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## Improving Accounting Education

Frances Ruth Woolfolk

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IMPROVING ACCOUNTING EDUCATION

Frances Ruth Woolfolk  
2018

COLUMBUS STATE UNIVERSITY

IMPROVING ACCOUNTING EDUCATION

A THESIS SUBMITTED TO THE

HONORS COLLEGE

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR HONORS IN THE DEGREE OF

BACHELOR OF BUSINESS ADMINISTRATION

ACCOUNTING

D. ABBOTT TURNER COLLEGE OF BUSINESS

BY

FRANCES RUTH WOOLFOLK

## ABSTRACT

This thesis examines and explores the potential of active teaching methods inside and outside the classroom. This literature review analyzes studies of accounting programs in different countries including the United States. The previous literature suggest that students perform better through active methods of teaching, rather than the traditional form of teaching in accounting programs. The findings also suggest that active teaching methods better prepare students for the professional world than the traditional teaching methods. This analysis is important for accounting education. First, it provides a deeper understanding for the need of experiential learning in accounting degree programs. Second, this thesis may provide accounting educators with information on the best methods to promote student learning through active teaching.

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**KEYWORDS:** Accounting Education, Teaching Methodology, Active Teaching,

Learning, Assessment, Active Instruction, Service Learning.

ABSTRACT

This thesis examines and explores the potential of active teaching methods inside and outside the classroom. This literature review analyzes studies of accounting programs in different countries including the United States. The previous literature suggest that students perform better through active methods of teaching, rather than the traditional form of teaching in accounting programs. The findings also suggest that active teaching methods better prepare students for field work in accounting versus the traditional teaching methods. This analysis has two implications for accounting education. First, it provides a deeper understanding for the need of experiential learning in accounting degree programs. Second, this thesis may provide accounting educators with information on the best methods to promote student learning through active teaching.

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create a large underclass of people who do not possess these skills. With each advance in technology, there are renewed projections of increasingly higher skill levels needed to function effectively in society (Taffler, 1980). Naturally, employment opportunities and job descriptions are undergoing transformation in response to these new work environments. However, required skills in accounting are lagging, leading practicing accountants and leaders in the accounting field to believe the current structure of accounting education is outdated, broken, and in need of significant modification (Albrecht & Sack, 2001). And, as accounting academics have read curriculum reports and recommendations during the past decades, they have become increasingly concerned about the importance of supporting higher order thinking skills in undergraduate education. For example, Levstov (2004) cited some deficiencies, which include an over-reliance on algorithmic problem-solving, undeveloped abstract reasoning skills, lack of generic skills, and inability in transferring academic knowledge to the workplace. Andrea (2017) stated the importance of quality in teaching pedagogy and innovative teaching approaches, which have been defined as critical components in addressing declines in student performance, enrollment, retention, and graduation rates.

The call for new teaching strategies in accounting education has been ongoing. The Bedford Report (American Accounting Association, 1986) recommended "educational experiences for students that require them to be active, independent learners"

## 1. INTRODUCTION

Since the early 1980s, countless reports have detailed shifts toward global economies requiring technologically sophisticated labor markets (Heitner et al., 1990). Additionally, the need for such skilled workers in the United States is anticipated to create a large underclass of people who do not possess these skills. With each advance in technology, there are renewed projections of increasingly higher skill levels needed to function effectively in society (Toffler, 1980). Naturally, employment opportunities and job descriptions are undergoing transformation in response to these new work environments. However, required skills in accounting are lagging, leading practicing accountants and leaders in the accounting field to believe the current structure of accounting education is outdated, broken, and in need of significant modification (Albrecht & Sack, 2001). And, as accounting academics have read curriculum reports and recommendations during the past decades, they have become increasingly concerned about the importance of supporting higher order thinking skills in undergraduate education. For example, Leveson (2004) cited some deficiencies, which include an over-reliance on algorithmic problem-solving, undeveloped abstract reasoning skills, lack of generic skills, and inability in transferring academic knowledge to the workplace. Andres (2017) stated the importance of quality in teaching pedagogy and innovative teaching approaches, which have been defined as critical components in addressing declines in student performance, enrollment, retention, and graduation rates.

The call for new teaching strategies in accounting education has been ongoing. The Bedford Report (American Accounting Association, 1986) recommended “educational experiences for students that require them to be active, independent learners



and problem solvers rather than passive recipients of information.” The Accounting Education Change Commission (AECC, 1990) stated:

Students should be taught the skills and strategies that help them learn throughout their lifetimes. Students must be active participants in the learning process, not passive recipients of information. They should identify and solve unstructured problems that require use of multiple information sources. Learning by doing should be emphasized. Working in groups should be encouraged. (p. 309)

Aligned with the above AECC statement, Cameron et al. (2015) stated the accounting profession, educators and researchers agree that future accountants need a quality education before going into the profession, and future employers require graduates to demonstrate the ability of becoming competent professionals, thus, the learning environment is critical to the development of suitable accountants. In order for students to have promising careers in accounting, it is important to consider the teaching methods professors implement. Universities must implement effective pedagogies for accounting students, “If there is to be one global accounting education model it needs to ensure that it will meet the needs of business and society in all jurisdictions and cultures in all religions of the world” (Das & Singh, 2018, p. 54). In today’s competitive business environment, accounting students must be equipped to deal with issues in business, starting with their education.

A research study from the American Accounting Association (1986) suggest future accountants will not receive the preparation they need to meet the emerging needs of business if significant changes are not made to accounting education. In order to improve the quality of accounting education, flaws in the current system must be addressed. Susan M. Curtis, a lecturer of accountancy and American Accounting

Association member (2017) stressed there have been historical efforts to reform accounting education, which have led to pockets of innovation, but have not addressed obstacles that inhibit extensive continuous improvement.

## 2. STATEMENT OF THE PROBLEM

Andres (2017) reported that it is common for student performances in higher education to be “mediocre or substandard” and argued that “it has become essential to identify pedagogical factors that might lessen or reverse this trend” (p. 270). Too many students see learning as reproducing, for example, acquiring facts and memorization, rather than making sense of understanding the relationships (Adler & Milne, 1997). Accounting educators should consider recent studies on teaching methodologies that lend positive results.

However, there have been disagreements about the accounting curriculum since the beginning of accounting education in universities (Chu & Man, 2012). Most practitioners believe mastery of technical accounting procedures is most effectively learned through practical experience (Previts & Merino, 1998). The needs of businesses are changing, and accounting education has been slow to implement necessary changes to equip accounting graduates with necessary and competitive skills needed to perform in the accounting field. Springer and Borthick (2004) stated, “Because memorizing solutions to existing problems has proved inadequate as preparation for solving new problems, not just in accounting but also in a variety of disciplines, students need a different kind of learning experience” (p. 278).

## 3. TEACHING METHODS

### 3.1 Passive Teaching

Traditional accounting programs rely heavily on the use of passive teaching methods. Passive teaching methods involves student learning through listening to lectures and observation of materials. In this teacher-centered approach, the teacher is considered the source of knowledge and expertise, while the student is a passive recipient (Al-Zu'be, 2013). The teaching method used by teachers who believe in this approach is transmittal lecture (Wilson & Peterson, 2006; Nilson, 2010), and this is the method that was widely used in higher learning institutions involved in this study. The assumption is students learn through seeing information on power point slides, while listening to the instructor's explanations (Guess, 2014). Lecture based classes generally provide the answers, takes apart the complex from the problem by simplifying it for students, and provide students with check figures and solutions to problems, while requiring them to analyze little or none at all (Guess, 2014). This method of teaching results in low learning outcomes for students and low-quality education because they address only one educational objective and limit students' learning activities. The only one learning outcome that this teaching method addresses is 'knowledge,' which is the lowest educational objective according to Bloom's taxonomy (Krathwohl, 2008).

Guess (2014) said it is logical if students practice skills then they will be better at that specific skill at the end of the semester versus the beginning, and repetition in multiple classes will show improvement. Springer and Borthick (2004) argued the "knowing" of concepts, computations, and definitions has governed traditional introduction to accounting courses (p. 278). But this "knowing" is not enough, and if students are going to perform at higher levels of thinking identified by the profession, students must learn to solve new, ill-structured problems that will arise in practice

(Springer & Borthick, 2004). Memorizing solutions to existing problems has proved inadequate as preparation for solving new problems, and this applies to a variety of disciplines, not just accounting (Springer & Borthick, 2004).

### **3.2 Active Teaching Methods**

Accounting education is in need of desperate change because traditional teaching methods in accounting will no longer provide accounting students with the tools necessary in the field. The most effective way to improve accounting education is by implementing active teaching methods in accounting degree programs. Andres (2017) defines active teaching as a model where emphasis is placed on the student, student and teacher collaboration, and activities that require students to engage in the learning process. According to Cameron et al. (2015), different types of instruction methodologies are classified as active, which relates to the incorporation of active and participatory learning opportunities into a course of study, or passive, which refers to non-experiential.

Active teaching methods implemented inside and outside the classroom will give accounting students a realistic view of today's business world. It is imperative to assess the knowledge students gain in their accounting courses before going forward to become competent professionals, thus, experiential learning must be implemented as an option or requirement. When active teaching methods are implemented, accounting graduates will be provided with critical-thinking skills and problem-solving skills regarding to accounting course material, while preparing them for the field.

The accounting field has evolved rapidly in recent years due to technology, which has developed an increased emphasis on the importance of the development of generic accounting skills in academic accounting (Knyvienė, 2014). The field of accounting has changed since the beginning of the new millennium, and technology has changed and

continues to change the needs of businesses and how they operate. As such, accounting educators must give close attention to the development of professional skills of future accountants (Arquero et al., 2015). This should extend not only to the teaching methods used inside the classroom, but also to the activities available to students outside the classroom in the accounting discipline. Prior research has found that active teaching approaches may have a greater positive influence on student learning rather than passive teaching approaches (Michel et al., 2009).

### **3.3 Consultative Versus Traditional Styles of Teaching**

Table 1 delineates differences between the student-centered consultative teaching approach (i.e., active teaching) and the traditional teacher-centered style of teaching. As this table indicates, in the traditional college classroom, the instructor acts as the central authority with ready answers to all questions and problems. In comparison, a consultative approach strives to develop students' abilities for abstract thinking, problem definition, interpretation, and synthesis with less structured interdisciplinary problems (Bonk & Smith, 1998).

Table 1

Characteristics of consultative (active teaching) and traditional styles of teaching

Consultative style	Traditional style
<p>1. Teaching: Varied, comprehensive, collaborative, and interactive. Teaching for thinking. Teacher is a co-learner, resource mentor, guide, coach, team builder, facilitator, tour guide, etc.</p>	<p>1. Teaching: Objectively-based lectures and individual worksheets/seatwork. Teaching is structured and narrowly focused for knowledge acquisition. Teacher is a manager, conveyer, "King of the Mountain."</p>
<p>2. Learning: Student and problem-centered. Individual learning needs and preferences are addressed. Emphasis on active learning, solving problems, student autonomy, peer dialogue, choice, responsibility, ownership, knowledge generation, linking new knowledge to old. Acquisition of conceptual understanding and problem-solving processes.</p>	<p>2. Learning: Largely teacher and text-centered. Students seen as homogeneous. Emphasis on passive learning and discrete knowledge acquisition without interconnections among topics, subjects, courses, or disciplines. Acquisition of facts, rules, standards, and procedures.</p>
<p>3. Learning Metaphor: Learner is a growing tree or a pilgrim on a journey.</p>	<p>3. Learning Metaphor: Learner is a sponge.</p>
<p>4. Knowledge: Knowledge is constructed by students and intertwined across subject areas.</p>	<p>4. Knowledge: Knowledge is transmitted and acquired in a piecemeal fashion.</p>
<p>5. Curriculum: Interdependent courses with a focus on transferring knowledge across course situations. Textbook is one resource among many including peers, experts, technology tools, instructors, and assessment.</p>	<p>5. Curriculum: Sequential courses are not explicitly related to one another. Textbook content, curriculum guides, objectives, and instructor notes dominate classroom activities.</p>
<p>6. Assignment Orientation: Authentic real-world tasks and problems with challenges and options. Focus on thinking, skill development, and teamwork, or sharing of findings.</p>	<p>6. Assignment Orientation: Emphasis on correctly and individually solving fictitious exercises and problems from texts. Minimal student selection or input.</p>

**Table 1 (Continued)**

7. Assessment: Continual, less formal, subjective, collaborative, and cumulative. Uses authentic portfolio and performance-based measures with higher-order thinking skill evaluation criteria or scoring rubrics.

8. Potential Outcomes: Critical and creative thinking skills as well as appreciation of collaboration and teamwork. Motivated, proud, metacognitively-aware, and independent, life-long learners.

7. Assessment: Individual, competitive, objectively-based evaluation. Stresses tests memorization skills and building factual knowledge. Unlikely barometer of future workplace success.

8. Potential Outcomes: Narrow band of cognitive skills and knowledge. Lacking interconnections across topics. Externally motivated with minimal learning responsibility and pride in one's work.

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Adapted from Bonk and Smith (1998).

#### 4. BENEFITS OF ACTIVE TEACHING

Active teaching is a student-centered approach to teaching. Numerous studies have shown active involvement in the learning process enhances students learning (Smart & Csapo, 2007). Active involvement is effective when it encourages dialogue and student engagement. Active teaching includes any technique that involves the students in the learning process and holds students responsible for their own learning (Bonwell & Eison, 1991; Michel, et al., 2009; Yoder & Hochevar, 2005).

Many students may see accounting topics as boring, but this is usually attributed to lack of experience with the actual processes underlying accounting theory (Lightbody, 1997). However, active teaching methods can help combat this “boredom” stereotype. One study done by Finelli et al. (2018), stated “students’ perceptions of their instructors’ use of explanation and facilitation strategies can have a significant impact on resistance”

(p. 80). Finelli et al. (2018) stressed that instructors can help combat resistance from students by clearly explaining the purpose and expectations of the activity, acknowledge the challenges of the new approach, ramp up slowly, provide students with feedback and support throughout the process, align activities with other course assessments, and solicit and act on student feedback about the activities.

Active teaching methods are incredibly useful in upper-level accounting courses, in which students have little practical contact or experience besides observation of reading materials. Active teaching tasks are beneficial because control and responsibility is delegated to the students from the professor (Adler, 1997), and it encourages input from students into the learning process (Pollard, 2014). Pollard said being engaged in the topic under discussion helps students be more intertwined in the learning process, and it allows them to learn from each other and from the person teaching the class.

Construction of one student's own understandings rather than listening to a teacher's words requires students to develop their own questions, generate and explore their own models, and build representations that organize their own experiences (Springer & Borthick, 2004), which is exactly what active teaching does. Educators should focus on an appropriate intrinsic motivational context, which actively involves students with the subject matter, promoting co-operation, interaction among the other learners, and working from a well-structured knowledge base (Alder & Milne, 1997).

## 5. ACTIVE TEACHING STRATEGIES

Instructors may have a vast arsenal of active teaching techniques at their disposal (Bonwell & Eison, 1991; Cook & Hazelwood, 2002; Ebert-May et al., 1997; Hackathorn, et al., 2010; Michel et al., 2009; Sarason & Banbury, 2004). From an innovation point of



view, active teaching techniques can change the pace of the classroom, and are a creative way to increase students' involvement, motivation, excitement, attention, and perceived helpfulness and applicability of the class (Bonwell & Eison, 1991; Guthrie & Cox, 2001; Stewart-Wingfield & Black, 2005).

From an engagement perspective, Andres (2017) identified pedagogical factors that will combat low standards that have been set by universities and colleges regarding student performance. Andres (2017) stated the active learning environment is characterized by instructional delivery modes that include videos/multimedia presentations, note-taking, class discussions, group work, repetitive guided in class exercises, and use of learning assessment quizzes. Andres (2017) stated:

Past research has shown that videos, multimedia presentations, and diagrams can augment cognitive processing by 1) minimizing explanatory content by summarizing distinctive features or procedures, 2) clarifying abstract concepts, 3) facilitating long-term memory via memorable mnemonic, and 4) sustaining attention, mental effort, and learning satisfaction through perceptual arousal. (p. 272)

“Working in groups should be encouraged. Teaching methods that expand and reinforce basic communication, intellectual and interpersonal skills should be used” (Fatima et al., 2007, p. 102). For example, working in groups or discussion of case studies in class could be utilized.

O’Leary (2013) explained accounting students have been provided with opportunities to become active learners, and results from Doran et al. (2011) study indicated that accounting students benefited from case study and problem-based learning in groups, which made them gain confidence and self-learning skills and lifelong learning

skills. Though there are many benefits to case-based teaching, prior research has identified barriers to successful implementation (Doran et al., 2011). Class sizes, teaching spaces, and overcrowded curricula are institutional factors that can all favor traditional teaching methods (Doran et al., 2011). Guess (2014) defended the use of case studies and argued accounting instructors work hard to assure their students gain knowledge of discipline specific content, while developing critical thinking, analytical reasoning, decision making, and communication skills. It is important that students gain self-confidence and demonstrate they have attained these skills (Guess, 2014). Guess (2014) pointed out traditional lecture teaching compared to case teaching differs because both are based on different underlying assumptions on how students attain these skills. Guess (2014) stated the assumption brought by case teaching makes students learn best by practicing skills. Guess (2014) compared these skills to learning to write by writing, and to think because no answers were given to us, which forced us to reason through a problem because no one told us how to solve it, thus, to make decisions by making them and learning from those decisions. In a case class, all of these skills are practiced, and students are involved in their learning in the active environment (Guess, 2014).

## 6. ACTIVE TEACHING INSIDE THE CLASSROOM

In order to have a positive effect on students, the educator must apply the principles of active learning to the practical setting of the classroom. Auster and Wylie (2006) suggest that four dimensions are necessary to create a systematic approach to promote active learning in the classroom: context setting, class preparation, class delivery, and continuous improvement. Context setting refers to creating an open and relaxed atmosphere for learning in the classroom. Class preparation involves thought,

planning, and creativity before the class session. Class delivery refers to the implementation of the planned lesson in the classroom. Continuous improvement entails seeking and using feedback concerning the teaching approach.

In addition to the above statements, students must face realistic issues through involvement in the classroom. This will help students develop and groom skills needed to meet the high standards of the profession. Accounting students, lecturers, and employers agree that the learning environment is critical to the development of suitable accountants (O'Leary, 2013). Exposing students in the classroom to active teaching methods will force involvement and experience, which is a stepping stone for learning. Teaching should include more than the passing of information from the instructor to the student.

A study done by Cameron et al. (2015) in Australia consisted of 9 classes with a total of 648 students, which spread across four years and analyzed the interaction of learning styles and teaching methodologies in accounting degree programs. Cameron et al. (2015) argued accounting academics must use careful consideration when choosing teaching methodologies to use in designing accounting degree programs. Cameron et al. (2015) stressed the accounting profession is affected by these decisions, so when designing curricula for university accounting classes, requirements of the profession influence accounting academics. The study exposed students to passive and active teaching methods, and though some students preferred the passive teaching method, active learners deemed active teaching methods more useful and provided an in-depth understanding to course concepts.

Inside the classroom, research has identified three specific strategies of active teaching that are positive and beneficial for student learning: flipped classroom instruction, case study analyses, and business simulations.

## 6.1 Flipped Instruction

One study by Timothy Rupert et al. (2016) found “flipping” in a managerial accounting course showed significant improvement in performance, particularly in students who performed lower than others. Though Rupert et al.’s (2016) study is one of the few studies on flipping, it provides evidence of effectiveness using a crossed within-participants research design. Flipping is considered an active teaching method, and the methodology and approach the study used was traditional instruction and simplified flipped instruction. The purpose of Rupert et al.’s (2016) study was to examine the effects of flipping the classroom on student performance, evaluation, and attendance in a managerial accounting principles class. The practical implications of flipping the classroom could be effective for application-oriented accounting courses for lower performing students (Rupert et al., 2016).

## 6.2 Case Study Method

One example of active involvement points to the use of case studies in the classroom. The use of business case studies has promoted encouragement to accounting students in becoming more active and independent learners (Cameron et al., 2015). A research study by Indrė Knyvienė (2014) analyzed the positive results of the case study method in accounting. Knyviene found that involving students in real-world simulations as part of their classroom experience is a way to develop competencies other than technical knowledge. Knyviene (2014) argued real-world simulations are considered a part of experiential learning, while the classroom experience is used through the medium of case studies. Knyviene (2014) defined the case study method in accounting as the method that allows students to be active throughout the process, make decisions, give

reasoned opinions, work in a team, and make conclusions, and it helps connect existing theoretical knowledge and practice.

### 6.3 Business Simulations

Another education tool that can be utilized in active teaching methods is the use of business simulations. One research study by Springer and Borthick (2004) gave positive results for the use of business simulations. These results showed the business simulation approach gave students opportunities to begin practicing the high-level thinking that business professions and accounting professions demand. Springer and Borthick's (2004) study agree with the growing literature in support of active teaching methods. Springer and Borthick (2004) argued that learners identify problems, find information that is relevant, acknowledge the influence of uncertainties and possible solutions, and then communicate the findings to the target audience, also known as the client. Springer and Borthick continued:

In each episode students are immersed in an evolving enterprise, providing advice for business owners. Cast into the role of 'experts,' students assume the voice of business advisors, taking cues from the business owners rather than directions from their instructors. (p. 291)

Springer and Borthick argued that engaging students like this requires instructors to shift their behavior from distributing knowledge to helping students in constructing their own mental representations of the business and how it operates, and how it could operate.

Springer and Borthnick (2004) said the business simulation forced students to construct their own understandings rather than the instructors transmitting knowledge.

Lightbody's (1997) study involved factory simulation exercises and outlining experience in a management accounting course, which concluded, "Many accounting

educators find that students' lack of exposure to a manufacturing environment hinders their ability to appreciate the relevance and importance of cost and management accounting topics." The study introduced active-based factory simulation exercises to provide students with the opportunity to experience the process of producing a physical product. The results showed enhancement of student comprehension and enthusiasm towards cost and management accounting. Lightbody (1997) gave advice on how factory simulation experience could be utilized in a range of topics within cost and management accounting, "First the exercise could be used to illustrate the application of traditional cost accounting topics, such as nature of costs, cost allocation, the control of costs, and the use of cost information for decision making" (p. 259).

## 7. ACTIVE TEACHING OUTSIDE THE CLASSROOM

Accounting students should be given the opportunity to a deeper understanding regarding courses in their degree program. When students are engaged in active exercises, their motivation to work in the class should increase. Given immediate feedback as the active approach suggests, students should more readily engage in higher-order intellectual activities, such as analysis and synthesis of class material. However, teaching should extend past the classroom for accounting students, and these activities should encourage students to get involved with activities related to their discipline of study.

Case studies and role-play exercises can provide realistic simulations in the classroom, but McCoskey (2003) explained that they can only approximate reality. "Out-of-class activities include," but are not limited to "students preparing article summaries and reviewing annual reports" (Cameron et al., 2015, p. 219). Personal experience through

participation in internships or volunteering improve students' learning in relation to the class. These personal learning experiences are classified under service learning, which is a technique that adds formal classroom education with real-life experiences, and it provides context to students to reinforce the application of technical knowledge to understand problems in the real world (Chiang, 2008).

### **7.1 Benefits of Service Learning**

One of the most impactful active teaching methodologies outside of the classroom is service learning, which is slowly starting to pick up popularity, for example, in income tax classes. However, service learning should be available to most, if not all upper-level accounting courses. For example, financial statement fraud was a huge problem for some public companies after the turn of the century. One of the nine elements that contributed to the *perfect fraud storm* was Educator Failures. Albrecht et al. (2018) argued educators did not provide sufficient ethics training to students, and by not forcing students to face ethical issues, accounting graduates were not equipped to deal with real ethical issues they faced in the business world. Albrecht et al. (2018) continued, "Effective accounting education must focus less on teaching content as an end and instead use content as a context for helping students develop analytical skills" (p. 354). For this, participation outside the classroom is vital.

McCoskey (2003) explained that service learning activities create opportunities for accounting students in a practical environment. Active teaching methods should extend outside of the classroom through service learning projects or service learning activities, which should encourage students to get involved with activities related to their discipline of study. Service learning is considered an effective teaching tool, and McCoskey (2003) claimed that service-learning allowed students to enhance learning

through real-world applications of concepts in accounting. Andrews (2007) argued integrating service learning into higher education as a way to improve the relevance of accounting education and address needs in the community has been endorsed by researchers. In one research study by Chiang (2008), stated, "Community Projects reconnect universities with their communities, and, at the same time, offer learning opportunities that go beyond the classroom" (p. 442).

Among the most important competencies for the practice of accountancy, are critical thinking skills, problem solving skills, oral and written communication skills, and interpersonal and leadership skills (Alder & Milne, 1997). Service learning can help develop these important skills future accountants need, but it has brought criticism and skepticism, for example, Strupeck and Whitten (2004) stated:

Service-learning is not without its critics who suggest that the theoretical outcomes detailed in the literature do not justify the cost of the process. The value of the benefits received is also questioned. A generalized criticism questions the academic soundness of service-learning outcomes. Moreover, experiences in the workplace and in the community are often viewed as narrow vocational undertakings hardly appropriate for the complex, liberal leaning at the core of postsecondary education. (p. 102)

Other issues Strupeck and Whitten (2004) highlighted with in service learning are personal liability issues when utilizing volunteers, time commitments, and disproportionate use of scarce resources. These issues can be combatted by educational institutions finding financial support for the startup costs through grants and leading a joint effort with continued faculty and administration support, public relations efforts, and sustainable funding (Strupeck & Whitten, 2004). As far as personal liability issues,



Strupeck and Whitten (2004) mentioned some countries offer legal protection for volunteers, for example, the Volunteer Protection Act of 1997 in the United States.

Strupeck's and Whitten's (2004) research expands on the service learning literature, which states the issues like interpersonal skills, training, administrative matters, pedagogical issues, and previous literature that details service-learning by providing information about individual programs. Aldridge et al. (2015) considered service learning a pedagogy that united class-room instruction with community service, which aimed to give students with experience that reinforces their curriculum in accounting. To prepare students to satisfy the high standards of the profession, college accounting courses must go beyond the focus of technical accounting knowledge (Christensen & Woodland, 2018).

## 7.2 Implementation Challenges with Service Learning

Can service learning projects fail? One study by McCoskey (2003) stated that if projects fail, it was never due to student failure, and the client was ultimately responsible for not providing documentation, whether it was lost, or the client did not request duplicates, or not allowing access to documentation. McCoskey (2003) stated minimizing this failure involves clear and early communication between the instructor and students,

For example, students should first locate all of the documentation. If financial statements are being prepared for the year, and the project begins during the autumn semester, the students should locate all of the bank statements during the first week of the project. If the March statement is missing, the client should call the bank and request it. If the client fails to do this (generally because he or she forgot or was too busy), the students should draft a letter for the client to sign and then students fax the letter to the bank. (p. 412)

By being proactive, McCoskey (2003) stated students can get the documentation that they need, and all of the attempts at attaining the documentation or access to the client's office should be documented as a precaution the project fails and the client asks why. If the students continue to have trouble accessing or contacting the client, the instructor can call the client (McCoskey, 2003). However, these situations will not occur often if the instructor explains how important the issues are with potential clients, while getting the client to understand at the beginning of the project the importance of these issues.

Service Learning assignments help combat memorization while forcing students to use critical analysis and problem solving (Still & Clayton, 2004). McCoskey (2003) highlighted several benefits of service learning,

First, they learn more. They gain technical knowledge by putting the concepts learned in the classroom into practice. For example, if students design an accounting system for a non-profit organization, they create a system, complete with internal controls and client use in mind, and then build the system. As students work on the project, they start to demand more knowledge. Issues arise that have not been discussed in class. The student has to research his or her self-identified issue. A well-documented answer to a self-imposed question should prove to be very satisfying to students and give them confidence in their ability to function as real professionals upon graduation. (p. 407)

Still and Clayton (2004) stated, "Utilizing service-learning in accounting classes such as auditing and governmental/nonprofit allows students to gain practical experience during the educational process and provides depth to the accounting program that assist in attracting top students into the field" (p. 480).

Many researchers have documented the learning effects of integrating real-life experiences into course work (Chiang, 2008). In particular, Chiang (2008) stated undergraduate students are affected by service-learning participation relating to civic responsibility, educational attainment, and life skills. Chiang (2008) found that participation in service learning activities during undergraduate years had positive effects on all learning outcomes. In Chiang's (2008) study, the results showed service learning in the business area was found to improve leadership development, communication skills, as well as social responsibility. Service learning projects also give students the chance to fine-tune core values in the AICPA's (American Institute of Certified Public Accountants) Vision Statement and develop communication and leadership skills by working with clients to determine their needs and how to meet those needs (McCoskey, 2003). Service learning has several advantages. These advantages include: adding realism, bringing durability to learning, giving opportunity for input on topics, added appeal to the course for students and instructors, and supporting instructors (Loeb, 2015).

In Rose et al. (2005) study, a service learning engagement was developed where outcomes were identified clearly, and characteristics and perceptions were measured of students who participated in the project. For service learning to be effective, Rose et al. (2005) study stated service learning activities must be relatable to accounting course material,

Apparently, when course material is unrelated to the service-learning experience, students devote less attention to it compared with material that is relevant to the service-learning experience. These results may occur because students are preoccupied with client demands. Alternatively, students in the traditional

learning environment may simply believe that all information presented is equally important. (p. 156)

In Rose et al. (2005) study, the courses were designed in a way that supported learning outcomes and helped define those learning outcomes.

### 7.3 Examples of Service Learning

Experience can help students internally process and explain a concept after implementing it. For example, in a research study conducted at seven universities regarding participation in the Volunteer Income Tax Assistance (VITA) Program by Christensen and Woodland, (2018) provided evidence that VITA participation can improve a student's ability to form ethical judgments and make ethical decisions. The VITA program is an IRS (Internal Revenue Service) initiative to provide free taxpayer assistance to those who could not afford a paid preparer (Aldridge et al., 2015). "The IRS provides free training, on both paper and software prepared tax returns, for new and experienced volunteers" (Strupeck & Whitten, 2004, p. 105). Participation in the VITA Program increased students' knowledge in relation to the Individual Income Tax Course offered at the seven universities. In agreement with Christensen's and Woodland's, (2018) proposal, ethical judgment is affected in a positive way through the service-learning experience through the VITA Program. Cameron et al. (2015) found that many accounting students benefited from case study and problem-based learning in groups, which led to students gaining confidence, self-learning skills and lifelong learning skills from the VITA program. In Aldridge et al. (2015) study, the VITA Program provides another successful learning method through which essential skills can be acquired by college students, while showing positive impacts on accounting students at Western Kentucky University,

The results of this study align with a number of prior studies that show positive impacts of service learning on practical academic outcomes. First of all, ITPA (Income Tax Preparation Assistance) service learning takes students from classroom settings where focused knowledge and teaching materials are delivered to them into field-based settings where application of knowledge is required in solving real-world complexities. Such settings and opportunities bring about improvement in students' competencies in applying tax knowledge. (p. 292)

Aldridge et al. (2015) study empirically tested the multidimensional benefits of service learning of an ITPA program, and results indicate that ITPA students actively participate in the learning process, which leads to development of their problem-solving, knowledge, application, and communication skills. "Future researchers can apply the multidimensional assessment proposed by this study to other income tax assistant programs to test the generalizability of the results and conclusions presented" (Aldridge et al., 2015, p. 294). A service learning project that was given to students by Gujarathi and McQuade (2002) in an intermediate accounting course found that,

Several students stated that they did not realize how valuable their technical skills could be to the community organizations that they worked with. Some commented that travels to the inner city opened their eyes to a side of life that they had never observed. Many mentioned that the service-learning assignment helped them grow as people. Most students reported a sense of satisfaction from producing work that made a positive impact on lives of people who were less fortunate and, in the process, gaining an appreciation for how lucky they were. (p. 148)

Scholars have noted that service learning assignments fit the scope of business courses and promote goals relevant to education (Gujarathi & McQuade, 2002). Gujarathi and McQuade (2002) also found that the service learning projects helped establish connections, and several students obtained internships in the non-profit sector after the experience.

A quasi-experiment done by Rose et al. (2005) included 90 master students in an accounting program. The students took part in one of three course types: full-immersion service learning with a supporting text book, full-immersion service learning without a supporting textbook, or nonservice-learning using case-based activities with deliverables the same as those in service-learning courses. Rose et al. (2005) found that full immersion service learning increased student satisfaction, student perceptions of ability, self-confidence in chosen careers, desire to study accounting information systems, and performance on complex data modeling tasks, and the only reduction that took place was in performance on topics that were loosely related to the service-learning project. The study conducted a contrast in comparing performance on two classes related to accounting information systems and found that exam performance was significantly higher for service-learning treatments relative to traditional courses (Rose et al., 2005).

One sample of 187 students at Philippine University found that students involved in service learning in connection through a financial accounting class had shown students achieving their goals, and these goals were achieved to a large extent through their projects (Yu, 2011). Yu (2011) argued the level of student participation positively affects the level of achievement of goals, and the levels of achievement among the service-learning goals are significantly correlated to be mutually-reinforcing. Yu (2012) concluded the study supports the growing research work about the many benefits that

service-learning brings to students, communities, and future participation in business fields of study, and that service-learning experiences in accounting can and should be improved through identification and screening of participating microenterprises. One service learning project done by Zamora (2012) concluded that service learning projects transitions “may be smoother from textbook problems to real-world application of managerial accounting concepts in the context of a social enterprise engaging in multiple for-profit ventures” (p. 212).

## 8. CHALLENGES OF IMPLEMENTING ACTIVE TEACHING OUTSIDE THE CLASSROOM

Some educators are reluctant to change their approach in accounting. Adler & Milne (1997) argued accounting educators in the United States are accepting the need to expand the proficiencies of accounting graduates, but far less are accepting the need to change the approaches to educating college graduates. There could be a number of reasons for this. Switching from traditional lecture-based to a more active-oriented and student-centered approach could potentially be more time consuming and may require more of a time commitment from the professor (Alder & Milne, 1997), but despite the difficulties of the decision, more accounting educators should consider pursuing action-oriented learning approaches (Alder & Milne, 1997).

Active teaching approaches provide students with in-depth understanding of difficult topics in accounting by being active in the learning process, and it can also build students' ability to think critically. Andrews (2007) argued taking in structural changes in accounting curriculums will not be easy, and related research shows institutional and program characteristics associated with successful service learning implementations in

business, focusing on course discipline, and service learning particular to application. Clear and direct lines of communication, planning, and grade percentages should be determined at the beginning of the semester. Clear and direct lines of communication should be open to the instructor and clients in the service learning projects as early in the semester as possible to ensure smooth transition into different stages of service learning activities. Planning the service activity should be planned before the semester starts. This ensures that changes in dates do not conflict with students' schedules, while giving them the ability to commit to the project with clear planning and guidelines for time management. Grade percentages should be discussed at the beginning of the semester, whether the instructor uses the service learning activity as an incentive or project grade should be outlined and detailed at the beginning of the course's term. When pertaining to grade allocation, students will take service learning projects seriously if the project is a significant portion of a student's grade (McCoskey, 2003). Grade allocation should be done on a case by case basis. Some accounting students are non-traditional students who may not be able to participate in service learning activities. In cases like this, service learning should be an incentive or extra credit.

It can be a challenge to combine community service and academic courses while successfully accomplishing service goals and achieving learning outcomes, and this particularly pertains to undergraduate business courses whose curriculum content is usually technical and standardized (Andrews, 2007). Andrews (2007) continued, "Integration into business curricula is also challenging because of institutions' achievement of academic goals is critical to maintaining their business accreditation and enabling them to succeed with the requisite technical skills in placing students in professional positions" (p. 19).



How can educators overcome these challenges? Educators achieve integration of curriculum such as those found at Bentley College and Montana State University, after many years of investment, and most curriculum integrations start with a service learning application in a specific course (Andrews, 2007). Andrews (2007) discussed recent research studies in relation to service learning in accounting, "The richness and complexity introduced by a live client in an accounting information systems course vividly demonstrates a major learning objective of systems development" (p. 22). Andrews (2007) also called for strategic analysis being appropriate for capstone courses, which would require a variety of skills learned over a student's years in college. Because of the growing research that supports the use of service learning activities improving student learning, universities should provide more opportunities for service learning. These activities and programs improve accounting students' understanding of course work in preparation to their careers.

## **9. STUDENT LEARNING IN ACTIVE TEACHING ENVIRONMENTS**

Whether inside or outside of the classroom, active teaching strategies should support deeper student learning. To maximize the impact of active teaching strategies, it is important that instructors add key tasks or elements that promote critical thinking, experiential learning, problem-based learning and collaborative learning.

### **9.1 Critical Thinking**

One important and major component of learning is critical thinking. Uzunöz et al. (2018) gives many definitions of critical thinking compiled from other researchers: the process of reasonable and reflective thinking that is focused on deciding what to believe or do; the cognitive skills and strategies that increase the likelihood of a specific

outcome; thinking that is purposeful reasoned, and goal-directed, the type of thinking involved in solving problems, formulating inferences, calculating likelihoods, and making decisions; purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as the explanation of the evidential, conceptual, methodological, or conceptual considerations upon which that judgment is based. Uzunöz et al. (2018) stated:

Although critical thinking was defined in different ways, prominent researchers in this field described critical thinking abilities in terms of skills and dispositions. The skills commonly represent the cognitive component while, the dispositions represent affective component. As a cognitive component, critical thinking skills include of analyzing arguments, making inferences using deductive or inductive reasoning, judging or evaluating, and making decision or solving problems. On the other hand, as an affective component, critical thinking dispositions can be seen as attitudes or habits of mind. (p. 80-81)

Uzunöz et al. (2018) considers critical thinking as one of the most important skills necessary for tackling the fundamental challenges and difficulties of the 21<sup>st</sup> century, and it involves the ability to reason effectively, consider different points of view, ask questions, create solutions when problems arise, and evaluate and reconsider one's own decisions.

## 9.2 Experiential Learning

Accounting education should include experiential learning, rather than listening and absorbing information. Kolb (1984) defines experiential learning as an associated concept in which students learn from relevant experiences provided in the course of instruction. Kolb (1984) further explains that learning is a process, not an outcome; that

learning comes from experience; that learning requires resolution of dialectically opposed demands; that learning is holistic and integrative; that learning requires interplay between a person and an environment; and that learning results in knowledge creation. This suggests forcing students outside of their comfort zone by encouraging active involvement through active teaching methods expands the learning process and students' cognitive abilities. There are many different tools teachers can utilize as far as activities in class that help with student learning. Andres (2017) mentioned one of the hallmarks of an active/experiential teaching strategy is that it promotes student engagement in the learning process by the use of multiple modes of instructional delivery (e.g., video, text, images) and requiring students to take notes, write, discuss, and reflect on learning content. In addition, applying concepts via guided in-class exercises accompanied with real world examples is also a feature of active/experiential learning (Andres, 2017). Andres (2017) study used Kolb's Experiential Theory Model to break down the process of experiential learning. Kolb's Theory has two levels: the cycle of learning, which involves four stages, and different learning styles. Andres (2017) stated, "Kolb's Experiential Learning Theory has defined experiential learning as a process whereby knowledge transfer is facilitated through (1) sensory learning (e.g., visual, auditory, tactile), (2) mental (e. g., attention, perception, sense-making) and (3) concrete participative (e.g. physical task performance) experience" (p. 270-271). Andres explained Kolb's model portrays a four-phase cyclical process: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Andres suggested the model shows a learner must experience, reflect, think and apply concepts learned in the cyclical process. Andres (2017) stated:

Concrete experience is realized when the learner is able to actively perform activities relevant to the learning objective. During the process of reflective observation, the learner consciously observes and reflects on their concrete experience to encode and organize information inherently made available through task performance. Abstract conceptualization is characterized by analysis, inferences, and conclusions derived from acquired information to construct a mental model of the learned concepts. This is followed with active experimentation where acquired knowledge is then applied to confirm comprehension. (p. 272)

Active teaching methods provide students with an experience through vision, hearing and touching, which involve three of the five traditionally recognized methods of perception (sight, sound, touch, smell, and taste). The concrete experience is the activity or the event itself. The mental stage leads to students' attention, which forces the student to engage in the active teaching method. This leads to the reflective observation, which brings familiarity to the experience once the student is exposed or observes a particular activity. After the reflective observation, the abstract conceptualization occurs, which brings context to a subject and shows how a process works or operates. The sensory learning is the stepping stone to the mental stage because it provides perception through the experience. The active experimentation is the student acting on the concepts learned, the "doing" element that puts the student in action. Active experimentation forces the student to apply the concepts learned through the concrete experience, reflective observation and abstract conceptualization by "doing", which adds to the learning experience.

**Active Experimentation**

Act/Do/Apply/Plan

**Concrete Experience**

Experience/Feel

**Abstract  
Conceptualization**

Think/Conceptualise/Generalise

**Reflective Observation**

Reflect/Watch/Observe

Figure 1. Kolb's Experiential Learning Theory

In figure 1, the *Concrete Experience* relates to a student's new experience, an encountered experience, or an existing experience that has been cognitively reinterpreted. Kuk and Holst (2018) stated experience is frequently discussed in relation to adult education, and experience is considered a part of adult learning. Experience is a very important factor in the learning process because its influence leads to the facilitation of firsthand events through internship and practicum in curriculums, but also moves toward recognition of one's experiences. "The accreditation of one's experiences is directly related to recognizing experience itself as knowledge, even if it took place without formal educational interventions" (Kuk & Holst, 2018, p. 150). Thus, experience is a key factor

in the learning process and is at the center of active teaching. The *Reflective Observation* represents the specific significance and inconsistencies between understanding concepts and the experience, particularly, this pertains to remembering and reflecting on a given experience. *Abstract Conceptualism* brings the learner to a conclusion, meaning the learner has learned from the experience. This conclusion could bring new ideas from the learner, while *Active Experimentation* involves the learner applying their ideas. In a study that expands on the dualistic split between experience and permanent learning qualities or characteristic learning qualities, Kuk and Holst (2018) stressed that not all experience is equated with learning. O'Leary (2013) stated methodological studies support active or experiential learning, which embraced the theory of cognitive moral development from Kohlberg.

### 9.3 Problem-based Learning

Another approach is problem-based learning (Albanese & Mitchell, 1993; Miller, 2004), which structures a course around the resolution of a real-world problem. This approach traces its beginnings to the philosopher and educator, John Dewey, who claimed that problems are a stimulus to thinking (Miller, 2004).

To discover the solution to a problem, students must learn the basic principles of a subject. Having borrowed the concept of problem-based learning from service learning in which students learn by performing some service for the community, Miller (2004) applied the approach to organizational behavior classes in the business school. Students work in teams acquiring, communicating, and integrating information. The case or problem is deliberately intended to act as a catalyst to promote the acquisition of new knowledge. Students should not have sufficient prior knowledge to be able to solve the problem right away (Milne & McConnell, 2001). The goals of problem-based learning

are to help students (a) think critically, analyze, and solve complex real-world problems; (b) find, evaluate, and use learning resources; (c) work cooperatively; (d) demonstrate effective communication skills; (e) use content knowledge and intellectual skills to become continual learners (Duch et al., 2001).

Problem-based learning falls under active teaching, and its approach consists of the problem, the student, and the teacher (Frezatti et al., 2018). In the Problem-based Learning Approach, students are expected to define their own problems (Frezatti et al., 2018). Frezatti et al. (2018) clarified applicability of Problem-based Learning:

The extension of Problem Based Learning's applicability in areas of business provides relevant opportunity to look at the approach and attends the profile of students that have the potential to advance in their learning beyond the solution to the case in itself. (p. 263)

Spraakman and Jackling (2014) continued, "Problem Based Learning has been used in medical education to cope with the explosion of knowledge that showed traditional rote learning to be seriously deficient," and that "accounting professionals are facing a similar knowledge explosion" (p. 62). A study that explains the rationale, design, and implementation of business simulations, elicited a developmental shift from *knowing* to *thinking* in an accounting introduction course, and Springer and Borthick (2004) found that learners can construct their knowledge rather than just receive it: an approach known as constructivism. In contrast to the more traditional approach of assigning application problems at the end of a conceptual unit, problem-based learning uses problems to motivate, focus, and initiated student learning.

#### 9.4 Collaborative Learning

In cooperative learning, students are required to work together in small groups and class discussions. In order for small groups to develop cooperative learning, five basic elements are necessary: positive interdependence, face-to-face interaction (promote each other's success), individual and group accountability (no social loafing), social skills, and group processing or feedback (Johnson et al., 1991). When the five elements are present, cooperative learning in small groups can maximize each student's learning as one helps another.

## 10. DISCUSSION

There is an abundant amount of research that supports active teaching methodologies for accounting courses inside and outside the classroom. Many empirical studies support the use of active teaching methods in accounting education and provide evidence that active teaching methods in accounting are more effective than passive teaching methods. Accounting professionals, accounting educators, and researchers encourage the use of active teaching methods outside the classroom through incentivizing or requiring students to participate in service learning activities, which has gained popularity over the years, but has had slow implementation in traditional accounting programs. Until active teaching methodologies are considered a priority within accounting programs, accounting education will not meet the growing standards of the accounting profession.

However, because teaching with active learning methods can require additional class time, it is possible that using the active learning approach may result in sacrificing some base knowledge in a course (Michel et al., 2004). Perhaps active learning is more appropriate once students already have a foundation in the particular subject matter.



Particularly in freshmen courses with high attrition, it may not be worth the time and effort to structure a course completely around the active learning approach. Teachers should instead consider which areas of their subject matter are best suited for the active learning approach (Michel et al., 2004) in order to supplement those areas where the passive approach is best.

## 11. CONCLUSION AND LIMITATIONS

In conclusion, it is crucial to continuously improve accounting education to produce efficiency in the accounting profession. The literature in accounting education contains repeated calls for accounting educators to intensify their emphasis on teaching technical accounting and general business skills, while investing more attention to developing students' organizational, interpersonal, and communication skills (Alder & Milne, 1997). Implementing active teaching methods inside and outside of the classroom is a critical step in advancing the accounting field and will add value to accounting programs. Additional participatory involvement outside of the classroom environment through service learning projects like volunteer programs, internships, or extracurricular activities related to accounting will give real-life personal experience and networking opportunities for students when discussing course work. Active teaching benefits accounting students by providing deeper understanding of material in accounting courses, and it will add strategy to combatting memorization, while encouraging the development of students' critical thinking skills. In maintaining a strong profession, attracting and retaining students in accounting is critical (Cameron et al., 2015). For the future of the accounting profession, dissemination of active teaching will add value to accounting education and the profession, which is needed to continue growth in the field.

However, because college universities have classes with an abundant number of students, accounting classes' cover the material required for each class period, with steady flow throughout the semester. When time is a constraint, this can be problematic with students who struggle with accounting course work, and it can strain professors who teach classes containing many students. Every student learns differently, Cameron et al. (2015) stated learning styles of accounting students is an area that consists of many complexities, which are impacted by demographic factors outside the academic sphere (such as age, cultural issues, etc.) and issues within the confines of academia (nature and/or complexity of course content).

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COLLEGE OF BUSINESS

Thesis Advisor [Signature] Date 12/12/18  
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Honors College Dean [Signature] Date 12/12/18

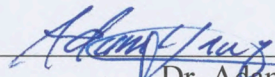
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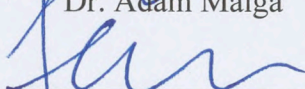
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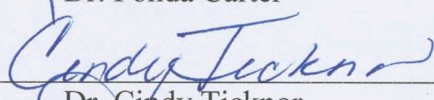
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