



Case

Do, reflect, think, apply: Experiential education in accounting

Maureen G. Butler^{a,*}, Kimberly S. Church^b, Angela Wheeler Spencer^c^a John H. Sykes College of Business, The University of Tampa, 401 W Kennedy Blvd, Box O, Tampa, FL 33606, United States^b The Bloch School of Management, University of Missouri-Kansas City, 5100 Rockhill Road, Kansas City, MO 64110-2499, United States^c School of Accounting, 401 Business Building, Spears School of Business, Oklahoma State University, Stillwater, OK 74078-4011, United States

ARTICLE INFO

Article history:

Received 12 November 2017

Received in revised form 4 May 2019

Accepted 4 May 2019

Available online 14 May 2019

Keywords:

Experiential education

Experiential learning

Accounting

Critical thinking

Core competencies

ABSTRACT

Experiential education can facilitate student critical thinking improvement. However, this method is more than learning by doing, active learning, simulations, or incorporating real-world information in instruction. Instead, it requires students to *Do, Reflect, Think, and Apply*. Thus, the additional planning and preparation required may discourage instructors transitioning from lecture to experiential delivery. This teaching note provides resources to help accounting instructors adopt or design experiential learning activities for their courses. We provide background and features of experiential learning, identify relevant accounting-specific experiential learning articles, and offer examples to help instructors adapt and evaluate experiential learning activities.

© 2019 Elsevier Ltd. All rights reserved.

1. Introduction

Educating students to be critical thinkers and problem solvers is on the forefront of business education. Henry Mintzberg, professor of management at McGill University, states that “a numerical view of the world . . . reduces very complex issues to rather simple things. But the world is nuanced and highly complicated.” (Hemp, 2009). Furthermore, Mintzberg emphasizes the importance of context and deep understanding developed through experience in making good business decisions. Likewise, experiential learning is the process of creating knowledge through experience as opposed to merely receiving or transmitting information; it requires adaptation to the world and transformation of experience (Kolb, 1984; Kolb & Kolb, 2005).

Experiential Learning Theory, rooted in the learning theory models of Lewin, Dewey, and Piaget (Kolb & Kolb, 2005; McCarthy, 2010), emphasizes the central importance of experience in learning, a supplement to traditional theories focused on acquisition, manipulation, and recall (Kolb, 1984). Engaging learners directly in the studied phenomena is central to experiential education (Kendall, Duley, Little, Permaul & Rubin, 1986). Learners participate in a concrete experience (*Do*), reflect on that experience and other information (*Reflect*), develop theories based on experiences and knowledge (*Think*), and formulate a conclusion or solve a problem (*Apply*).

Traditional accounting instruction often emphasizes task completion, memorization, and clear-cut answers that are descriptive of surface learning (Turner & Baskerville, 2013). Conversely, deep learning (i.e., experiential education) involves developing a new perspective by integrating new material with existing knowledge.¹ Further, approaching accounting education solely from a technical perspective ignores the social realities of accounting practice (Dellaportas, 2015), whereas

* Corresponding author.

E-mail addresses: mbutler@ut.edu (M.G. Butler), churchk@umkc.edu (K.S. Church), angela.spencer@okstate.edu (A.W. Spencer).¹ For additional information on accounting perspectives of deep and surface learning, see Apostolou et al. (2015, 2016), Turner and Baskerville (2013), McDowall, Jackling, and Natoli (2015), and Everaert, Opdecam, and Maussen (2017).

experiential education facilitates incorporating this perspective into instruction. Stout (2018) motivates the use of experiential education by citing the Association to Advance Collegiate Schools of Business (AACSB) accreditation standards that suggest using experiential learning activities as a strategy for demonstrating continuous improvement (AACSB, 2017). Experiential learning provides a means to integrate context, understanding, and experience.

The accounting profession expects graduates to possess critical thinking skills and professional judgment in addition to technical knowledge. For example, the American Institute of Certified Public Accountants (AICPA) Core Competency Framework for professionals includes managing relationships, gathering and organizing information, listening, analyzing data, building conceptual decision models, making decisions, and adapting to changing circumstances (AICPA, 2005; Kendall et al., 1986). The Certified Public Accountant (CPA) Examination evaluates complex problem-solving and judgment by testing abilities to identify and solve unstructured problems, develop reasonable hypotheses to answer questions, and generate responses rather than simply identifying the answer to a question (AICPA, 2018). In addition, the Pathways Commission, a joint project of the American Accounting Association and the AICPA, has published the Pathways Vision Model, which highlights the role of critical thinking and professional judgment in evaluating and creating information useful for decision-making, and ultimately the prosperity of society (Pathways Commission, 2013, 2015).

Intuitively, an education model that incorporates an experiential component would be favorable because students can recall more of what they do than what they hear (Hawtry, 2007). Through experiential education, students can develop skills identified by practice and academics as critical to professional success. As accounting educators respond to the profession's demand for students with critical thinking and problem-solving skills,² experiential education can facilitate this learning. The challenge, however, is understanding the transformative features of experiential education and knowing how to incorporate those teaching methods in the classroom.

We provide resources to help accounting instructors properly implement experiential education. These resources include a summary of experiential education and an explanation of experiential education benefits for accounting education. We also provide examples to help accounting educators evaluate, implement, or design experiential learning activities for their courses. We rely on previous research to demonstrate the efficacy of the experiential learning model and provide a detailed example of adapting an accounting course activity to an experiential learning model.

2. Experiential learning background

Active learning can lead to greater understanding, retention, problem-solving skills, and critical thinking ability (Brickner & Etter, 2008). This teaching method involves authenticity, application, engagement, struggle, and ownership of learning through experiences. However, active learning does not require some important elements for knowledge creation. According to experiential learning theory, it is through the reflecting, theorizing, and applying those theories that students create knowledge (Kolb, 1984; McCarthy, 2010).

Experiential education extends learning activities by requiring students to reflect on the experience from different perspectives, integrate observations into logical theories, and use those theories to solve a problem or decide a course of action (Kolb, 1984; Kolb & Kolb, 2005; McCarthy, 2010). These learning actions do not occur in a set order, but rather in a cyclical or recursive manner so that students perform them all at some point in the learning process, enabling them to learn at a deeper level, as described in Section 1 (Kolb & Kolb, 2005; Keeton, Sheckley, & Griggs, 2002). Of course, students need general knowledge of the subject matter before learning at this deeper level.

Kendall et al. (1986) describe this process, outlined in Table 1, as complete learning. We summarize these learner actions as *Do, Reflect, Think, and Apply* (see Table 2).

The National Society for Experiential Education (NSEE)³ emphasizes the importance of reflection to learning.

“Reflection is the element that transforms simple experience to a learning experience. For knowledge to be discovered and internalized the learner must test assumptions and hypotheses about the outcomes of decisions and actions taken, then weigh the outcomes against past learning and future implications.”

[(NSEE, 1998)]

Experiential instruction is student-centered because it requires the learner to identify and locate resources, develop questions, define problems, generate hypotheses, and undergo individualized evaluation (Harrison & Hopkins, 1967; Kendall et al., 1986). This method is in stark contrast to traditional teacher-centered instructional approaches of expert-provided information and questions with standardized solution evaluation. Learners that become dependent on an expert instructor may not know how to learn and therefore may have difficulty when faced with new problems and new information (Harrison & Hopkins, 1967).

Gosen and Washbush (2004) provide an overview of experiential learning effectiveness research and cite multiple studies that indicate positive effects of this learning method, while criticizing the research design and measurement standards used in published studies. We reference studies that primarily use a pre-post-test and/or control group research model to docu-

² *Inside Higher Ed* reports that thinking, communicating, and problem solving are more important to business executives than a new hire's major (Budryk, 2013).

³ NSEE is a US-based nonprofit organization and resource for the development and improvement of experiential education programs.

Table 1
Effective learning abilities and learner actions.

Effective learning abilities (Kolb, 1984)	Learner actions (Kolb, 1984; McCarthy, 2010)
Concrete experience	<i>Do</i> – Participate in new experiences
Reflective observation	<i>Reflect</i> – Reflect on experiences
Abstract conceptualization	<i>Think</i> – Integrate observations into logical theories
Active experimentation	<i>Apply</i> – Use theories to make decisions and solve problems

Table 2
Principles of good practice for experiential learning activities.

Principles	Guiding questions
1 Intention	How will this experience achieve the learning objectives?
2 Preparedness and planning	Do the participants have enough knowledge for a successful experience? Does the experience plan link to the intended objectives? Is the plan adaptable to dynamic experiences and feedback?
3 Authenticity	Does the experience include or simulate a real-world context?
4 Reflection	Does the learning activity include a reflection component that requires students to consider assumptions, outcomes, decisions, past learning, and future implications?
5 Orientation and training	Do partner organizations and participants have adequate background information to facilitate productive relationships?
6 Monitoring and Continuous improvement	Is a feedback system in place that maintains the focus on the intentions and objectives?
7 Assessment and evaluation	Is a method to document the intentions and outcomes of the learning activity in place?
8 Acknowledgment	Is a culminating documentation of accomplishments or celebration of learning and impact planned?

ment the effects of experiential learning methods in Table 6. Empirical evidence of the experiential learning activity effectiveness addresses the concern that published teaching cases benefit students and that the research is sufficiently rigorous (Rebele & St. Pierre, 2015; Stevens & Stevens, 1992; Stout, 2018). A summary of this evidence is in the following paragraphs.

Canziani, Welsh, Hsieh, and Tullar (2015) document that experiential learning is related to motivation to establish goals. Further, experiential education methods adapted to Kolb's experiential learning model lead to increased student knowledge but may not be more effective than other methods (Powell & Wells, 2002). Herz and Merz (1998) show that a Kolb experiential model simulation/game seminar results in learning gains significantly greater than a traditional seminar.

Research suggests that experiential education has a greater impact on students with less tendency to diminish the impact of stress through cognitive optimism and coping actions. Bansal (2014) documents that problem-solving ability of these students demonstrate a significant improvement when taught using experiential learning strategies compared to traditional teaching strategies. According to Hamer (2000), student learning improves when taught with structured experiential learning activities, lectures, and semi-structured activities. The effect is stronger for low and moderate overall performing students when learning definitional material. Zlotkowski (1996) suggests that direct practical experience is the best way for students to learn how to deal with complex situations. Throughout their careers, accounting graduates must demonstrate higher-level skills learned through practicing organizing, retrieving, applying, and transferring information in different contexts across the accounting curriculum (Bransford, Brown, & Cocking, 2000; Budryk, 2013).

Experiential learning is a natural enhancement to accounting education, which inherently involves student participation in the learning process through practicing problems. Experiential education can enhance student learning and workplace performance by developing critical thinking skills, problem-solving expertise, and the ability to handle complex issues in accounting practice. As a recent example, Christensen and Woodland (2016) find that participation in Volunteer Income Tax Assistance (VITA) programs is positively and significantly associated with problem-solving skills. Finally, experiential education mitigates the tendency to cover the content of extensive accounting curricula at a surface level characterized by focusing on task completion, memorization, and clear-cut answers (Turner & Baskerville, 2013).

Teaching and learning focused on content and grades will not likely achieve the results possible through experiential learning, which requires personal discovery and the accumulation of knowledge through inference (Kosnik, Tingle, & Blanton, 2013). For example, an experiential learning model might include students reflecting on their existing knowledge of allocations and the impact of allocations on multiple stakeholders (*Reflect*), a teacher guiding students through the process of allocating costs (*Do*), students integrating this information while evaluating a nonprofit organization's allocation of costs to its various programs (*Think*), then using this information to develop an allocation methodology for a different nonprofit (*Apply*). Students will reflect on the information, expectations, observations, and future impact throughout the process. Thus, students in a successful learning environment should be prepared to approach confidently an open-ended allocation problem as opposed to simply restating memorized rules or problem solutions.

In summary, experiential education is broader than active learning. It facilitates learning by providing students an opportunity to participate in a concrete experience (*Do*), reflect on that experience and other information (*Reflect*), develop logical theories from current and previous experiences and knowledge (*Think*), and use those theories to make decisions or solve problems (*Apply*).

3. Adopting experiential education in accounting courses

Traditional education is teacher-centered, relying on information from experts in textbooks or lectures and evaluation using instructor posed and evaluated questions (Harrison & Hopkins, 1967). This model allows the instructor to completely control the learning environment. Instructors and students transitioning to an experiential learning model may have some apprehension about a teaching method that presents ambiguity. Instructors can adopt experiential instruction at multiple levels by applying the principles to a single assignment, a segment of a course, an entire course, or even to support a co-curricular activity. This section of the paper provides best practices, practical ideas, and references for incorporating experiential learning into accounting courses.

3.1. National society for experiential education (NSEE) principles of good practice for experiential learning activities

Foundational to the effective use of experiential learning methods are the NSEE Eight Principles of Good Practice for All Experiential Learning Activities (NSEE, 1998). We summarize the principles as questions an instructor might consider when developing or evaluating a potential experiential learning activity to ensure its design will achieve the desired results.⁴

3.2. Designing accounting experiential learning activities

After determining the objective of an experiential learning activity, the next step is to identify an activity to serve as the concrete experience. Table 3 contains 20 examples of in-class and out-of-class activities that might serve as the basis of experiential education applications in accounting courses.⁵

The experience should involve critical thinking components such as problem articulation, research, decision modeling, risk analysis, or decision-making.

After identifying a concrete experience linked to the learning objective, instructors should develop questions and response methods to complete the experiential learning cycle of *Do*, *Reflect*, *Think*, and *Apply*. Reflecting includes observations of experiences and the environment which can be in a variety of written or digital media formats. Through reflection questions, students can consider different perspectives (industry, global, legal, regulatory, culture, ethical, and client); personal attributes (leadership, communication, and professional demeanor); business skills (time management, goal setting, and project management) and resource management (information, financial, and human) (Kendall et al., 1986; Kosnik et al., 2013). Table 4 contains example questions instructors can use as prompts for *Reflecting*, *Thinking*, and *Applying*. Questions should be appropriate for the participating students and tailored to the activity.

The questions in Table 4 are a starting point for customizing questions appropriate for the activity. Instructors need not limit students to exploring and explaining their thoughts about experiential activities, but can incorporate demonstrations of new abilities, creation of products, preparation of plans, and justifications for decisions resulting from the experiential learning activity.

3.3. Example accounting experiential learning activities

To illustrate the adaptation of the experiential learning model to existing class activities, Table 5 contains examples of incorporating the experiential learning model of *Do*, *Reflect*, *Think*, and *Apply* appropriate for the different accounting content areas. We provide a more detailed example of an experiential learning activity in Appendix A to assist instructors with developing an activity in any accounting course. Our example does not demonstrate efficacy of the experiential learning model, but rather is a practical guide for adapting existing activities to an experiential learning approach.

3.4. Accounting-specific experiential education references

To further assist accounting instructors with implementing experiential learning activities, we provide a list of articles published since 2000⁶ containing activities and strategies specific to the accounting classroom (Table 6). Instructors can use the activities in these articles as foundations for an experiential learning *Do* action, and supplement with the remaining experiential learning model actions of *Reflect*, *Think*, and *Apply*, if not already included. Although research exists that addresses different aspects of experiential learning such as learning styles (McCarthy, 2010) and experiential learning program reviews (Blanthorne & Westin, 2016), Table 6 summarizes articles providing implementation assistance for instructors.

⁴ Complete descriptions of each principle are available on the NSEE website (<https://nsee.memberclicks.net/8-principles>).

⁵ Experiential learning activity ideas come from multiple sources including: AICPA (2005), Albrecht and Polhemus (1998), Brickner and Etter (2008), Hawtry (2007), Healy and McCutcheon (2008), Kendall et al. (1986), Kosnik et al. (2013), Lavoie and Rosman (2007), Long and Kocakulah, (2007), Savage, Strand, and Lancaster (2008), Webb (2006).

⁶ We arbitrarily selected articles published since 2000 to mitigate the risk of the activities and context not aligning with the contemporary business environment and technological advances.

Table 3
Example accounting experiential learning activities.

Accounting software set up and use	Interviews and observations
Article summaries and discussions	Meetings or events
Case studies	Movies
Data and modeling	Not-for-profit consulting
Debates	Online threaded discussions
Feasibility and efficiency studies	Practical exercises
Field experiences	Presentations
Financial statement analysis	Role playing
Game creation	Simulations
Internships and cooperatives	Volunteer Income Tax Assistance (VITA)

Table 4
Sample experiential learning process questions (Hocking, 2010).

Experiential learning process	Sample questions
Reflect (Reflective Observation)	<ol style="list-style-type: none"> 1. What were your expectations? 2. What did you know before the experience? 3. What did you do or observe? 4. Who were the stakeholders and how were they affected? 5. How did the experience feel? 6. How did your apprehension change, or your confidence grow? 7. Did you feel successful, effective, and knowledgeable?
Think (Interpretive or Abstract Conceptualization)	<ol style="list-style-type: none"> 1. What did the experience make you think? 2. How did the experience change your thinking? 3. What did you learn? 4. What worked or did not work? 5. What was unexpected? 6. What did you like or dislike? 7. Why did the experience occur in the way it happened?
Apply (Decisional or Active Experimentation)	<ol style="list-style-type: none"> 1. What will you do differently next time? 2. What decisions or opinions have you formed? 3. How will you apply what you learned? 4. How will the experience affect your career path, personal life choices, use of new information, skills, or technology? 5. What would you like to know because of this experience? 6. To what other situations can you apply knowledge gained from this experience?

3.5. Experiential learning evaluation

Instructors must customize the evaluation of experiential learning assignments to incorporate the experiential learner actions of *Do*, *Reflect*, *Think*, and *Apply* along with the other assignment requirements such as technical competency or writing. Table 7 contains sample evaluation criteria related to each experiential learner action. Instructors may use these sample criteria as the basis for a customized rubric⁷ by selecting criteria suitable for the assignment and defining the standards of performance for each level of proficiency such as does not meet expectations, meets expectations, and exceeds expectations.

4. Challenges of implementing experiential education in accounting courses

Notwithstanding the established pedagogical benefits of implementing experiential education in accounting courses, this teaching method does pose challenges. First, experiential education must show evidence of student learning and achievement of course objectives (Kendall et al., 1986; Rosenstein, Sweeney, and Gupta, 2012). Instructors can mitigate this challenge by linking concrete experiences to objectives and determining the assessment method in the initial experiential learning activity planning and design phase. Liang, Howard, Dunn, and Khananayev (2016) illustrate achievement of objectives in an experiential learning entrepreneurship context.

Second, instructors incorporating experiential learning activities need consulting and coaching skills to manage students working on open-ended projects, possibly with external organizations (Kosnik et al., 2013). Moreover, inadequate preparation, poor implementation, and insufficient perceived value can lead to low student satisfaction with an experiential learning model (Zhai, Gu, Liu, Liang, & Tsai, 2017). Stanley and Edwards (2005) report that using an experiential interactive, virtual multimedia learning medium made learning more meaningful to students. Instructors implementing an experiential learning model must adequately prepare for an uncontrolled environment to effectively manage the experience and to mitigate

⁷ For information on developing and using rubrics in accounting, see Schaefer and Stevens (2016).

Table 5
Example experiential learning activities by content area.

Course (Topic)	Do (Concrete Experience)	Reflect (Reflective Observation)	Think (Abstract Conceptualization)	Apply (Active Experimentation)
Accounting Information Systems or Audit (Internal Controls)	Observe an actual sales or purchase process at a local business	Prepare a flowchart to identify observed internal controls	Identify gaps in the internal controls of the observed process	Prepare a revised internal control flowchart suitable for sharing with the business owner
Cost Accounting (Cost Allocation)	Evaluate allocation of indirect costs of a not-for-profit organization using a Form 990	Record perceptions and observations of not-for-profit organization functional expense reporting	Identify and evaluate relevant allocation methods and issues; Develop theories regarding allocation methods as well as users and misuses of allocated expense information	Develop an allocation policy for a not-for-profit organization
Financial Accounting (Percentage of Completion)	Build a structure using Jenga® blocks	Identify relevant issues and understanding before and after the experience such as revenue recognition, billing process, and value creation	Evaluate the impact of this process on the balance sheet	Evaluate alternate situations such as dissimilar materials based on experience of building structure from uniform blocks. Apply concepts, observations, and conceptualizations to other percentage of completion problems
Government and Not-for-Profit Accounting (Budgeting and Reporting)	Attend or view a recording of a local government budget hearing and document observations	Document expectations before the budget hearing	Evaluate budget hearing observations in comparison to the government's Comprehensive Annual Financial Report	Identify potential implications of the budget process on services provided to citizens, citizen behavior, and local government accounting and reporting
Master's Programs (Professional Development)	Use AICPA or IMA Core Competency Framework to assess skills	Evaluate and document current and desired skill levels and other characteristics such as strengths and weaknesses or feedback from others	Determine methods and develop plans to achieve desired skill levels	Undertake steps to achieve desired skill levels including scheduling, reassessing, documenting, and modifying plan periodically
Tax (Volunteer Income Tax Assistance)	Participate in VITA Program	Document expectations, apprehensions, and preparation before and during experience, then record knowledge gained and outcomes after experience	Evaluate experience from perspectives of preparers, clients, and organizers, as well as technical aspects of tax preparation experience	Evaluate the effectiveness of the program and make substantiated recommendations for improvement; Apply concepts practiced to more complex situations

low student satisfaction. Finally, overzealous goals, ill-planned activities, or poor communication with partner organizations may result in an incomplete learning cycle (Easterling & Rudell, 1997). Research, training, planning, and communication by instructors can alleviate the potential risks of these challenges of implementing experiential education.

5. Conclusion

We provide resources designed to enable accounting educators to incorporate more critical thinking and problem-solving activities in their courses through experiential education. Instructors already using experiential learning activities also may find these resources helpful in affirming the experiential approach. We describe the elements of experiential education based on the Kolb (1984) Experiential Learning Cycle and the benefits it offers in achieving critical thinking and problem-solving skill development goals of accounting educators. As universities continuously improve and respond to concerns about critical thinking skills by academics and the profession, experiential education is one way to enhance theoretical instruction. Instructors adopting experiential learning are at the forefront of this shift to encourage deeper learning by their students.

We provide resources to assist accounting instructors with implementing and designing experiential learning activities in the specific discipline of accounting, a need documented by Rosenstein et al. (2012). The paper contains example experiential learning activities (Table 3), sample experiential learning process questions (Table 4), example experiential learning activities by content area (Table 5 and Appendix A), and accounting-specific experiential education research references (Table 6). These resources will help accounting educators adopt or develop experiential learning activities in their courses.

Table 6
Experiential education research by accounting content area.

Course/Content Area	Reference
Accounting – General	Bisman (2011) Bovinet and McVay (2004) Boyce, Williams, Kelly, and Yee (2001) Edmonds, Edmonds, and Mulig (2003) Kern (2002) Marriott (2004)
Audit	Gifford and Howe (2012) Laing (2013) Schwartz, Spires, and Young (2004)
Audit and Government/Not-for-Profit	Still and Clayton (2004)
Co-Curricular Activities	DeLaune, Rakow, and Rakow (2010)
Ethics	Loeb (2015)
Ethics and Audit	Dellaportas and Hassall (2013) Savage, Strand, and Lancaster (2008)
Financial Accounting	Carter and Jones (2011) Christ (2002) Fuglister, Stegmoyer, and Castrigano (2010) Gujarathi and McQuade (2002) Well, McGuigan, and Kern (2011)
Financial Accounting/Government and Not-for-Profit	Huber and Mafi (2013)
Government and Not-for-Profit	Elson, Ostapski, O'Callaghan, and Walker (2012) Murphy (2005)
International Accounting	Chmielewski-Raimondo, McKeown, and Brooks (2016)
Internship	Beard (2007)
Introductory Accounting	Brickner and Etter (2008) Fowler (2006) Killian, Huber, and Brandon (2012)
Managerial Accounting	Bremser and White (2000) Calvert and Kurji (2012) King and McConnell (2010) Kosnik, Tingle, and Blanton, III (2013)
Managerial/Cost Accounting	Barsky, Catanach, and Lafond (2008) Walters and Pergola (2009)
Pedagogy	Rama and Zlotkowski (2007)

Table 7
Sample evaluation criteria.

Learner actions	Sample evaluation criteria
Do	1. Describe the experience 2. Participate in a concrete experience
Reflect	1. Assess situations or individuals 2. Describe experience from different perspectives 3. Develop questions 4. Document expectations and perceptions 5. Explain personal discovery 6. Identify issues 7. Identify resources
Think	1. Develop theories based on experiences and knowledge 2. Evaluate outcomes against past learning and future implications 3. Explain knowledge gained 4. Integrate observations into logical theories 5. Test assumptions and hypotheses
Apply	1. Adapt theories to solve a problem or decide a course of action 2. Apply concepts to new or more complex situations 3. Assess implications 4. Extrapolate experiences and observations to new situations 5. Formulate solutions to problems 6. Implement alternative actions

Acknowledgements

The concept for this paper was cultivated during the NSEE Experiential Education Academy sessions at The University of Tampa. The authors thank two anonymous reviewers, the associate editor, and the editor-in-chief for their comments and suggestions that significantly improved the paper.

Appendix A. Detailed example of experiential learning activity

Course	Master's level accounting courses
Topic	Professional Development
Objective	Students will create a plan to develop the skills necessary for success as accounting professionals
Materials	Professional Competency Framework (e.g., AICPA, IMA, CGMA.)
Reflect	
<i>Class discussion</i>	
	<ol style="list-style-type: none"> 1. What skills should accounting professionals possess? 2. How do accountants develop these skills?
Reflect	
<i>Individual activity</i>	
	Evaluate your current state by answering the following questions:
	<ol style="list-style-type: none"> 1. What are your strengths? 2. What are your weaknesses? 3. What feedback do you receive from others (at least two positive and two negative)? 4. How do you respond when under stress (at least two)? 5. What can you conclude from this assessment?
Do	
<i>Individual or small group activity</i>	
	Using an appropriate professional competency framework, create a table indicating the following for each competency:
	<ol style="list-style-type: none"> 1. Description of each competency in the students' own words 2. Skills that demonstrate each competency 3. Courses, work experience, or other activities facilitating development of each skill
Think	
<i>Individual activity</i>	
	1. Evaluate and rate yourself with respect to each competency (e.g., 0 = no ability to 5 = expert ability)
Apply	
<i>Individual activity</i>	
	Develop short- and long-term plans to improve deficient competencies. Include the following:
	<ol style="list-style-type: none"> 1. Competency level goal (What) 2. Expected effect of competency improvement on career (Why) 3. Resources and knowledge required to improve competency (How) 4. Timeline for achieving proficiency improvement (When)
Commentary	
	This exercise can be an ice-breaker activity on the first day of class or an assignment to evaluate writing skills. Students can complete it as a single out-of-class assignment or as a series of assignments throughout the semester. By sharing answers with an advisor, trusted partner, or small group, students can learn from others and develop an accountability system for working toward their individual goals. As students reflect on their personal strengths and weaknesses, some may seek guidance from the instructor on how to acquire skills not included in the curriculum.

References

- Association to Advance Collegiate Schools of Business (AACSB). (2017). Eligibility Procedures and Accreditation Standards for Business Accreditation. Available at: <http://www.aacsb.edu/accreditation/standards/business> (last accessed April 20, 2019).
- W. S. Albrecht, & C. E. Polhemus (Eds.). (1998). Experiential learning – service learning: Linking accounting content to practice and real-world problems, Accounting Education News. Available at: <https://aaahq.org/facdev/teaching/aen/spr98/item14.htm> [last accessed November 11, 2017].
- American Institute of Certified Public Accountants (AICPA). (2005). Sample teaching strategies and classroom techniques that address the core competencies. Available at: <http://www.aicpa.org/interestareas/accountingeducation/resources/pages/corecompetency.aspx> (last accessed April 20, 2019).
- American Institute of Certified Public Accountants (AICPA). (2018). Uniform CPA Examination Blueprints. Available at: <https://www.aicpa.org/content/dam/aicpa/becomeacpa/cpaexam/examinationcontent/downloadabledocuments/cpa-exam-blueprints-effective-jan-2019.pdf> (last accessed April 20, 2019).
- Apostolou, B., Dorminey, J. W., Hassell, J. M., & Rebele, J. E. (2015). Accounting education literature review (2013–2014). *Journal of Accounting Education*, 33, 69–127.
- Apostolou, B., Dorminey, J. W., Hassell, J. M., & Rebele, J. E. (2016). Accounting education literature review (2015). *Journal of Accounting Education*, 35, 20–55.
- Bansal, P. (2014). Effects of experiential learning strategies on problem solving ability of adolescents from psychological hardiness perspective. *Indian Journal of Health and Wellbeing*, 5(5), 574–578.
- Barsky, N. P., Catanach, A. H., & Lafond, C. A. (2008). Student turned consultant: Teaching the balanced scorecard using experiential learning. *Advances in Accounting Education: Teaching and Curriculum Innovations*, 9, 287–305.
- Beard, D. F. (2007). Assessment of internship experiences and accounting core competencies. *Accounting Education*, 16(2), 207–220.

- Bisman, J. (2011). Engaged pedagogy: a study of the use of reflective journals in accounting education. *Assessment and Evaluation in Higher Education*, 36(3), 315–330.
- Blanthorne, C., & Westin, S. (2016). VITA: A comprehensive review of the literature and an analysis of the program in accounting education in the U.S. *Issues in Accounting Education*, 31(1), 51–69.
- Bovinet, J., & McVay, G. (2004). Accounting majors and experiential exercises. *Academy of Educational Leadership Journal*, 15(3), 3–4.
- Boyce, J. S., Williams Kelly, A., & Yee, H. (2001). Fostering deep and elaborative learning and generic (soft) skill development: The strategic use of case studies in accounting education. *Accounting Education: An International Journal*, 10(1), 37–60.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn: Brain, mind experience, and school*. Washington DC: National Academy Press.
- Bremser, W. G., & White, L. F. (2000). An experiential approach to learning about the balanced scorecard. *Journal of Accounting Education*, 18, 241–255.
- Brickner, D. R., & Etter, E. R. (2008). Strategies for promoting active learning in a principles of accounting course. *Academy of Educational Leadership Journal*, 12(2), 87–93.
- Budryk, Z. (2013). More Than a Major. Inside Higher Ed, April 10, 2013. Available at: <https://www.insidehighered.com/news/2013/04/10/survey-finds-business-executives-arent-focused-majors-those-they-hire> (last accessed April 20, 2019).
- Calvert, V., & Kurji, R. (2012). Service-Learning in a managerial accounting course: Developing the 'Soft' Skills. *American Journal of Economics and Business Administration*, 4(1), 5–12.
- Canziani, B., Welsh, D. H. B., Hsieh, Y., & Tullar, W. (2015). What pedagogical methods impact students' entrepreneurial propensity? *Journal of Small Business Strategy*, 25(2), 97–113.
- Carter, F., & Jones, R. (2011). Accounting for a simulated investment portfolio: active learning pedagogy in intermediate accounting. *Academy of Educational Leadership Journal*, 15(3), 105–117.
- Chmielewski-Raimondo, D., McKeown, W., & Brooks, A. (2016). The field as our classroom: Applications in a business-related setting. *Journal of Accounting Education*, 34, 41–58.
- Christ, M. Y. (2002). Developing intermediate accounting students' analytical and communication skills through the annual report project. *Advances in Accounting Education: Teaching and Curriculum Innovations*, 4, 41–57.
- Christensen, A. L., & Woodland, A. M. (2016). Is participation in the volunteer income tax assistance (VITA) program associated with students' problem-solving skills and professional commitment? *Issues in Accounting Education*, 31(1), 71–90.
- DeLaune, L. D., Rakow, J. S., & Rakow, K. C. (2010). Teaching financial literacy in a co-curricular service-learning model. *Journal of Accounting Education*, 28(2), 103–113.
- Dellaportas, S. (2015). Reclaiming 'Sense' from 'Cents' in Accounting Education. *Accounting Education*, 24(6), 445–460.
- Dellaportas, S., & Hassall, T. (2013). Experiential learning in accounting education: A prison visit. *The British Accounting Review*, 45, 24–36.
- Easterling, D., & Rudell, F. (1997). Rationale, benefits, and methods of service-learning in marketing education. *Journal of Education for Business*, 73(1), 58–62.
- Edmonds, C. D., Edmonds, T. P., & Mulig, E. V. (2003). Using problem-based learning to promote skill development in the accounting classroom. *Advances in Accounting Education: Teaching and Curriculum Innovations*, 5, 229–242.
- Elson, R. J., Ostapski, S. A., O'Callaghan, S., & Walker, J. P. (2012). Enhancing the understanding of government and nonprofit accounting with THE PUZZLE GAME: A pilot study. *Journal of Instructional Pedagogies*, 9, 1–7.
- Everaert, P., Opdecam, E., & Maussen, S. (2017). The relationship between motivation, learning approaches, academic performance and time spent. *Accounting Education*, 26(1), 78–107.
- Fowler, L. (2006). Active learning: an empirical study of the use of simulation games in the introductory financial accounting class. *Academy of Educational Leadership Journal*, 10(3), 93–103.
- Fuglister, J., Stegmayer, M., & Castrigano, R. (2010). Two open-ended, experiential learning cases in accounting. *American Journal of Business Education*, 3(11), 23–30.
- Gifford, E., & Howe, H. (2012). Rosie's East End Restaurant: An experiential introduction to auditing. *Journal of Accounting Education*, 30(2), 207–219.
- Gosen, J., & Washbush, J. (2004). A review of scholarship on assessing experiential learning effectiveness. *Simulation and Gaming*, 35(2), 270–293.
- Gujarathi, M., & McQuade, R. (2002). Service-learning in business schools: a case study in an intermediate accounting course. *Journal of Education for Business*, 77(3), 144–150.
- Hamer, L. O. (2000). The additive effects of semistructured classroom activities on student learning: An application of classroom-based experiential learning techniques. *Journal of Marketing Education*, 22(1), 25–34.
- Harrison, R., & Hopkins, R. (1967). The design of cross-cultural training: an alternative to the university model. *Journal of Applied Behavioral Science*, 3(4), 437–438.
- Hawtry, K. (2007). Using experiential techniques. *Journal of Economic Education*, Spring, 143–152.
- Healy, M., & McCutcheon, M. (2008). Engagement with active learning: Reflections on the experience. *The Irish Accounting Review*, 15(1), 31–49.
- Hemp, P. (2009). Recession: Rethinking the MBA (last accessed April 20, 2019) Available at: [Harvard Business Review](http://www.harvardbusinessreview.com).
- Herz, B., & Merz, W. (1998). Experiential learning and the effectiveness of economic simulation games. *Simulation and Gaming*, 29(2), 238–250.
- Hocking, D. E. (2010). Using journals to enhance learning in business classes. *Journal of Instructional Pedagogies*, 4, 1–18.
- Huber, M. M., & Mafi, S. L. (2013). Education par excellence: Developing personal competencies and character through philanthropy-based education. *Journal of Accounting Education*, 31, 310–332.
- Keeton, M. T., Sheckley, B. G., & Griggs, J. K. (2002). *Efficiency and effectiveness in higher education*. Dubuque, IA: Kendall/Hunt Publishing Company.
- Kendall, J. C., Duley, J. S., Little, T. C., Permaul, J. S., & Rubin, S. (1986). *Strengthening experiential education within your institution*. Raleigh, NC: National Society for Internships and Experiential Education.
- Kern, B. B. (2002). Enhancing accounting students' problem-solving skills: The use of a hands-on conceptual model in an active learning environment. *Accounting Education*, 11(3), 235–256.
- Killian, L. J., Huber, M. M., & Brandon, C. D. (2012). The financial statement interview: intentional learning in the first accounting course. *Issues in Accounting Education*, 27(1), 337–360.
- King, G., & McConnell, C. (2010). Using a common experience to teach introductory managerial accounting. *Journal of Instructional Pedagogies*, 4, 1–8.
- Kolb, A., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning and Education*, 4(2), 193–212.
- Kolb, D. A. (1984). *Experiential learning: experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Kosnik, R. D., Tingle, J. K., & Blanton, E. L. III. (2013). Transformational learning in business education: the pivotal role of experiential learning projects. *American Journal of Business Education*, 6(6), 613–629.
- Laing, G. (2013). Service learning: an auditing project study. *International Education Studies*, 6(1), 174–183.
- Lavoie, D., & Rosman, A. J. (2007). Using active student-centered learning-based instructional design to develop faculty and improve course design, delivery, and evaluation. *Issues in Accounting Education*, 22(1), 105–118.
- Liang, K., Howard, A., Dunn, P., & Khananayev, S. (2016). Students' assessment of experiential learning in an entrepreneurship curriculum: Expectations versus outcomes. *Journal of Business and Entrepreneurship*, Fall, 125–144.
- Loeb, S. E. (2015). Active learning: An advantageous yet challenging approach to accounting ethics instruction. *Journal of Business Ethics*, 127(1), 221–230.
- Long, B. J., & Kocakulah, M. C. (2007). VITA, the MTC and the modern accounting curriculum (Part I). *Tax Adviser*, 474–479.
- Marriott, N. (2004). Using computerized business simulations and spreadsheet models in accounting education: a case study. *Accounting Education*, 13(1), 55–70.
- McCarthy, M. (2010). Experiential learning theory: From theory to practice. *Journal of Business and Economics Research*, 8(5), 131–139.

- McDowall, T., Jackling, B., & Natoli, R. (2015). Relationships between vocational interests and learning approaches to advance the quality of student learning in accounting. *Accounting Education*, 24(6), 498–513.
- Murphy, E. A. (2005). Enhancing student learning with governmental accounting Jeopardy! *Journal of Public Budgeting, Accounting and Financial Management*, 17(2), 223–248.
- National Society for Experiential Education (NSEE). (1998). Eight Principles of Good Practice for All Experiential Learning Activities, 1998 Annual Meeting Presentation, Norfolk, VA, Last Updated Monday, December 9, 2013 12:16 PM, Available at: <https://nsee.memberclicks.net/8-principles> (last accessed April 20, 2019).
- Commission, Pathways (2013). *Vision for the First Academic Exposure to Accounting*. Anaheim, CA: American Accounting Association Annual Meeting.
- Commission, Pathways (2015). In pursuit of accounting's curricula of the future. *American Accounting Association and the AICPA*.
- Powell, K., & Wells, M. (2002). The effectiveness of three experiential teaching approaches on student science learning in fifth-grade public school classrooms. *The Journal of Environmental Education*, 33(2), 33–38.
- Rama, D. V., & Zlotkowski, E. A. (Eds.). (2007). *Learning by doing: Concepts and models for service-learning in accounting*. Sterling, VA: Stylus Publishing.
- Rebele, J. E., & St. Pierre, E. K. (2015). Stagnation in accounting education research. *Journal of Accounting Education*, 33, 128–137.
- Rosenstein, A., Sweeney, C., & Gupta, R. (2012). Cross-disciplinary faculty perspectives on experiential learning. *Contemporary Issues in Education Research*, 5(3), 139–144.
- Savage, A., Strand, C. S., & Lancaster, K. A. S. (2008). Using a movie to study the COSO internal control framework: An instructional case. *Journal of Information Systems*, 22(1), 63–76.
- Schaefer, T. F., & Stevens, J. S. (2016). Using rubrics to assess accounting learning goal achievement. *Issues in Accounting Education*, 31(1), 17–28.
- Schwartz, S. T., Spires, E. E., & Young, R. A. (2004). Experiential learning in auditing: Four experiments for the classroom. *Advances in Accounting Education: Teaching and Curriculum Innovations*, 6, 19–43.
- Stanley, T., & Edwards, P. (2005). Interactive multimedia teaching of Accounting Information System (AIS) cycles: Student perceptions and views. *Journal of Accounting Education*, 23, 21–46.
- Stevens, K. T., & Stevens, W. P. (1992). Evidence on the extent of training in teaching and education research among accounting faculty. *Journal of Accounting Education*, 10, 271–283.
- Still, K., & Clayton, P. R. (2004). Utilizing service-learning in accounting programs. *Issues in Accounting Education*, 19(4), 469–486.
- Stout, D. E. (2018). Further things I have learned...selected reflections about publishing in accounting education. *Issues in Accounting Education*, 33(3), 67–84.
- Turner, M., & Baskerville, R. (2013). The experience of deep learning by accounting students. *Accounting Education*, 22(6), 582–604.
- Walters, L. M., & Pergola, T. M. (2009). An instructional case: Cost concepts and managerial analysis. *Issues in Accounting Education*, 24(4), 531–538.
- Webb, L. (2006). Learning by doing. *Dev and Learning in Org*, 20(5).
- Well, S., McGuigan, N., & Kern, T. (2011). The usage of an online discussion forum for the facilitation of case-based learning in an intermediate accounting course: A New Zealand case. *Open Learning: The Journal of Open, Distance and e- Learning*, 26(3), 237–251.
- Zhai, X., Gu, J., Liu, H., Liang, J. C., & Tsai, C. C. (2017). An experiential learning perspective on students' satisfaction model in a flipped classroom context. *Educational Technology and Society*, 20(1), 198–210.
- Zlotkowski, E. (1996). Opportunity for all: Linking service-learning and business education. *Journal of Business Ethics*, 15, 5–19.