assess areas where potential fraud could occur as part of their evaluation of a client. This evaluation does not necessarily mean fraud has occurred, but rather heightens awareness of potential vulnerabilities of a business process or activity, alerting the auditors to pay closer attention to these area(s).

\textbf{Implementation Guidelines}

These cases have been presented and discussed in small groups (3-4 students per group to minimize the potential for free-riding—refer to Bryant and Albring 2006). Working in small teams throughout the semester, the students learn from each other and the discussions are often lively (especially with regard to recommendations to mitigate the identified risks). The nature of these cases, as well as their length, allow the students to stay focused on the topic. Since the majority of the students who have completed these cases work either part- or full-time while attending classes, they often bring their personal experiences into the discussion, providing an added richness to the overall learning experience.

When used in the classroom in this manner, the cases are presented approximately halfway through a three-hour class session. This placement provides the instructor with an opportunity to have the students apply materials previously covered, and also requires the
students to think beyond the lecture on the related topic (for example, a lecture session about the payroll and disbursements process might lead to analyzing the case on abuses in a small construction company, e.g., case 3). In keeping with a problem-based learning (PBL) approach to teaching in auditing courses, these cases provoke the students into researching and investigating the issues on their own, allowing them to better internalize the issues and retain knowledge of the decision process involved in problem-solving. The PBL approach presents an unstructured problem without a clear or definitive answer, the students identify the issues and what they need to know to respond to the problem, and they respond or make decisions based on their research and small group discussion (Hansen 2006, Heagy and Lehmann 2005, Breton 1999). The PBL method has been shown to be an effective way to develop teamwork (when teams are intact for an entire semester) and questioning skills useful to problem-solving in the “real world” (Stanley and Marsden 2012).

In the PBL environment, the instructor’s role is to facilitate discussion, rather than to provide answers (e.g., Barrows and Tamblyn 1980, Schmidt, Machiels-Bangaerts, Hermans, Cate, Venedamp, and Boshuizen 1996, Heagy and Lehmann 2005, Hansen 2006). The case presentation and class discussion generally takes 20-30 minutes, and provides an excellent segue into second lecture session discussing more detail about how to deter/detect fraud in a particular area related to the case topic. Because the teams in the IT auditing class remain intact during an entire semester, they usually rotate the “scribe/spokesman” for their team as different cases are discussed. Each group provides responses during the class discussion and turns in their written responses to receive a participation grade.

The cases have also been used in an MBA financial accounting class where students worked an asset misappropriation case individually and turned in a written response. These
students chose one of the four cases to work individually as an extra credit assignment.² They received the case at the end of class and turned in their individual responses the following class. A brief discussion of the cases during the class when the responses were turned in resulted in excellent feedback from the students. Many of the students recommended that the cases be used in future classes to illustrate the necessity of internal controls to protect an organization from fraudulent activity.

These cases have also been used in a one-day CPE course on fraud detection techniques for CPAs taught at a mid-sized university in the Southeastern United States. The cases were presented as part of a day-long seminar meant to provide information to practicing CPAs regarding the identification of situations where fraud could occur. Thirty-three participants in the seminar worked the cases individually and then there was a discussion during the session. The instructor said the cases were well received, with the participants highly engaged. The seminar participants also came up with nearly all of the suggested answers. She noted that for some reason, case 4 (Small Business: Inventory, Accounts Receivable, and Accounts Payable—body shop) did not spark as much discussion as the others. She also stated that while she would use a different approach for students (preferring to have the students work the cases in small groups), she would use the cases again.

Discussions with the instructors who used the cases and others in the forensic and investigative accounting area resulted in some slight changes to the questions after the cases to help focus the students’ discussion on identifying “red flags” for fraudulent activity (which indicate risks) to help them identify controls and make recommendations to minimize the opportunity for fraud. Two auditing professors at a large regional university in Texas agreed to

---

² Extra credit was awarded based on participation, not necessarily the “correctness” of the response.
use the cases in the Fall 2013. All four cases were utilized, and feedback was collected from the instructors and from the students.

**Feedback on the Cases**

Student feedback, both informal and formal, has been overwhelmingly positive. Students have come back after graduation to report that the analysis of these cases have helped them be more effective in their jobs by giving them practice in developing a risk assessment for fraud and developing recommendations to minimize the opportunity for fraud. Each of these cases has been used in at least two semesters of the graduate IT auditing course and during one semester in the MBA financial accounting course. At the end of the Spring 2013 semester, formal validation of the use of the cases began. A total of 81 students and professionals worked one or more of the cases and provided feedback. During the Spring 2013 semester, the cases were completed in a graduate IT auditing class (n=8) and an MBA financial accounting class (n=10). Feedback was also collected from a group of CPAs after their CPE seminar (n=11). In the Fall 2013 semester, feedback was collected from two auditing sections; one a mixed undergraduate/graduate section (n =37), the other an undergraduate section (n = 15). All feedback was collected using the survey in Exhibit 1. Feedback from the two auditing professors and their students was collected using a survey for the students (with a Likert scale agreement) and an open-ended survey for the instructors.³

The feedback from those who worked the cases during the feedback period can be found in Table 1. Overall, those who worked the case(s) agreed or agreed strongly on average with all of the survey statements. Highest agreement levels were with the statements regarding the applicability of the cases to “real world” issues and the usefulness of the cases in preparing them

³ Surveys are available from the author.
for the business world (average agreement for all participants 83/100). The participants also enjoyed the cases (average agreement scores 80 for all participants (refer to Table 1, Panel A). Table 1, Panel B shows the average agreement scores by section or class participating in this study. Student feedback with regard to enjoyment working the cases (question 2 on the survey) was 89 for the graduate IT audit students and 86 for MBA students). In general, the students in the graduate IT auditing class ranked the body shop case the highest; they ranked the retail and bank cases the lowest.\(^4\)

The CPAs who attended the fraud detection seminar were presented all four cases individually, followed by a full class discussion of their responses to the questions presented by the instructor during a full-day seminar. Feedback from the CPAs who completed the survey at the end of their seminar (n=11) can also be found in Table 1. In general, their agreement level was similar for all of the survey questions. Question 3 (regarding the cases being good teamwork exercises) was not relevant to the way that the cases were administered in their session,\(^5\) but ten of the participants indicated that they thought the cases were a good teamwork exercise (average agreement score was 73 out of 100). In general, the participants ranked the body shop case the highest, and the banking case the lowest, similar to the graduate IT audit students.

Feedback from the auditing students (n = 52) included both graduate and undergraduate accounting majors\(^6\) indicated that the students in the class that worked cases 1 and 2 (n = 37) agreed that the cases were realistic,\(^7\) enjoyable to work, and added to their textbook knowledge

---

\(^4\) Ranking of the cases was not applicable for the MBA participants, as they only worked one case.

\(^5\) In the CPE session, the cases were read to the participants and then the instructor asked the case questions. Various individuals provided responses, and then the instructor would gain consensus from the class.

\(^6\) One of the classes was a cross-listed undergraduate/graduate auditing class and information about how many students were graduates and how many were undergraduates were not collected. The "pure" undergraduate auditing class had a total of 15 students.

\(^7\) With regard to the responses from students on how realistic the cases are, the university in the sample is an upper-level commuter school; the students who worked the cases are older than traditional university students are
(average agreement scores of 84, 80, and 85, respectively). They also indicated the cases they worked helped them to better understand “real world” fraud issues (average agreement score 83, helped them understand warning signs of fraud (average agreement score 82), and would be helpful in other courses (average agreement score of 81). The undergraduate auditing class who worked cases 3 and 4 (n = 15) indicated similar (but lower) agreement levels with the “cross-listed” class (Table 1, Panel B). These different levels of agreement could be due to the fact that the classes worked different cases, or could be due to the larger section including graduate students, who might have more life experiences that enriched the class discussion.\textsuperscript{8}

\[
\text{[Insert Table 1 about here]}
\]

\section*{III. SUMMARY OF THE TEACHING NOTES}

The Teaching Notes for each of the cases can be obtained from the author, which include the following

1. The recommended responses to the case questions. Note that the cases are somewhat unstructured and open-ended, so the students might come up with more creative answers during the discussion session.

2. Suggestions for adapting the cases for use in the classroom.

\textsuperscript{8} Evaluation of between-subjects effects found significant differences in level of agreement between the IT auditing section and the undergraduate auditing sections (the IT auditing section level of agreement was significantly higher). There was a marginal difference between the IT auditing section and the CPAs'). Polynomial contrasts showed the IT auditing section differed from all of the other sections, in general having higher agreement levels on all questions. There could be two reasons for this; in the IT auditing class 1) the cases were worked in small groups, 2) this class worked short cases every class session, so these four cases were just a subset of the cases they worked during the semester. The CPAs had lower agreement levels than all of the other groups. Contrast results available from the author.
REFERENCES


Association of Certified Fraud Examiners (ACFE) (2012). *Report to the Nations on Occupational Fraud and Abuse: 2012 Global Fraud Study.* Austin, TX: ACFE.


Table 1
Summary of Feedback on Use of Cases
Average Level of Agreement with Survey Cases

Panel A: All Feedback

<table>
<thead>
<tr>
<th>Question</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1: Cases were realistic</td>
<td>81</td>
<td>10</td>
<td>100</td>
<td>83</td>
<td>16.0</td>
</tr>
<tr>
<td>Question 2: Enjoyed working the cases</td>
<td>81</td>
<td>10</td>
<td>100</td>
<td>80</td>
<td>15.3</td>
</tr>
<tr>
<td>Question 4: Added to my textbook knowledge and helped me to better understand the “real world” issues</td>
<td>80</td>
<td>20</td>
<td>100</td>
<td>83</td>
<td>15.3</td>
</tr>
<tr>
<td>Question 5: Case(s) helped me to better understand &quot;real world&quot; fraud issues faced in my career</td>
<td>81</td>
<td>10</td>
<td>100</td>
<td>83</td>
<td>16.1</td>
</tr>
<tr>
<td>Question 6: Provided better understanding of &quot;warning signs&quot;</td>
<td>81</td>
<td>10</td>
<td>100</td>
<td>79</td>
<td>15.5</td>
</tr>
<tr>
<td>Question 7: I believe I would learn more and would be better prepared for the business world if my professors would use more case studies like these</td>
<td>79</td>
<td>10</td>
<td>100</td>
<td>79</td>
<td>20.2</td>
</tr>
</tbody>
</table>
Table 1 (continued)

Panel B: Mean Agreement with Survey Statements by Participating Group

<table>
<thead>
<tr>
<th>Survey Statements*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel B: Mean Agreement with Survey Statements by Participating Group</strong></td>
</tr>
<tr>
<td>Students: Graduate CI Auditing</td>
</tr>
<tr>
<td>n = 8</td>
</tr>
<tr>
<td>Survey Statements*</td>
</tr>
<tr>
<td>Cases were realistic</td>
</tr>
<tr>
<td>Enjoyed working the cases</td>
</tr>
<tr>
<td>Cases were good team work exercise (if applicable)</td>
</tr>
<tr>
<td>Added to my textbook knowledge and helped me to better understand the “real world” issues</td>
</tr>
<tr>
<td>Case(s) helped me to better understand “real world” fraud issues faced in my career</td>
</tr>
<tr>
<td>Provided better understanding of “warning” signs</td>
</tr>
<tr>
<td>I believe I would learn more and would be better prepared for the business world if my professors would use more case studies like these</td>
</tr>
<tr>
<td>Ranking of cases**</td>
</tr>
<tr>
<td>Highest: Case 1 &amp; 2 (taught)</td>
</tr>
<tr>
<td>Lowest: Cases 1 &amp; 2 (taught)</td>
</tr>
</tbody>
</table>

*** This class had both graduate and undergraduate students; level was not indicated on survey

*Level of agreement with statements:
0 = Strongly Disagree, 50 = Neutral, 100 = Strongly Agree

**Cases
Case 1: Retail Business: Billing Schemes/Personal Purchases (Zip-In)
Case 2: Banking and Financial Institutions: Theft of Cash on Hand/Theft of Cash Receipts
Case 3: Construction/Service Industry: Fraudulent Enhancements (Paints 4 U)
Case 4: Small Business: Inventory, Accounts Receivable, and Accounts Payable Frauds (Burl Dry)

362