INSTRUCTIONAL RESOURCE

Using “The Wave” to Facilitate Participants’ Understanding of the Implicit Pressures Associated With the Auditing Profession

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SUMMARY: This case presents a collaborative and experiential learning technique that can be used to engage new auditing students in a classroom, or junior auditors in a training session, to facilitate their understanding of the social complexities and pressures associated with auditing. The case utilizes “the wave” (the collaborative activity performed at most stadium-based events) to represent the flow of information through an accounting system, and demonstrate how auditors are often put in a position in which they must decide how to handle the implicit pressures resultant from identifying a problem in an accounting system. The case creates real-world social and psychological pressures, and requires a participant to navigate the social awkwardness of identifying poorly performing participants and to choose between the well-being of a handful of participants compared with the well-being of the entire class. The case, which requires only three participant volunteers, no student pre-work, and about 25 minutes of class time, can stimulate dialogue about audit-related pressures, the audit risk model, fraud risk, professional responsibilities (and results of auditors not fulfilling their professional responsibilities), as well as the importance of internal controls.

Keywords: audit pressure; ethics; internal controls; audit risk model.

INTRODUCTION

While professional standards require auditors to maintain objectivity, integrity, and not knowingly misrepresent facts (American Institute of Certified Public Accountants [AICPA] 1998), research suggests that various chronic environmental, occupational,
and role pressures can influence auditors’ attitudes, intentions, and behaviors (DeZoort and Lord 1997). Much of the extant research (e.g., Hackenbrack and Nelson 1996; Ng and Tan 2003; Hatfield, Jackson, and Vandervelde 2011) has focused on client pressure, which suggests that client pressure biases auditors such that auditors will typically justify client-preferred treatments.

Client pressure can come in two forms—explicit and implicit. Explicit client pressure occurs when a client clearly articulates his or her position and desired outcome, as is common in auditor-client negotiation contexts (e.g., Bennett, Hatfield, and Stefaniak 2015). Implicit client pressures are client pressures that are implied, but not plainly stated. For example, a client’s employee does not need to state explicitly to the auditor that he or she would rather not be identified as the source of a deficiency. Rather, inherently, auditors are aware that client personnel likely want to maintain a positive professional image.

Auditors are required to uphold their professional responsibility to report their findings objectively and without bias, while implicitly understanding that reporting some deficiencies will have negative labor market effects on client personnel. Accordingly, this case discusses a collaborative and experiential learning technique that can be used to engage new auditing participants in a classroom, or junior auditors in a training session, to facilitate their understanding of the social complexities and pressures associated with auditing. In particular, the case aims to mimic a situation in which an auditor identifies a deficiency that can be linked to specific client personnel, and requires an auditor to decide how to respond.

The case utilizes “the wave” (the collaborative activity performed at most stadium-based events), which analogously represents the flow of information through an accounting system. In particular, each wave represents a transaction that occurs within an organization. Like many organizations, in order for a transaction to make it from its origination to the organization’s financial statements, the transaction details must pass through several people within the system. However, as transaction volume increases, the potential that someone within the system will err increases, as well. By purposefully creating a failure environment, the case exhibits how auditors are often put in a position in which they must decide how to handle the social complexities resultant from identifying such errors in an accounting system.

The case utilizes three volunteers—two of which “account” for the accuracy of the class’s performance and one that (initially unknowingly) serves as the “Auditor” of the class’s performance. Eventually, the Auditor must decide whether to risk the entire class’s well-being or to identify specific individuals who should be penalized for poor performance. As a result of the implicit pressures encountered during the case, participants often risk the entire class’s well-being to forgo the discomfort of identifying specific individuals’ deficiencies. The case can stimulate dialogue about audit-related pressures, the audit risk model, fraud risk, professional responsibilities (and results of auditors not fulfilling their professional responsibilities), as well as the importance of internal controls.

Specific benefits of conducting the case include improving participants’ (1) understanding of the pressures that auditors face when discovering a deficiency, (2) understanding of how auditors’ decisions have widespread impact, and (3) understanding of how auditors’ decisions can influence a client employee who is deficient at his or her job. Further, instructors can use the case to highlight and discuss components of the audit risk model, including inherent risk, control risk, and audit risk. Moreover, instructors can add an optional module to the case to demonstrate the importance of internal control efficiency and effectiveness. Finally, from an academic accreditation perspective, the case helps substantiate compliance with various Association to Advance Collegiate Schools of Business (AACSB) accreditation standards.
This case contributes to the auditing case literature based on two distinctive features. First, the case allows participants to experience a pressure-filled situation firsthand. Often, when discussing pressure and ethics in an auditing context, instructors utilize straw-man hypothetical situations, high-level conceptual arguments, cases related to past indiscretions, or regulatory requirements (e.g., Weidenmier Watson and Dow 2010; Mellon and Marley 2013). This case allows participants to gain a more thorough awareness of the ramifications of an auditor identifying individuals who are deficient at performing their job requirements. Further, participants are able to experience firsthand the widespread repercussions of an auditor choosing not to identify those individuals who are deficient. Second, although the case must be incentivized (e.g., extra credit/homework points or a small prize) in order to elicit a pressure situation or dilemma, the case is relatively costless in that it requires no materials, no pre-work on behalf of the participants, and takes a relatively short amount of time to conduct (total time for the case is about 25 minutes).

REFERENCES
CASE LEARNING OBJECTIVES AND IMPLEMENTATION GUIDANCE

Case Learning Objectives

The case is designed to enhance participants’ understanding of the implicit social and psychological pressures associated with identifying deficiencies at a client site, and to increase understanding of the impact that auditors’ decisions can have on individual client employees, as well as additional stakeholders. While more detailed discussions of the learning objectives are provided in the teaching notes, the learning objectives are summarized below:

**LO1:** Improve participants’ understanding of the pressures that auditors face when discovering a deficiency.

**LO2:** Improve participants’ understanding of how auditors’ decisions have widespread impact.

**LO3:** Improve participants’ understanding of how auditors’ decisions can influence a client employee who is deficient at his or her job.

The learning objectives are generally consistent with introductory audit course and junior auditor training objectives related to professional responsibilities, ethics, and pressure. However, I suggest that instructors not use the case at the beginning of an ethics session because participants might react differently if they know that the topic of the forthcoming session will be ethics.

Academic Setting Notes

Because there is no requisite auditing knowledge necessary, for instructors in an academic setting, I encourage the use of the case at the beginning of an auditing course as an introduction to the complexities of the profession. Further, the learning objectives are consistent with existing AACSB accreditation standards. AACSB (2015) standards require that “accounting academic units aspire to develop in their graduates’ strong foundational skills, thorough and relevant knowledge, and a sense of integrity in the practice of accounting” (emphasis added). This case encourages participants to understand both the importance of integrity in accountants’ decision-making processes and how making the correct decision requires accountants to be able to put aside perceived pressures. Moreover, Standard A4 (AACSB 2015) requires programs to have in place curricula that “facilitate and encourage active participant engagement in learning” (emphasis added). Finally, Standard A4 (AACSB 2015) requires that curricula encourage participant-participant and participant-faculty interaction designed to achieve learning goals, and suggests that “successful teaching and learning demand high levels of interaction between learners, as well as between teachers and learners.”¹ This case facilitates an active and engaging learning environment in which participant-participant and participant-faculty interactions occur with the specific purpose of achieving a learning goal.

¹ Meeting Standard 4’s requirement of active participation between instructors and students is likely not met with a single case. Rather, cases such as this, well placed during the semester, allow instructors to meet various learning goals with the help of interaction.
Implementation Guidance

Necessary Skillsets

The case requires instructors to possess three main skillsets—risk-taking, class management, and participant rapport. First, the case requires the instructor to create a failure environment (i.e., ensure that students are not able to accurately complete the case). Although unlikely, instructors must be comfortable with the risk that participants could be exceptionally coordinated and perform the task effectively, thus mitigating the necessary dilemma. Because some instructors are more risk-averse, I provide guidance later in this section on how to minimize this risk to the lowest possible extent. However, the case itself might present a style of instruction that some instructors are not comfortable with performing in the classroom. Second, instructors will need to have a thorough understanding of the end goals of the case, as well as the different phases of the case, in order to be able to manage the classroom case effectively. Instructors ought to be well-versed in the case such that the conversation with the class is natural. To help facilitate this familiarity, I have created an easy-to-reference implementation guide, which is presented in Appendix A.

Third, instructors will need to simultaneously encourage and frustrate participants during the case. Specifically, instructors must be able to have sufficient rapport with participants to make participants believe that if they tried hard enough, they would be able to succeed, knowing that, ultimately, the aim is that participants will fail. A solid rapport with participants will allow instructors to more easily manage this dichotomy.

Setting the Stage

I begin the case by asking for three volunteers to come to the front of the class. I instruct two of the volunteers to bring a pencil and a piece of paper with them, while the third participant does not need to bring anything. Next, I inform the remainder of the class that it will be performing “the wave” (like they do at sporting events). For practice, I make them complete a single wave that must snake from the back of the class to the front of the class. See Figure 1 for a diagram of a typical practice wave.

The class is often timid at first, so practicing a couple times will be beneficial for involvement. Once the class is comfortable with the wave, I tell them that I want to make it a little more difficult. I inform them that instead of starting one wave at one location, we are now going to start two waves, offset by a couple of seconds, at two locations (the far back-right and back-left of the classroom). The updated format of the wave will be used throughout the remainder of the case. If done correctly, the two waves should snake through the classroom similar to what is presented in Figure 2.

Once participants understand that waves can start from two different origination points, and that they must pay attention to what is going on all around them, I tell them that we are about to start the exercise. Before starting, however, I turn to one of the participant volunteers with the paper and pencil (Accountant 1) and I tell him or her to write down how many waves I start at the back-left and the back-right of the room (keeping track of starting location). Then I instruct the other participant with paper and pencil (Accountant 2) that I want him or her to record how many waves finish at the front-left and front-right of the room (keeping track of ending location). If all is done correctly, then the number of waves started in the respective sides of the back of the room should equal the number of waves that finish at the corresponding side of the front of the room. Finally, I turn to the third participant volunteer (Auditor—but this participant is not told he or she is an “auditor”) and instruct him or her to simply watch the process and be able to speak to the class’s performance.

2 I have learned that encouraging them to make a “whooo” sound breaks the tension and increases participation.
Increasing the Wave Volume and Frequency

Next, I inform the participants that every time I point to either the back-left or back-right of the room, a new wave should start. I typically start the waves in rather short order, so that the participants struggle to keep up with the waves progressing through the class. It is important to note that the instructor should be trying to set the class up for failure, because the pressure that will be placed on the Auditor can only occur when the class is unable to keep up with the demands of the waves (information) flowing through the classroom. Inevitably, if 12 to 15 waves are started, in quick succession, alternating randomly between starting at the back-right and back-left of the room, participants are typically unable to keep up.

After the first set of waves makes it to the front of the class (or, realistically, does not make it to the front of the class), I ask Accountant 1 how many waves started at the back-left and back-right of the classroom and ask Accountant 2 how many waves made it to the front. Typically, there will be a significant portion of waves that do not make it to the corresponding side of the front of the classroom. Next, I turn to the Auditor, and I ask him or her how the class did. Usually, the Auditor will willingly describe the class’s performance as less than desirable.

Acknowledging that the class did not perform well, I repeat the exercise with the class again, this time asking them to “really try.” Remember, though, that the instructor should secretly be trying to start waves at a pace greater than the class is able to keep up with. After the second round, and after tallying the waves that were started in the back, and comparing them to the waves that made it to the front, I have the Auditor again assess the class’s performance. Again,

If participants are not struggling with the preliminary stages of waves, it is critical that the instructor ensure that subsequent wave frequency and randomness is escalated to a point of failure. Wave starting cadence and randomness are critical to creating a failure environment for the class. Every class will differ, but, typically, to achieve a failure rate, the cadence I employ can be as quick as two waves per second. Assuming a quick (half-second) cadence, along with variable-length pauses, an example 12-wave cadence might be (alternating between A-Side and B-Side): A, B, A, A (two-second pause), B, B, A (one-second pause), A, B, B, A.
participants will inevitably not complete the correct number of waves, and the Auditor must admit that the class failed.

The Final Round—Incentivized Waves

The wave portion of the case concludes with one final round of waves, but this final round of waves must be incentivized. Without proper incentive, the pressure situation at the end of the case will have no meaning to the participants or the Auditor. In an academic classroom setting, I will typically offer a modest amount of extra credit or homework points for their successful accomplishment of the wave. In a training session environment, a trivial, yet desirable, reward can be offered as an incentive (e.g., small gift cards to each participant, T-shirts). With the participants now having “skin in the game,” they are often interested in ensuring that each wave makes it through the class.4 For the final round, I typically begin about 12 or 15 waves quickly, alternating haphazardly between starting at the back-right and back-left of the room. One final time, I ask Accountant 1 and Accountant 2 to reveal their final wave counts. If done correctly, there should be a mismatch of wave counts.

The Deal

After the wave counts are revealed and the class realizes that, yet again, it failed to transfer the proper number of waves from the back of the classroom to the front of the classroom, I ask Accountant 1 and Accountant 2 to sit down. However, I ask the Auditor to stay at the front of the class and to describe, one last time, how the class performed. Typically, it is rather easy to gain agreement from the Auditor that the system broke down somewhere along the way. I comment to the Auditor how it is unfortunate that the class missed out on the opportunity for points. However, being a sympathetic instructor, I am willing to make a deal with the Auditor, but the deal requires the Auditor to make a difficult decision. In particular, the Auditor must choose between two options:

Option 1: I tell the Auditor that I am willing to give the entire class the points/prizes for

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4 Inform participants at the front of the class that they are not allowed to “phantom wave,” which means that they are not able to make up for known lost waves by randomly raising their hands at the end.
the wave exercise. However, we need to address the fact that we both agreed that the system broke down. As such, I need the Auditor to point out the individuals who broke the process down, because I am not willing to give points/prizes to the participants who were the source of the failure—those participants will receive no points/prizes. Based on how poorly the class performed, I typically tell the Auditor that, at a minimum, approximately 20 percent of the class will need to be identified. I let the auditor know that for each participant he or she points out, I will have them stand and say their names, I will write the names down, and then make sure that those participants do not receive any points/prizes later. The intention of this portion of the case is to set a serious tone about the consequences of specifically identifying participants who “performed poorly.”

Option 2: I tell the Auditor that there is an alternative. The Auditor can choose to not identify any individuals. However, I will write down a random number between 1 and 20, and the Auditor will have to attempt to guess the number within one digit in either direction of my number (e.g., if I chose 14, then the Auditor would have to guess 13, 14, or 15 to win). If the number guessed is within the range of the number I chose, then all participants will receive the points/prizes. However, if the number is more than one digit away in either direction, then the entire class will not receive any points/prizes. The purpose of this choice is to highlight that not identifying specific individuals puts the entire class at risk.

The Decision

The Auditor tends to get rather uncomfortable at this stage of the case. Sometimes the class will try to help the Auditor make a decision. For example, some participants will offer to “take one for the team,” while others will suggest that the Auditor take the chance with the random number. It is important to disallow feedback from the class, as the decision should rest solely with the Auditor. If the Auditor selects the option to identify individual participants, ask the Auditor to point to the participants who caused the problem. Once a participant is identified, have that participant stand up and state his or her name. Be sure to write down each participant’s name on a piece of paper (the writing down of the name creates a slightly more uncomfortable setting for the Auditor). Because of how uncomfortable the task is, it is common for the Auditor to reverse his or her decision after selecting only a couple of names. That is, I have often experienced an Auditor wanting to switch to “guessing the number” because the pressure and awkwardness of singling out individuals to be penalized is too great. Typically, I allow the Auditor to switch his or her choice if he or she so desires. If the Auditor does not change his or her mind throughout the identification process and selects enough individuals, thank the Auditor for his or her help and ask him or her to have a seat. You can then continue to the debrief portion of the case.

If the Auditor chooses to guess a number, then I will ask the Auditor to return to his or her seat. I write down a number between 1 and 20 on a sheet of paper. I ask the Auditor to guess a number and then respond accordingly. If the number is within the range (one above or one below my number), then I will congratulate the participant and tell the class they are fortunate that the Auditor chose the correct number. If not, I will inform the participants that, unfortunately, they will not receive any points/prizes for the exercise.

The Debrief

Historically, I have observed that most Auditors will choose to guess a random number. Also, typically, the Auditor does not guess a number within the range and the class ought not to receive any reward. However, in an academic classroom in particular, and regardless of strategy chosen (even if specific participants were called out), I typically still award full points to everyone for their...
participation, because to me it is important that the Auditor not feel he or she has adversely affected someone’s actual grade. However, instructors can use their discretion in terms of evaluating whether the class exerted enough effort and was engaged enough in the case to merit credit. I have yet to encounter a class that does not try their hardest to complete the task, but if I did, I would not hesitate to withhold credit. In a training session environment, the instructor should use his or her discretion to determine whether to award the prizes to all participants or to withhold the prizes.

I begin debriefing the case by asking participants to imagine the class as an accounting system, and that every wave that started at the back of the room represented a revenue or expense transaction that occurred. Just like in any organization, in order for a transaction to make it from its origination to the organization’s financial statements, it must pass through several people along the way. Further, a lot of information flows through an organization at any one time (represented by the multiple waves going through the class simultaneously); as such, there is the potential that some information will be lost along the way. For example, a wave that started at the back of the class and only made it halfway could represent a sale that was agreed upon, shipped to the customer, but never invoiced.

The Audit Risk Model, Internal Controls, and Fraud Risk

During the debriefing, instructors also have the opportunity to address some components of the audit risk model—specifically, inherent risk, control risk, and audit risk. First, from an inherent risk perspective, instructors can mention that in some organizations, the frequency of transactions are low (as were the frequency of waves at the beginning of the case), but other organizations have a larger volume of transactions that must be processed much faster (represented by the waves coming faster and quicker toward the end of the case). Instructors can engage participants about how transaction frequency, volume, other organization-specific characteristics, and all potential opportunities for error inherently influence the likelihood of misstatement.

Second, from a control risk perspective, instructors can ask participants to identify all the potential causes for lost waves (risks), as well as possible solutions to mitigate the risk of wave loss (internal controls). The instructor can lead a brainstorming discussion about the most effective and/or efficient control that would mitigate wave loss. Instructors can then point out to participants how important controls are in the mitigation of risk. Further, instructors can lead discussions about overall audit methodology in that if an auditor observed that a process’s controls were failing to prevent or timely detect errors (i.e., control failures), then the auditor would have to be more suspect of any information output by the system (i.e., increase in the risk of material misstatement). Toward that end, the auditor would rely less on controls and increase auditing effort to ensure the accuracy of the system’s output. Further, instructors can engage in a conversation about design versus implementation failures. That is, an internal control could be designed well, but it still might not work as expected (implementation), which leads to increased control risk.5

From an acceptable audit risk perspective, instructors can point out how the atmosphere changed when the case transitioned from an inconsequential activity to an activity of merit (i.e., worth points or a prize). All parties involved understood that the gravity of the situation increased, which made everyone more interested in the results and accuracy of the wave counts. Audit risk is

5 An optional module for implementation of the suggested internal controls is discussed later.
similar to that change in atmosphere in that issuing the correct audit opinion (knowing if the waves accurately made their way through the class) is always important, but in certain circumstances (when more is “on the line”), issuing the correct opinion is even more important.

Finally, from a fraud risk perspective, instructors can engage the class in a brainstorming exercise concerning the ways in which the class could have fraudulently completed or reported the results of their performance. For example, the students could challenge the auditors’ count of either waves started in the back of the class or waves finished at the front of the class, claiming that they performed more accurately than what the auditors asserted. Alternatively, students near the front of the class could “phantom wave” in order to decrease the perceived discrepancy between waves started and waves that finished. Discussions about these risks can focus on ways in which the auditors could plan for these risks and mitigate the likelihood of occurrence.

**Decision Ramifications**

Once the audit risk model and internal control debrief has completed, instructors can ask participants, “Assume you are an auditor in the process of conducting your audit and you realize that certain employees are simply not doing their jobs—what happens to those employees if you document their ineffectiveness in your audit report?” Participants typically understand that if an auditor identifies someone as being deficient at his or her job (or was the cause of a misstatement), there is the potential that that employee incurs a labor market penalty of some kind. That is, the employee could be passed up for a promotion, not receive as large a raise, or even be fired (in extreme circumstances). Participants identified as deficient capture this potential by being denied points/prizes for the case. That is, the Auditor, by identifying the problematic participants, must come face-to-face with the implicit pressure from clients (i.e., the client employee’s implicit pressure to not be penalized) and repercussions of identifying someone else’s ineffectiveness. I explain that auditors will often know their clients well, similar to how well participants often know each other in a classroom or training session, which further complicates the decision-making process. Understanding that identifying and documenting a deficiency could directly lead to a penalty being imposed on another individual is a burden some auditors are not comfortable with bearing. At this point, it is important to remind participants of what the alternative is.

In the case, participants will typically only complete about 50 to 75 percent of the waves that were initiated. I ask participants, “What would happen to a company if up to half of its revenue or expense transactions were not properly accounted for and never made it to the financial statements?” Participants will understand that companies that have such difficulty maintaining accurate records would struggle to make sound business decisions, and would likely end up going bankrupt. I follow by asking, “Is it safe to assume that a company that loses 25 to 50 percent of its financial information would likely stand only a small chance of staying in business—that is, it might only have a 15 percent chance of staying in business?” Participants typically agree that the estimate is reasonable, and I explain that the “guessing a number” option is designed to mimic those odds (i.e., the Auditor had approximately a 15 percent chance of guessing a correct number).

If an auditor in the real world were to choose not to disclose a deficiency in an accounting system, then the auditor puts the entire client organization at risk. If the unmitigated deficiency leads to the downfall of the company, then the auditor has jeopardized the well-being of not only those who were responsible for the deficiency, but also the remainder of the organization and other client stakeholders. In the case, the entire class being denied points/prizes represents the potential of the organization going out of business.
Finally, instructors can use this aspect of the case to remind participants about their professional responsibilities. Namely, instructors should remind participants that auditors have a responsibility to maintain objectivity and integrity and not knowingly misrepresent facts (AICPA 1998). Not properly disclosing a known deficiency or material finding could lead not only to the firm dismissing the auditor, but also to the auditor losing his or her license, being investigated by a regulatory body, and/or litigation against the firm.

**Optional Module**

After the debriefing, instructors could add an additional optional module to the case to demonstrate the effectiveness and efficiency of internal controls. In particular, an additional module can be added to challenge the participants to complete the same wave exercise, but to first propose and implement possible controls that could be put in place to mitigate the risk of wave loss (these ideas could have originated out of the debriefing conversation about control risk if the instructor mentioned control risk during the debriefing). For example, participants often propose one internal control that requires participants to sacrifice speed to accuracy. That is, each wave was queued and given an identifying number. Each wave only started once the prior wave was completed. If participants suggest this method, they will quickly see that the process is slowed tremendously, but wave loss is virtually eliminated.

Participants have proposed other solutions, including: (1) the class holding hands to decrease wave loss (ensuring data transmission), (2) each participant calling out a wave identifier (number or letter) to ensure that the ending wave ID matches the beginning wave ID (similar to sequenced checks), and (3) ensuring that there are no empty seats between participants (closing communication gaps). Each possible solution will come with its share of costs and benefits, but, ultimately, adding an internal control module to the case could be beneficial in helping participants understand how controls must balance efficiency with effectiveness.

**Evidence of Effectiveness**

To measure the effectiveness of the case, I emailed an anonymous survey to participants who had participated in the case while they were in school, but who had already graduated and were practicing accountants. This group was targeted in an effort to gather feedback on the applicability and usefulness to practicing accountants. The survey was completed by 83 former students. Participants were asked to rate, on a five-point Likert-type scale ("1 = Strongly Disagree" and "5 = Strongly Agree"), the extent to which they agreed with five questions. The results of the survey are presented in Table 1. Overall, participants provided optimistic perceptions of the case. Specifically, participants agreed that the case improved their understanding of (1) the pressures auditors face (M = 4.24, 96 percent agreement); (2) how auditors’ decisions can influence a large group of people (M = 4.34, 97 percent agreement); and (3) how auditors’ decisions can influence a single person if that person is responsible for a deficiency (M = 4.25, 90 percent agreement). Further, they perceived the exercise to be engaging (M = 4.57, 96 percent agreement) and suggested the exercise could be utilized in classes at other universities (M = 4.47, 96 percent agreement).

Participants also provided open-ended comments concerning the case. Specifically, participants mentioned that “Upon reflecting on the wave, I find it to be a great representation

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6 Administering the optional internal control module is not included in the case’s time estimate. If an instructor administers this optional module, then he or she should plan on approximately ten minutes of extra case time.
of real life. One person can experience pressure from several sources, which can have a heavy influence . . . I feel this could be beneficial to interns and new hires in the audit profession." Another participant mentioned that now that he is an internal auditor, he realizes that "audit findings can have a huge impact on employees, managers, and directors; so, you really do face real pressure to get it right and to be truthful about what you find."

**SUMMARY**

The purpose of this case is to discuss a collaborative and experiential learning technique that can be used to engage auditing students or auditors in a classroom or training session to facilitate their understanding of the social complexities and implicit pressures associated with auditing. In particular, the case aims to mimic a situation in which an auditor identifies a deficiency that can be linked to specific client personnel, and requires an auditor to decide how to respond. While auditors are required to maintain objectivity and integrity and not knowingly misrepresent facts (AICPA 1998), implicit pressure created from personal and social connections among auditors and client personnel, similar to personal and social connections formed among accounting students in a classroom or auditors in a training session, could jeopardize an auditor’s ability to respond to the deficiency. The case ought to help participants experience not only the difficulty auditors experience in reporting clients’ deficiencies, but also the potentially catastrophic effects of not reporting deficiencies on their client organizations, their employing accounting firm, and their own careers.

Specifically, the Auditor in the case experiences the conflict of (1) knowing that some fellow participants were deficient in their performance, (2) identifying those participants who were deficient will lead to adverse repercussions to those participants, but (3) not identifying the deficient participants could lead to adverse repercussions for a larger population. By the end of the case, participants ought to understand that auditors have an obligation to report deficiencies, even
if it means that certain individuals (i.e., client personnel) will face repercussions. Ultimately, participants should acknowledge that if auditors do not report deficiencies, the auditor risks putting his or her entire client organization in jeopardy. The case positions an instructor to facilitate conversations that elicit feedback and encourage dialogue among participants as to what creates these pressures on auditors, how to prepare for such situations, and how they desire to respond if they find themselves in such a situation.

REFERENCES
Association to Advance Collegiate Schools of Business (AACSB). 2015. Eligibility and Accreditation Standards for Accounting Accreditation. Tampa, FL: AACSB.
### APPENDIX A

#### Implementation Guide

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<th>Identify Volunteers</th>
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<tr>
<td>- Identify three volunteers; two will need paper and pencil</td>
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<th>Introduce Case</th>
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<td>- Tell the class that they will be doing the wave and how it will snake through the class</td>
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<td>- See Figure 1 for guidance</td>
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<td>- Practice a wave, point once at back corner</td>
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<th>Attempt Two Waves From Different Sides</th>
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<tr>
<td>- Start two waves at opposite sides of the back of the classroom</td>
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<td>- Give students enough time between the two waves (3–5 seconds) so both waves are successful (builds confidence)</td>
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<td>- See Figure 2 for guidance</td>
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<td>- If they fail, try again and encourage focus and effort</td>
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<th>Explain Volunteer Responsibilities</th>
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<td>- Tell two volunteers with paper and pencil that one (Accountant 1) will count the number of waves started in the back of the room, while the other (Accountant 2) will count the waves that end at the front of the room</td>
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<td>- The third volunteer (Auditor) will simply watch the process and be able to speak to the class’s performance</td>
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<td>- Do not inform the third volunteer that he or she is the “auditor”</td>
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<th>Create Wave Failure</th>
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<td>- Tell the class the next round will be more intense than before</td>
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<td>- Tell the class the exercise now officially begins</td>
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<tr>
<td>- Start 10 to 15 waves in quick succession, starting randomly from the back-right and back-left of the room</td>
</tr>
<tr>
<td>- Typically to achieve failure, the cadence should be as quick as two waves per second</td>
</tr>
<tr>
<td>- Assuming a quick (half second) cadence, along with variable-length pauses, an example 12-wave cadence might be:</td>
</tr>
<tr>
<td>- (Alternating A-Side and B-Side): A, B, A, A, [2 second pause], B, B, B, A, [1 second pause], A, B, B, A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compare Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>- After the first set of quick waves go through the class, have Accountant 1 and Accountant 2 compare how many waves they each counted (should differ; if not, the next round should be significantly more challenging)</td>
</tr>
<tr>
<td>- Ask the Auditor, based on the results of the wave count, how he or she believes the class performed</td>
</tr>
<tr>
<td>- The Auditor should admit the class failed pretty terribly</td>
</tr>
<tr>
<td>- Encourage the class in a jovial manner that they could do way better if they tried a little harder</td>
</tr>
<tr>
<td>- Keep the atmosphere light-hearted and encouraging</td>
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</table>

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**APPENDIX A (continued)**

1B

<table>
<thead>
<tr>
<th>Repeat Failure Waves</th>
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<tbody>
<tr>
<td>• Encourage the class to “really try” and start another round of waves (with the intention of creating failure)</td>
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<table>
<thead>
<tr>
<th>Compare Results</th>
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</thead>
<tbody>
<tr>
<td>• After the second set of quick waves, compare Accountant 1’s and Accountant 2’s counts (should differ, if not, make the next round incredibly difficult)</td>
</tr>
<tr>
<td>• Ask the Auditor, based on the results of the wave count, how he/she believes the class performed</td>
</tr>
<tr>
<td>• Auditor should again recognize that the class failed</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Incentive Success</th>
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<tbody>
<tr>
<td>• Acknowledge that the task is hard, but that motivation might be the missing factor</td>
</tr>
<tr>
<td>• Appropriately incentivize the successful completion of the task (e.g., points or prize for everyone)</td>
</tr>
<tr>
<td>• Make sure to convey that the next round is the last round and that if they don’t complete the task, they will not receive the reward</td>
</tr>
<tr>
<td>• Make sure the students at the front know that they can’t “phantom wave” (can’t just raise their hands randomly to make up for missing waves)</td>
</tr>
<tr>
<td>• Final round should have about 12 to 15 waves (to ensure failure)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Final Comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Have Accountant 1 and Accountant 2 reveal their counts</td>
</tr>
<tr>
<td>• Have them return to their seats, make Auditor stay up front</td>
</tr>
<tr>
<td>• Ask Auditor whether the system broke down</td>
</tr>
<tr>
<td>• When Auditor admits that the system broke down, state that it’s unfortunate their performance did not merit reward</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Deal: Option 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Explain that you are willing to give the class the full prize amount</td>
</tr>
<tr>
<td>• However, people who broke the system down need to be penalized; therefore, everyone will get the reward, except the people the Auditor identifies as deficient</td>
</tr>
<tr>
<td>• Tell the Auditor that he or she will need to identify about 20 percent of the class if he or she chooses this option</td>
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## APPENDIX A (continued)

### The Deal: Option 2
- Explain that the Auditor has another choice
- He or she can forgo identifying people, however you will write down a number between 1 and 20
- The Auditor will have to guess within one digit in either direction (e.g., if 14 is chosen, the Auditor would have to choose 13, 14, or 15 to win)
- If the Auditor chooses a number within the range, everyone gets the reward; if not, no one gets a reward

### The Decision
- Have the Auditor select an option and respond accordingly
  - If the Auditor identifies people, ensure the Auditor identifies approximately 20 percent of the class before he or she sits down. With each person identified as deficient, have that person say his or her name and write it down
  - If the Auditor chooses to guess a number, have the Auditor sit down and secretly write a number down on a piece of paper. Have the Auditor guess, and reveal your number
- During the decision process, do not let the class provide input or sway the decision; the decision should be the Auditor’s alone
- Allow the Auditor to switch options if he/she feels uncomfortable with the original selection; often Auditors will start with Option 1 and then choose Option 2 after identifying a couple of people

### Reward Decision
- If the Auditor identifies deficient individuals or chooses a wrong number, you will have to decide whether to give the reward to everyone based on their effort and your own discretion
- Do this only after making the decision and the class has felt the gain/loss of the decision

### Debriefing — Explain the analogy
- The class represented an organization’s accounting system
- Each wave represented a transaction
- A wave making it to the front of the class represented a transaction that was properly processed and made it to the financial statements
- Each transaction touched several people before it could make it to the financial statements
- A wave that started at the back of the class and only made it halfway could represent a sale that was agreed upon, shipped to the customer, but never invoiced
- Some organizations have few transactions, but others have complex transactions of high volume (waves starting at both sides of the room and at increased frequency)
- Information being lost can have significant impacts on organizations

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### APPENDIX A (continued)

#### Debriefing — The Impact on the Audit Risk Model

- **Inherent risk**
  - Frequency of transactions increase the inherent risk of a misstatement on the financial statements

- **Control risk**
  - Ask students to identify causes of lost waves (risks), and brainstorm what could have been done to decrease wave loss (internal controls)
  - What effect would the controls have on efficiency and effectiveness?
  - If an auditor saw transaction processing problems (waves not getting through), could he or she trust the end result (number of waves counted at the front of the class)?
  - Engage the class on design (bad idea, implemented well) vs. operational failures (good idea, not implemented well)

- **Acceptable Audit Risk**
  - Discuss the change in atmosphere when the task shifted from inconsequential to an activity of merit (points or prize on the line)
  - The more an auditor has on the line, the more confidence is needed in the audit opinion (lower acceptable audit risk)

#### Debrief — Decision Ramifications

- What might happen to an employee who was identified by an auditor as not doing his or her job correctly (deficient)?
  - There would likely be a labor market penalty of some kind (e.g., poorer performance review, missed promotion, even termination)
  - Captured by identified individuals not receiving a reward. It’s hard to identify individuals though, knowing they might be penalized

- What happens if the auditor doesn’t report the problem?
  - In the case, lots of “transactions” didn’t make it to the financial statements
  - What if 50 percent of an organization’s revenue or expense transactions were not properly recorded? Would that company be in jeopardy of going out of business? Likely
  - Captured by the “guessing a number” option. The auditor risks everyone’s well-being by not identifying a few individuals

- If the auditor refuses to identify deficiencies, the auditor also faces personal penalties (e.g., losing his or her license) and exposes the firm to risk (e.g., lawsuits and fines).

#### Optional Internal Controls Exercise

- The instructor has the option of allowing students to implement their best internal control idea from the earlier brainstorming session
- If performed, discuss the impacts that the chosen control has on effectiveness (wave count alignment) and efficiency (how much was the process slowed down)