

Monopoly: Using Cooperative Learning to Develop Technical and Soft Skills in Accounting

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Abstract

This article describes a class project in principles of accounting, intermediate accounting, and individual federal taxation at two universities with diverse student populations. The project, refined over seven semesters, required students to act as real estate moguls in the game of Monopoly to review the accounting cycle and practice cooperative learning strategies. The project served two purposes. First, the project strengthened the students' technical knowledge of accounting. Academic rigor was established by requiring students to record journal entries, prepare financial statements, and in the taxation course, complete a tax return. Second, the project used cooperative learning strategies to develop the AICPA "professional core competencies" of ethical and professional conduct, decision making, collaboration, leadership, communication, and project management. The instructors witnessed a heightened sense of collaboration and motivation among their students. Student feedback was positive on the satisfaction surveys, with students saying they experienced a deepened understanding of the accounting process through this quasi-real-world simulation. The researchers found that final exam scores significantly improved after adopting Monopoly in the principles and intermediate classes. Finally, because of the COVID-19 pandemic, the researchers also developed instructions for offering the project online.

Keywords: accounting cycle, games, soft skills, cooperative learning, collaboration

Introduction

The American Institute of Certified Public Accountants (AICPA, 2018) developed a core competency framework to provide guidelines on the proficiencies necessary to prepare accounting students to enter the profession effectively. The framework is subdivided into three areas: accounting competencies, business competencies, and professional competencies. Much has been written regarding the accounting and business competencies in the accounting

literature; however, less has been written on the professional competencies or the requisite soft skills such as collaboration and communication.

This article focuses on a class project where students play Monopoly and utilize cooperative learning strategies. The implementation of this project is unique in that it was adopted across the accounting curriculum in three different accounting courses – principles of financial accounting (principles), intermediate accounting 1 (intermediate), and individual federal taxation (taxation) – at two different universities. The learning outcomes were modified to meet the learning objectives for each course. Each university is in the downtown of a medium-sized, economically distressed city.¹ This environment influences the diversity of the student population with many first-generation college students. For this article, diversity is defined by Loes, Culver, and Trolan (2018) as race, ethnicity, culture, and socioeconomic status.

The implementation of Monopoly in the accounting curriculum is not a novel idea. Tanner and Lindquist (1998) used Monopoly as a cooperative learning project to introduce soft skills into a class assignment without sacrificing the academic rigor required in an intermediate accounting course. In addition, the soft skills promoted by the project dovetailed nicely with the AICPA professional competencies.

For our project, the student feedback was overwhelmingly positive in all three accounting classes. Overall, for the principles class, the Monopoly project improved the understanding of the accounting cycle as students developed problem-solving skills. In intermediate, students gained a deeper understanding of how their decision-making could potentially affect the profitability of a business. In the taxation class, the game was renamed Taxopoly, which allowed students to gain firsthand experience linking financial accounting to tax accounting. Students experienced a heightened sense of motivation for all the classes as they collaborated on decision-making and critical thinking skills when playing the game and completing the deliverables.

This article is organized into the following sections. First, we share a literature review on utilizing games in higher education. Second, we address the literature linking cooperative learning strategies with the AICPA professional competencies. Third, we discuss the project and the related learning objectives of each course and give implementation guidelines. Next, we present quantitative and qualitative evidence showing that the project met the classes' learning objectives and supported soft skill development. Lastly, the conclusion summarizes the students' feedback about playing the old-fashioned board game. The appendices provide instructions on how faculty can adopt Monopoly for their accounting classes (including how to play the game online).

Literature Review

Gaming in Higher Education

Gaming was first introduced to higher education in 1904 when Elizabeth Magie used a game to teach economics and the Single Tax theory according to Moncada & Moncada, 2014. Public opinion, however, was negative toward this method of learning, viewing games as inconsistent with the reputation of higher education (Moncada & Moncada, 2014). Thus, for decades, professors avoided using games in higher education. In 1958, using games to teach in higher education was reintroduced at the American Management Association's annual meeting.

The 1960s and 1970s marked a time when games became popularized as a potential educational tool (DeVries & Edwards, 1973). Researchers also began investigating the advantages of game playing in class. DeCoster and Prater (1973) found that students playing games displayed a more positive attitude toward the learning process. By actively participating in the learning process, students also experienced a deeper understanding of course material, especially

¹ The Distressed Communities Index combines seven complementary economic indicators – high school diplomas, housing vacancy rate, unemployment, poverty rate, median income, change in employment, change in establishments - into a single measure of community well-being. Distressed communities are the worst-performing communities (Economic Innovation Group, 2020).

among those with shorter attention spans (Riley & Ward, 2017). Games give students opportunities to apply business knowledge when using quasi-real-life experiences presented in games like Monopoly (Knechel, 1989). Tanner and Lindquist (1998) documented the improvement in academics and attitudes toward financial accounting. Kober and Tarca (2002) and Shanklin and Ehlen (2007) found that games in intermediate accounting resulted in improved motivation and enhanced learning experiences. More recently, Silva, Rodrigues, and Leal (2019) empirically examined the successful use of games in accounting education, showing games increased student engagement and improved concentration while maintaining rigorous academic standards. Lastly, Mousa (2019) used Monopoly to assess the AICPA core competencies in the principles of accounting class. Her research found that this game successfully addressed decision-making, personal interaction, critical thinking, and resource management (Mousa, 2019).

Furthermore, the diversity of the student population in higher education is shifting in response to the globalization of the business world. Globalization requires employees to adapt to multicultural teams, intercultural communications, and cross-cultural decision-making (Pillay & James, 2013). In turn, higher education classrooms must utilize innovative learning techniques to incentivize diverse student populations to work together as a cohesive unit. One way to achieve this is by implementing games into the curriculum. In a qualitative study on utilizing games in a diverse university classroom, Pillay and James (2013) concluded games led to increased receptiveness to multicultural teams and enhanced the cross-cultural skills of collaboration, communication, and conflict resolution. In the last decade, however, history appears to be repeating itself, with the use of games declining somewhat in higher education (Moncada & Moncada, 2014). Still, now with the changing classroom dynamics, gaming is finding a new foothold.

Using Cooperative Learning Strategies to Develop Soft Skills

Cooperative learning is a classroom strategy based on social interdependence theory, which stresses cooperation, competition, and individualized efforts (Johnson & Johnson, 2009). Therefore, we structured the Monopoly game to allow students to work in small groups while maintaining individual responsibilities for task completion. According to Deering (1989), cooperative learning heightens student accountability and learning while simultaneously cultivating intergroup relations among the students. The learning responsibility is then shared among the group members, identifying and utilizing each member's strengths working toward a common goal (Sweeney, Weaven, & Herington, 2008).

An added benefit to utilizing cooperative learning group dynamics is its alignment with the AICPA professional competencies. The AICPA developed accounting, business, and professional competencies necessary for students to transition to the professional workforce successfully. The professional competencies include ethical and professional conduct, decision making, collaboration, leadership, communication, and project management. Cooperative learning group dynamics addresses these soft skills.

Cooperative learning strategies require four key components (Emerson, English & McGoldrick, 2015; Johnson & Johnson, 2009; Tanner & Lindquist, 1998). First, small groups must have positive role interdependence, thus developing a positive relationship between an individual student's success and the group's success. This stresses the importance of team-building skills and collaboration. Second, group dynamics must include verbal communication, including collaboration and resolution of disagreements. Communication and conflict resolution are the underlying principles of cooperative learning. Third, individual students must be held accountable for mastering the material. Assignments should also include the completion and accuracy of individualized tasks. Lastly, equal participation of all group members is necessary for the success of this learning strategy. This requirement stresses the importance of team building once again. Academic rigor is maintained through assigned tasks, while students practice soft skills through team interactions.

Cooperative learning moves the responsibility of instruction from the instructor to the student, with the instructor serving as an advisor, mentor, or sometimes a referee. Peek, Peek, and Horras (1994) studied small group

cooperative learning strategies at Arthur Anderson. They concluded that the individual team members had to evaluate the pros and cons presented by fellow players to resolve conflicts. These conflict resolution discussions generated ethical decision-making opportunities about what's best for the group versus the "correct way" to handle the conflict. This helps the students become aware of the importance of resolving conflicts within the team while maintaining professionalism.

Small groups, if diverse, also require students with culturally different viewpoints and ideas to work together (Slavin & Cooper, 1999). Loes et al. (2018) identified these strategies as a powerful tool to encourage collaboration, build communication skills, and improve achievement by working with fellow students of different cultures and perspectives. According to Hsiao, McSorley, and Taylor (2017), team members supporting and teaching each other, collaborating and practicing open-mindedness, developed team building and leadership skills. Even though no one student may emerge as the group leader, their research found cooperative learning develops individual leadership. Munoz and Huser (2008) and Pimmel (2001) referred to cooperative learning as a "hands-on, reality-based approach," allowing students to enhance their leadership and communication skills while they deal with others' strengths and weaknesses.

The Monopoly Project

As the Monopoly game boxes were carried into the classroom, the student chatter grew to a loud buzz. Students dropped cell phones into book bags as their excitement level grew. They said, "We are actually playing Monopoly?" "I haven't played a board game in years." "I'm so excited!" and "The real game?!" Students eagerly anticipated learning how the game of Monopoly could be applied to an accounting class. Many were excited to adopt the role of entrepreneurial business owners. In later semesters, the students would check the syllabus to see if Monopoly was on the schedule, often saying, "It's here! We are playing Monopoly too! "

University A began using the project in intermediate accounting in the fall of 2016. After two semesters of positive student feedback, the project was modified and adapted for the principles class at the same university. University B adopted the project after learning about it at an accounting conference for the taxation class for the fall of 2019. Because of COVID-19, University B tested an online version in the fall of 2020, then adopting a new online version for the spring and summer semesters of 2021.

Learning objectives

The project had three learning objectives common among the three accounting classes – principles, intermediate, and taxation – and a fourth learning objective added for the taxation class. The first learning objective was improving the students' baseline knowledge and applying the accounting cycle through cooperative learning. Students played Monopoly, giving them firsthand experience creating and analyzing business transactions, then preparing journal entries, financial statements, and closing entries.

The project's second objective was to strengthen students' verbal communication skills in an engaging decision-making environment. The game rules intentionally left several items without detailed instructions for the upper-level classes so that the small groups would discuss the accounting issues at hand. Each group had to come to an agreed-upon resolution and document their process. This rule supported the cooperative learning strategies of collaboration and conflict resolution. As an example, the accounting treatment of the "get out of jail free" card was intentionally not disclosed to the students.

The third learning objective of the project is to promote collaborative learning, including professional competencies of project management. The project allowed a diverse group of students to solve problems together in a relaxed, fun atmosphere.

University B follows the AICPA Model Tax Curriculum guidelines in developing the content of the taxation course. The AICPA states in learning outcome #2: the students need to understand the interrelationship and differences

between financial accounting and tax accounting. The fourth learning objective was to support the understanding of book and tax differences.

Context

Intermediate Accounting

The Monopoly project was first implemented in intermediate during the fifth week of the fall semester in 2016 at University A, an ACBSP-accredited private liberal arts university in the eastern U.S. with 4,400 students (See instructions in Appendix A). Based on the definition previously offered in this article, the intermediate class is considered 26.8% diverse with students of color, international, non-traditional, and first-generation students (Table 1).

The first few weeks of this class predominately served as a review of the accounting cycle, previously learned in the principles courses. The first exam, covering journal entries, adjusting entries, the balance sheet and income statement, reinforced the broad range of student abilities needed to play Monopoly.

Students selected three classmates to form a group of four property owners, selected one member to act as the banker, and arranged a convenient time outside of class to meet to play 36 “rounds” of Monopoly. Each “round” of Monopoly generated a business transaction such as buying a property or paying rent to another group member. The only stipulation on the group formation was that one property owner had to be an international student. These rules were specifically created to stimulate role interdependence required for cooperative learning. In addition, the students had to request the board game from the professor during scheduled office hours. This allowed the professor to monitor student progress and track playing time. Students were permitted to ask questions about the assignment at the beginning of each class period, during scheduled office hours, and through a Blackboard discussion forum or email. Student questions took approximately 45 minutes of in-class time over three weeks.

Principles of Financial Accounting

Unlike the intermediate class, one class period was devoted to playing Monopoly, and if time allowed, students began the project by making journal entries (See instructions in Appendix B). Like the intermediate class, the principles class had a diverse student population, with 25.6% meeting the diversity criteria.

The project was offered at the end of the semester as a comprehensive assignment to assess the students’ retention and application of accounting knowledge. Several game tasks were modified from the intermediate model because most of the majors in the class were not accounting majors but business majors. The project required fewer transactions, did not have partial year depreciation, and gave students more starting capital to avoid the need for loans and interest. The project’s primary learning outcome was to synthesize 16 weeks of knowledge into one comprehensive experience. The second and third learning outcomes were consistent with the intermediate class by promoting communication, critical thinking, and problem-solving skills.

Individual Federal Taxation

The monopoly project was adopted by University B, an AACSB-accredited public university with 12,000 students in the Midwest U.S., for an individual federal income tax course (See instructions in Appendix C). Two tax professors used Monopoly over a two-year period.² The students at this university are predominately first-generation college students.

² Professor A used the game while Professor B was on sabbatical leave. When Professor B returned, she continued using the project, building on Professor A’s experience.

Tax Professor A offered the project in the latter half of the semester after students learned tax depreciation rules. Students played the game during a two-hour class period, with students playing at tables with teams of two or three members each. Tax Professor B and three graduate assistants participated in the game as bankers. After students completed 36 transactions, the class ended, and the students completed their tax returns and financial statements as a homework project.

Most of the game rules remained the same as the intermediate class; however, the real estate business became a single-member limited liability company. After the students played the game, they prepared financial statements using US GAAP and a 1040 tax form with the Schedule E for real estate and form 4562 for depreciation.

The instructions provided additional personal tax information, requiring students to calculate book-tax differences for issues like straight-line versus MACRS depreciation. Also, students confronted the deductibility of fines and other revenues and expenses allowed on financial statements but disallowed on the tax return.³

Implementation Guidelines

Instructions for each course – principles, intermediate, and taxation – are included in Appendix A, B, and C, respectively, and Appendix D provides the COVID-19 online version of the project. The four instructions are similar but with modifications to address each course’s specific learning objectives discussed earlier.

The instructions for the Monopoly project should be distributed to students with the syllabus early in the course. Faculty should remind students to review these instructions before game time and keep a copy on hand while playing the game. Faculty should post the instructions on their Learning Management Systems (e.g., Blackboard, Canvas) for students who misplace their hard copies. Students may also ask additional questions in class, on the discussion board, or during office hours. Several rules of “real” Monopoly are not applicable, such as purchasing all the properties in a colored set before buying a home or hotel. In this class assignment, purchasing a home or hotel is required before the end of the game.

The students must form groups of four independent property owners and select one member to act as the banker. Once groups are formed, there were subtle differences in the instructions between the principles, intermediate, and taxation classes.

First, the principles students take 24 turns covering the span of a twelve-month calendar year. In contrast, intermediate and taxation students take 36 turns covering nine months from April 1 to December 31, forcing them to consider partial year calculations (e.g., depreciation) for certain expenses.

Second, the principles class received more detailed instructions on how to handle the community chest and chance cards. The intermediate and taxation students were not given these details, forcing them to use critical thinking skills in a cooperative learning environment. This subtle change promoted increased communications, decision-making, and ethical conduct related to the AICPA professional competencies.

Third, the initial investment for the principles and taxation students was \$1,500 to minimize their need to borrow money. The intermediate students, however, began with \$500 forcing them to make more complicated journal entries. Some principles and taxation students still needed loans but significantly fewer than in the intermediate class.

Fourth, principles students were required to purchase at least one property. If they already owned a property, they were not required to buy a second property; therefore, they could potentially have a turn without a transaction. In the

³ Professor B developed an on-line version of the game that was used during COVID-19, when the tax classes went online, which will be discussed later in the article.

intermediate and taxation game, the banker auctioned the property if the business owner did not purchase it. The details are in the “Playing Monopoly Instructions,” item “g” (e.g., in Appendix B and C).

The instructions provided in the appendices served as guidelines to the instructors. For example, the professor at University B adapted the instructions for intermediate accounting for his class, adding the tax return preparation requirement.

The taxation class made additional modifications as well. When setting team sizes, the professor ensured each team member had enough work to contribute to the deliverables substantially. Finally, Tax Professor A replaced his final exam with the project feeling it was a worthwhile substitute for testing student comprehension. By eliminating the final exam, he had the grading time he needed to grade the projects.

Adopting Taxopoly during COVID-19

Because of the COVID-19 pandemic, the tax courses at University B moved online, with Tax Professor B teaching in fall 2020.⁴ She kept the game, simplified it, and made it optional for the fall. She allowed students to play with family members using the tabletop version or an online version (See instructions in Appendix D). The assignment, however, became mandatory in the following spring and summer, with the professor adding back the collaborative component.

After testing various online options, the professor chose the online game platform called *Rento* because it was free, easy to use, and allowed students to mortgage and trade properties with each other. *Rento* added a few surprises not in the original Monopoly, including a space where a wheel spins for prizes. Students did not calculate book depreciation but used tax depreciation for the books and tax returns in the online version. The professor used this opportunity to teach students about non-GAAP financial statements, a typical financial statement used by non-public companies. Finally, the professor added a like-kind exchange to the game where students traded properties, making the respective journal entries and completing the like-kind exchange tax from 8842.

Challenges

The student learning curve in playing Monopoly was minimal because most students had previously played the game as children. Several international students, however, had never played the game before. The issue was resolved by requiring each group of four property owners to include one international student. These students then caught on quickly with the assistance of their peers.

A second challenge arose in the principles class. The students wanted the instructor to resolve disagreements instead of arriving at a consensus on their own. To maintain the cooperative learning strategies and stimulate an accounting discussion, the instructor did not resolve the issues but instead acted as a moderator, forcing the group to resolve their issues.

A third challenge arose during COVID-19 with classes going online and social distancing requirements. In the fall 2020 class, Taxopoly was optional so that the professor could test the game online with a few students. Many students thought it would be too challenging to coordinate playing the game online with other teams and opted for a final exam instead of the game. Since scheduling was tight, the professor simplified the instructions and allowed students to play with team members, friends, or family members. However, after piloting the game in the fall 2020, the professor made the game mandatory in the spring and summer of 2021. The professor put each team into a break-out room to play the game. She then visited the rooms to monitor team progress and answer questions. The students played the game during one two-hour class period to address the challenge of coordinating the teams. The professor also allowed time in the next class for students to work on their deliverables together.

⁴ Professor B is prototyping the online version. In spring and summer 2021, the game was required.

Grading

Each student was individually responsible for submitting a complete accounting packet for their company based on their unique transactions. No two students (or teams) should have the same financial statement results. The instructions also explained how the assignment would be graded. Points were assigned to each aspect of the accounting cycle to stress the need for each step of the process. This project was worth 100 points.

1. The chart of accounts must include all accounts used throughout the project. Grading also includes the correct ordering of accounts beginning with assets, followed by liabilities, equity, revenue, and expenses.
2. Each student had to maintain a log of each transaction in a three-column Excel file. The column headings are “Number Rolled, Space Landed on, and Action Taken.” For example, if a student rolled six, she would move to Oriental Avenue, purchase land, and maybe a house. Even though this is not explicitly assigned a point value, the journal entries are graded against the log. If the log does not exist, the journal entries cannot be graded.
3. T-accounts are graded to confirm proper posting and completeness.
4. The trial balance is compared to the chart of accounts, reviewed for expected normal balances, and confirming debits equal credits.
5. The financial statements are graded for proper formatting, the use of all accounts on the appropriate financial statement, and the flow of balances.

The grading summary is given in Appendix A, B, C, and D in section 3 labeled “End of Game.”

Teaching tips

As mentioned earlier, the taxation class used outsiders (another tax professor and GAs) as bankers. This was helpful because the players were not distracted by having to make change. The outsiders could also remind the students of the rules to ensure students played the game as intended (e.g., item j on the instructions in Appendix B and C).

For the principles and intermediate classes, one student had to work as a banker and acted as a real estate investor. This encouraged more meaningful communications between the students and built a relationship between the students and the banker. The principles class found the dual role overly challenging; therefore, we recommend using a banker as the taxation class did. Another option is to use the online version of the game, and the computer serves as the banker.

Second, the instructions specifically state, “every roll must create a business transaction.” In addition, the instructions specify “a house or hotel may be purchased the first time landing on any of the colored spots or any time it is your turn in the game.” This resulted in several students owning land but not having any depreciable properties. Faculty need to remind students to purchase at least one house and one hotel to depreciate.

Results

Regarding overall project efficacy, we present the results from qualitative and quantitative analyses to investigate if: (1) the class's learning objectives were met, and (2) soft skills were developed. The results are from a 5-question student satisfaction survey, a pre-intervention and post-intervention comparison of test scores, and student comments.⁵

Meeting learning objectives

The Monopoly project successfully met each class's desired learning objectives discussed earlier in this article from the instructors' perspectives. This statement is based on the student survey results and the statistically significant positive change in exam scores when comparing classes that played Monopoly to those that didn't.

⁵ The Institutional Review Board (IRB) approved the study at both university A and B.

Learning objective 1: Understanding the accounting cycle

The Monopoly project's first learning objective was to enhance the students' understanding of the accounting cycle. As shown in Table 2, Question #1 shows 91% of the intermediate students "agreed" or "strongly agreed" to the survey item addressing an increased understanding of the accounting cycle compared to 86% of the principles students and 88% of the taxation students. Student comments included, "I finally understand how the full accounting cycle flows together." One of the best comments came from a taxation student who wrote, "This project does a nice job incorporating financial accounting into taxes and shows us how all our accounting classes can link together." Isn't that the goal of every professor – to get the student to integrate their accounting classes into one knowledge base?

The Monopoly project was offered in principles and intermediate to help students master the content and reinforce learning. In both classes, students' performance on exams improved significantly. The difference-in-differences (D-I-D) analysis shows that students' improved performance (statistically significant at $p < .01$) can be attributed to the Monopoly project, as discussed for the following sections.

In the fall 2017 principles class, Monopoly was not administered. The average score on Exam 1 was 86.26% and on Exam 2 was 77.74%. The decline in the average score is statistically significant. In the principles class of spring 2018, spring 2019, and fall 2019, the Monopoly project was deployed between Exam 1 and Exam 2. The average score was 74.97% for Exam 1 and 81.35% for Exam 2. The increase was significant at the level of $p < 0.01$. The changes in average exam scores are depicted in Figure 1.

In spring 2016, the Monopoly project was not administered in the intermediate class. The average score on Exam 1 was 80.54%, while the average score on Exam 2 was 74.88%. For four fall semesters from fall 2016 to fall 2019, the intermediate class adopted the Monopoly project. The average exam score for classes with Monopoly was 75.80% on Exam 1 and 81.92% on Exam 2. The mean differences in both groups were statistically significant at the level of $p < 0.01$. The changes in mean scores are depicted in Figure 2.

Additional statistical analysis was conducted to investigate factors that caused the changes in exam scores in the principles classes and the intermediate classes. More details of the DID regression analysis are reported in the footnote.⁶ The results indicate that the improvements in exam scores were caused by the Monopoly game, not by changes in exams (Exam 1 vs. Exam 2) or the passage of time.

Learning objective 2: Verbal communications

The second learning outcome was to strengthen verbal communication in an engaged decision-making environment. This outcome was tied to the AICPA professional competencies of communication, decision-making, and collaboration in a cooperative learning environment. Question 2 on the survey produced the highest mean at 4.49 on a five-point Likert scale, as displayed in Table 2. Each of the three courses had above a 90% positive response rate, with students either "strongly agree" or "agree" to resolving their differences through group discussions.

This project required extensive communication among group members. Furthermore, several students commented on the decision-making aspect of this project. One student wrote, "My dad owns property back home. Now I

⁶The regression model can be depicted as $\text{Score} = \beta_0 \text{Intercept} + \beta_1 \text{Monopoly} + \beta_2 \text{Exam} + \beta_3 \text{Monopoly} * \text{Exam} + \epsilon$. Score represents students testing scores in Exam 1 and Exam 2. Monopoly is a dummy variable with 0=without Monopoly project and 1=with Monopoly project. Exam is a dummy variable with 0=Exam 1 and 1=Exam 2. Monopoly*Exam represents the interaction between those two variables. For both classes, β_1 and β_2 are not statistically significant but β_3 is statistically significant. Thus, the Monopoly game caused the increase of exam scores, not the difference in the exam or the passage of time..

understand a little better the decisions he has to make to be successful.” The second outcome was achieved in all three courses based on the student survey results and student comments.

Learning objective 3: Collaborative learning and time management

The third learning outcome focused on enhancing collaboration and time management skills. One of the AICPA professional competencies is time management. The survey asked students questions about their time management experience. This competency was evaluated by how well the group completed the assignment on time. Most students, or 97%, submitted the assignment on the due date.

Interestingly, 84% of the principles students “strongly agree” or “agree” that their group helped them complete the assignment on time on Question 3 (Table 2). In contrast, only 78% of the intermediate and 82% of taxation students responded similarly. This could mean the younger students needed more help from others to self-regulate, whereas older students did not need much support. Finally, Question 4 (Table 2) showed that approximately 87% of students “strongly agree” or “agree” that members collaborated in helping each other complete the assignment.

Learning objective 4: The interrelationship between financial accounting and tax

Lastly, the in-person taxation course achieved the primary objective of the students' need to understand the interrelationship and differences between financial accounting and tax. Data was collected for two classes: (1) the in-person version in fall 2019 and (2) the COVID-19 online version for spring 2021. The taxation survey data is presented in Table 3. For Question A in Table 3, the class majority, 91- 92% of taxation students, “agreed” or “strongly agreed” they better understood the linkage between financial and tax accounting. One student wrote a comprehensive analysis of the project,

I think it does a nice job incorporating financial accounting into taxes and shows us how all our accounting classes can link together. It widens our perspective and helps me understand more about accounting as a whole. Working in groups is very beneficial when everyone does their part, and it's a great way to show what it's like to be a sole proprietor. Also, when I started studying for the final, it felt like I already knew some of the information.”

Table 3 questions B and C showed differences between the in-person group and the online COVID-19 group. The online student group felt that the game improved their understanding of “real world” issues more than the in-person group (88% versus 79%, respectively), and the game improved their understanding of tax preparation (90% versus 83%, respectively). The online game seemed to enhance the student learning experience more than playing the game in person. The online students also seemed to value working with their teammates more than the in-person groups, perhaps countering the social isolation experienced by so many of them during COVID.

Practicing Professional Competencies

This project's secondary goal was to allow students to practice soft skills, specifically those listed in the AICPA professional competencies, using cooperative learning strategies. The competencies of communication and leadership overlap with learning objective 2 – verbal communication – while the competency of collaboration overlaps with learning objective 3 – collaboration and time management, discussed in the prior section. From the responses gained from the student survey and comments, the Monopoly project also appears to enhance the other professional competencies successfully.⁷

The mean scores on the student satisfaction survey items, as shown in Table 1, ranged from 3.93 to 4.71 (on a five-point Likert scale). Students made positive comments such as, “Teamwork is #1. I never did a project like this, and it was extremely rewarding.”

⁷ Table 1 shows the means for all the classes that played Monopoly. All means were 3.93 to 4.71 for all the classes. The highest means were for the taxation class that played the game online during COVID-19.

The professional competency of ethical and professional conduct was addressed in the grading process. Each student had a unique series of transactions; however, several of these transactions should be reciprocal. The property owner should recognize income while another group member should have a related expense. These transactions are to be reviewed and confirmed in the grading process. Additionally, the community chest and chance cards presented situations that allowed for discussion about ethical conduct.

Each student was given a two-week window to partner with three classmates, coordinate a time to play the game, and individually complete the required components of the assignment. This encouraged students to develop project management skills such as scheduling and time management to produce a quality deliverable.

Overall, the students enjoyed the class project. Students expressed positive emotions by saying they felt good about their choice of major, enjoyed working with their groups, and sharing responsibilities. One student wrote, "I loved buying as many properties as possible. Everyone owed me money. It confirmed why my double major in accounting and entrepreneurship will serve me well after I graduate."

Conclusion

This class project was adopted at a smaller liberal arts university and a larger state university. The Monopoly project spanned four academic years, with 218 participating students. Table 1 gives descriptive statistics, the survey items, and the averages for the three accounting courses. This table reflects the consistent positive feedback from students across the accounting curriculum with means above four on the five-point Likert scale. Question 5 on Table 2 asked students if this project should be offered in future classes. Approximately 86% of the students "agree" or "strongly agree" with offering Monopoly in future classes. These results support our belief that the Monopoly project was successfully implemented across the accounting curriculum from both the instructors' and students' perspectives.

The learning objectives for the project were met for each class's specific learning outcomes. In the intermediate class, the project effectively heightened the student's baseline knowledge of the accounting cycle. In the principles class, the project successfully functioned as a comprehensive accounting project synthesizing a semester of accounting cycle knowledge into one project. For the taxation class, the project reviewed the accounting cycle in taxation and clarified the links between financial accounting and tax accounting. Finally, the researchers found the game led to a statistically significant positive change in final exam scores for students playing Monopoly versus those that did not have that opportunity.

Second, students had the opportunity to enhance their "soft skill" professional competencies by working together in diverse groups. The project required students to collaborate with fellow group members, communicate and problem-solve as a group, and discuss the proper accounting treatment for various transactions. Students were also required to coordinate their schedules and manage their time to be successful.

The project reinforced and solidified their accounting knowledge from the students' perspective, allowing them to have fun and enjoy the game. Several international students, not having played Monopoly before, bonded with their group members to learn the new game. Some students made new friendships or new study partners. This was especially true for the online tax group, playing the game during COVID-19, allowing them to interact with one another in a time of social isolation. Finally, Monopoly was not just another group project with one student carrying the weight for the remainder of the group. All the students had to participate since individual assignments were also a required part of this project.

One professor found that some undecided business students changed their majors to accounting because they found the experience of negotiating purchase prices, preparing financial statements, and completing the accounting cycle to be thrilling. This became an unexpected benefit of the project, not anticipated when first implemented. Students came to understand why accounting is called "the language of business."

The game was played at universities that were in predominately lower socioeconomic, working-class neighborhoods. This could potentially limit the success of the project for universities with different student populations. Therefore, we recommend that other universities modify the game to match their course objectives and student populations when adopting this project. One potential modification is to use a different board game such as The Game of Life, Money Matters, or Ice Cream Empire. The last game allows students to express their entrepreneurial spirit, like Monopoly.

Regardless of the game, any class project that uses an active learning environment can help strengthen students' understanding of accounting principles and develop their professional competencies. As we experienced, a well-designed game can also improve student satisfaction as students engage in the learning process.

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Table 1
Descriptive Statistics

	Principles	Intermediate	Taxation-Pre-COVID	Taxation-During COVID
Participating Students				
Males (n=139)	48	53	19	19
Females (n=79)	30	29	4	16
Total (n=218)	78	82	23	35
Percent of Accounting Majors	24.4%	100%	76.5%	51% ⁸
Diversity %	25.6%	26.8%		
Semesters Adopted	Spring (2), Fall (1)	Fall (4)	Fall (1) ⁹	Spring (1)
1. My understanding of the complete financial accounting cycle has been enhanced by the Monopoly assignment.	4.21	4.34	4.17	4.49
2. Any questions or problems that arose while playing Monopoly were discussed, and a resolution was agreed upon with all the members of the group.	4.45	4.51	4.48	4.71
3. Being a part of a group helped me to complete the Monopoly assignment in a more timely fashion.	4.10	4.00	4.39	4.41
4. My group members spent time working together on the remainder of the assignment, helping each other to complete the assignment.	4.14	3.93	4.35	4.62
5. The instructor should continue using the Monopoly assignment in future classes.	4.31	4.31	4.39	4.4

⁸ The tax class is made up of accounting and finance majors. In the fall, the majority of students are accounting majors. However, in the spring, many accounting majors are on internships, thus finance majors make up about half of the class.

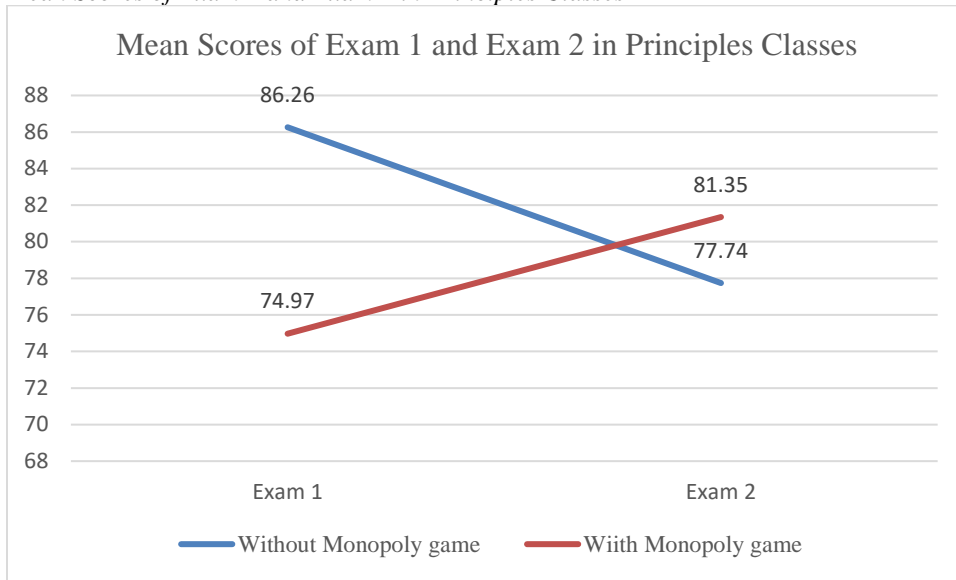
⁹ This semester was prior to the pandemic in Fall 2019. During COVID-19, the project was used again in Spring 2021 in an on-line format.

Table 2

Table 2						
Responses to Survey Items (N = 218)¹⁰						
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
1. My understanding of the complete financial accounting cycle has been enhanced by the Monopoly assignment.						4.29
Principles	51%	35%	1%	12%	1%	
Intermediate	50%	41%	0%	0%	0%	
Taxation	52%	36%	3%	9%	0%	
Total	51%	38%	1%	10%	0%	
2. Any questions or problems that arose while playing Monopoly were discussed, and a resolution was agreed upon with all the members of the group.						4.49
Principles	55%	40%	0%	4%	1%	
Intermediate	61%	30%	2%	6%	0%	
Taxation	67%	27%	6%	0%	0%	
Total	60%	33%	2%	4%	0%	
3. Being a part of a group helped me to complete the Monopoly assignment in a more timely fashion.						4.17
Principles	46%	38%	1%	12%	3%	
Intermediate	55%	23%	0%	17%	5%	
Taxation	63%	19%	12%	6%	0%	
Total	54%	28%	3%	12%	3%	
4. My group members spent time working together on the remainder of the assignment, helping each other to complete the assignment.						4.13
Principles	40%	49%	0%	12%	0%	
Intermediate	20%	66%	0%	13%	1%	
Taxation	67%	20%	3%	6%	0%	
Total	38%	49%	1%	11%	0%	
5. The instructor should continue using the Monopoly assignment in future classes.						4.34
Principles	50%	36%	10%	3%	1%	
Intermediate	51%	34%	11%	4%	0%	
Taxation	60%	28%	5%	5%	2%	
Total	53%	33%	9%	4%	1%	

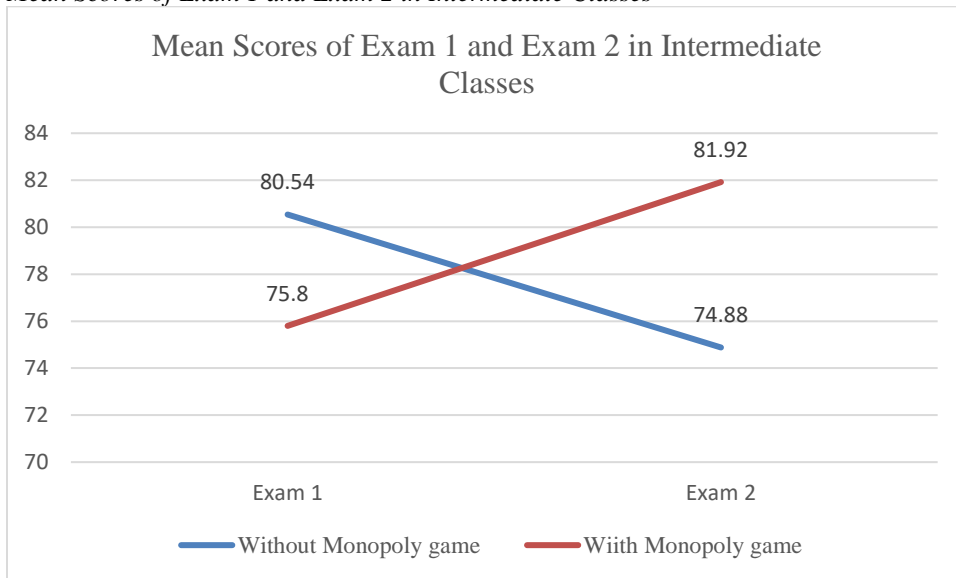
¹⁰ The distribution for sample sizes: Principles (N = 78); Intermediate (N = 82) and Taxation (N = 58)

Figure 1
 Mean Scores of Exam 1 and Exam 2 in Principles Classes



Note: both changes between Exam 1 and Exam 2 are statistically significant at the level of p-value < 0.01.

Figure 2
 Mean Scores of Exam 1 and Exam 2 in Intermediate Classes



Note: the increase from Exam 1 to Exam 2 of the group with the Monopoly game is significant at the level of p-value < 0.01.

Table 3

Table 3						
Responses to Survey Items						
For Taxation Classes¹¹						
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
A. My understanding of the linkages between financial accounting and taxes has been enhanced by the Monopoly assignment.						
Taxation before COVID	57%	35%	0%	4%	4%	4.35
Taxation during COVID	60%	31%	9%	0	0	4.51
B. The Monopoly assignment improves my understanding of tax issues that accountants face in the "real" world.						
Taxation before COVID	44%	35%	17%	4%	0	4.46
Taxation during COVID	57%	31%	9%	3%	0	4.42
C. My understanding of tax preparation has been enhanced by the Monopoly assignment.						
Taxation before COVID	53%	30%	4%	9%	4%	4.17
Taxation during COVID	66%	24%	7%	3%	0	4.43

¹¹ The sample sized for the Taxation class before COVID-19 (N = 23) and during COVID – 19 (N = 35)

Appendix A

Intermediate Accounting Monopoly Instructions

The purpose of playing Monopoly is to complete the full accounting cycle for your newly formed company formed on April 1st. Your company is organized as a corporation, and the name of the company must include your last name(s). **Each student is a separate company.** Please form groups/companies of three people (based upon the number of people in the class, there will be several groups of two people). You are forming your own groups/companies. Please do this before class if possible, but if not, we will form groups quickly at the beginning of class.

1. Initial Requirements

- a. Form a Monopoly group of 4 owners of properties.
- b. One student shall volunteer to be the Banker, in addition to playing the game along with the rest of the group. The Banker will handle all bank transactions, such as making loans, accepting payments on loans, or holding the Title Deed cards until a property is purchased, but will not record the transactions of the bank. The banker is, however, responsible for recording his/her own individual transactions just like the other players.
- c. If a particular transaction is not noted in these detailed instructions, the Monopoly group must agree on an acceptable accounting solution. A short paragraph is required to explain the transaction and the agreed-upon resolution.

2. Playing Monopoly

- a. The first transaction is the contribution of capital for \$500.
- b. Every roll must create a business transaction. Several potential scenarios do not require a business transaction.
- c. Each rental company is required to complete a minimum of 36 transactions. Every four rolls are a month. Remember, your company is formed on April 1, so 36 rolls later, take your companies to Dec. 31.
- d. Each time you land on a “colored” avenue, you must buy it, or the banker must auction it off to another company. Opening auction bids are always \$10. **Each company must own at least one property.** A house or hotel may be purchased the first time landing on any of the colored “avenues” or any time it is your turn in the game. You may borrow money from the bank or purchase a property from another company.
- e. If your company lacks cash, borrow money from the bank in \$100 increments at 12% interest. All loans may be paid off early. At the end of the game, you must pay off outstanding loans in \$100 increments to the extent you are liquid. If you do not have enough cash to pay off the entire loan balance, that’s ok. Leave the balance on your balance sheet.
- f. If you land on a property owned by another company, you must pay rent equal to the amount stated on the Title Deed card. If you do not have available cash, you must record Rent Payable.
- g. You may not remain in jail for consecutive turns. You must pay \$50 to get out of jail if you do not roll a double. You will also pay \$50 if you are just visiting the jail.
- h. If you land on Railroad, this is treated the same as a “colored” avenue. Buy it or Auction it. Opening auction bids are always \$10.
- i. If you land on Chance or Community Chest, do as the card states, and record the transaction to an appropriate income or expense account.
- j. Common Sources of Income:
 - i. Pass Go, earn \$200
 - ii. Receiving Rental Income equal to the amount on the Title Deed card.
 - iii. Chance or Community Chest cards
- k. Sources of Expense
 - i. Landing on property owned by another company
 - ii. Paying to get out of jail
 - iii. Landing on Utilities
 - iv. Chance or Community Chest cards
 - v. Depreciation Information:

1. Use straight-line depreciation for book depreciation. Depreciation should be calculated for both financial statements (by month) and the tax return. Use the following information to calculate depreciation:

<u>Asset</u>	<u>F-S Life</u>	<u>F-S Salvage</u>
House	15 yr.	10% of the cost
Hotels	20 yr.	10% of the cost
Railroads	20 yr.	zero

- vi. Interest Expense is calculated by month and recorded when the loan is paid off or at the end of the year if a balance remains.

3. End of the Game

- a. The game ends when ALL companies have 36 transactions. As a reminder, every four transactions equal a business month.
- b. Count and record your cash on hand. Note this balance at the end of your list of transactions.
- c. Complete the following assignments [100 points total]:
 - i. Complete Chart of Accounts,
 1. The Chart of Accounts must include, at a minimum, the following accounts:
Cash, at least one Property, Capital, specific Revenues, and detailed Expenses.
 - ii. 36 Journal Entries with the list of recorded transactions compiled while playing Monopoly,
 - iii. T-Accounts,
 - iv. Trial Balance,
 - v. Income Statement,
 - vi. Statement of Equity
 - vii. Balance Sheet
 - viii. Closing Entries

Appendix B

Principles of Accounting Monopoly Instructions

The purpose of playing Monopoly is to complete the full accounting cycle for your newly formed company formed on January 1st. Your company is organized as a corporation, and the name of the company must include your last name(s). **Each student is a separate company.** Please form groups/companies of three people (based upon the number of people in a class, there will be several groups of two people). You are forming your own groups/companies. If possible, please do this before class, but if not, we will form groups quickly at the beginning of class.

1. Initial Requirements

- a. Form a Monopoly group of 4 owners of properties.
- b. One student shall volunteer to be the Banker, in addition to playing the game along with the rest of the group. The Banker will handle all bank transactions, such as making loans, accepting payments on loans, or holding the Title Deed cards until a property is purchased, but will not record the transactions of the bank. The banker is, however, responsible for recording his/her own individual transactions just like the other players.
- c. If a particular transaction is not noted in these detailed instructions, the Monopoly group must agree on an acceptable accounting solution. A short paragraph is required to explain the transaction and the agreed-upon resolution.

2. Playing Monopoly

- a. The first transaction is the contribution of capital for \$1,500.
- b. Every roll must create a business transaction. Several potential scenarios do not require a business transaction.
- c. Each rental company is required to complete a minimum of 24 transactions. Every two rolls are a month. Remember, your company is formed on January 1, so 24 rolls later, take your company to Dec. 31.
- d. Each time you land on a “colored” avenue, you must buy it if you have not purchased another property. **Each company must own at least one property.** A house or hotel may be purchased the first time landing on any of the colored “avenues” or any time it is your turn in the game. You may borrow money from the bank or purchase a property from another company.
- e. If your company lacks cash, borrow money from the bank in \$100 increments at 12% interest. All loans may be paid off early. At the end of the game, you must pay off outstanding loans in \$100 increments to the extent you are liquid. If you do not have enough cash to pay off the entire loan balance, that’s ok. Leave the balance on your balance sheet.
- f. If you land on a property owned by another company, you must pay rent equal to the amount stated on the Title Deed card. If you do not have available cash, you must record Rent Payable.
- g. You may not remain in jail for consecutive turns. You must pay \$50 to get out of jail if you do not roll a double. You will also pay \$50 if you are just visiting the jail.
- h. If you land on Railroad, this is treated the same as a “colored” avenue. Buy it or Auction it. Opening auction bids are always \$10.
- i. If you land on Chance or Community Chest, do as the card states, and record the transaction to an appropriate income or expense account.
- j. Common Sources of Income:
 - i. Pass Go, earn \$200
 - ii. Receiving Rental Income equal to the amount on the Title Deed card.
 - iii. Chance or Community Chest cards

1. Bank error in your favor	Miscellaneous Income
2. You inherit \$100	Gift Revenue
3. Collect \$50 from every player	Rental Income
4. Life insurance matures	Insurance Revenue
5. Xmas fund matures	Miscellaneous Income
6. Beauty contest winner	Miscellaneous Income
7. Sale of Stock	Gain on Sale of Investment

Appendix C

Taxopoly Instructions

The purpose of playing Monopoly is to complete the full accounting cycle for your newly formed company formed on April 1st. Your company is organized as a company, and the name of the company must include your last name(s). Each group is a separate company. Please form groups/companies of three people (based upon the number of people in the class, there will be several groups of two people). You are forming your own groups/companies. If possible, please do this before class, but if not, we will form groups quickly at the beginning of class.

The following is a list of detailed instructions. Some instructions may have to be amended as we proceed and “learn as we go.”

1. Initial Requirements

- a. Form a Monopoly group of co-owners of properties.
- b. The banker will be provided for each game. The banker is responsible for handling all necessary bank transactions, such as making loans, accepting payments on loans, or holding the Title Deed cards until a property is purchased. These transactions will not be recorded.
- c. If a particular transaction is not noted in these detailed instructions, the Monopoly group must agree on an acceptable accounting solution. A short paragraph is required to explain the transaction and the agreed-upon resolution.

2. Playing Monopoly

- d. The first transaction is the contribution of capital for \$1,500.
- e. Every roll must create a business transaction. Several potential scenarios do not require a business transaction.
- f. Each rental company is required to complete a minimum of 36 transactions. Every four rolls are a month. Remember, your company is formed on April 1, so 36 rolls later, take your company to Dec. 31.
- g. Each time you land on a “colored” avenue, you must buy it, or the banker must auction it off to another company. Opening auction bids are always \$10. Each company must own at least one property. A house or hotel may be purchased the first time landing on any of the colored “avenues” or any time it is your turn in the game. You may borrow money from the bank or purchase a property from another company.
- h. If your company lacks cash, borrow money from the bank in \$100 increments at 12% interest. All loans may be paid off early. At the end of the game, you must pay off outstanding loans in \$100 increments to the extent you are liquid. If you do not have enough cash to pay off the entire loan balance, that’s ok. Leave the balance on your balance sheet.
- i. If you land on a property owned by another company, you must pay rent equal to the amount stated on the Title Deed card. If you do not have available cash, you must record Rent Payable.
- j. You may not remain in jail for consecutive turns. You must pay \$50 to get out of jail if you do not roll a double. You will also pay \$50 if you are just visiting the jail.
- k. If you land on a Utility, Income Tax or Luxury Tax, you must pay the amount stated on the board as an expense.
- l. If you land on Railroad, this is treated the same as a “colored” avenue. Buy it or Auction it. Opening auction bids are always \$10.
- m. If you land on Chance or Community Chest, do as the card states, and record the transaction to an appropriate income or expense account.
- n. If you land on “Free Parking,” roll again.
- o. If you get doubles, you can roll again unless you end up in jail.
- p. Common Sources of Income:
 - ix. Pass Go, earn \$200
 - x. Receiving Rental Income equal to the amount on the Title Deed card.
 - xi. If you receive a “Get out of Jail Free” card, this is a Short-Term Investment. You may set the value of this card, and it can be sold to any other company if you do not need it.
 - xii. Chance or Community Chest cards

- q. Sources of Expense
- xiii. Landing on property owned by another company
 - xiv. Paying to get out of jail
 - xv. Landing on Utilities
 - xvi. Chance or Community Chest cards
 - xvii. Depreciation Information:
 - 1. Use straight-line depreciation for book depreciation. Depreciation should be calculated for both financial statements (by month) and the tax return. Use the following information to calculate depreciation:

<u>Asset</u>	<u>F-S Life</u>	<u>F-S Salvage</u>
House	15 yr.	10% of cost
Hotels	20 yr.	10% of cost
Railroads	20 yr.	zero

TAX DEPRECIATION FOLLOWS MACRS RULES.
 - xviii. Interest Expense is calculated by month and recorded when the loan is paid off or at the end of the year if a balance remains.
3. End of the Game
- r. The game ends when ALL companies have 36 transactions. As a reminder, every four transactions equal a business month.
 - s. Count and record your cash on hand. Note this balance at the end of your list of transactions.
 - t. Complete the following assignments [100 points total]:
 - xix. Complete Chart of Accounts, 5 points
 - 1. The Chart of Accounts must include, at a minimum, the following accounts:
Cash, at least one Property, Capital, specific Revenues, and detailed Expenses.
 - xx. 36+ Journal Entries with the list of recorded transactions compiled while playing Monopoly, 36 points
 - xxi. T-Accounts, 10 points
 - xxii. Trial Balance, 3 points
 - xxiii. Balance Sheet and Income Statement, 10 points
 - xxiv. Schedule E, 10 points
 - xxv. Form 4562, 16 points
 - xxvi. 1040, 10 points

Appendix D

Online Taxopoly Instructions – COVID-19 Edition

The purpose of playing Monopoly is to complete the full accounting cycle for your newly formed company formed on April 1st. Your company is organized as a company, and the name of the company must include your last name(s). Each team is a separate company. Please form two companies of 2 to 3 people. You will play with team members in your group. You can play the game in person or online using the recommended platform:

1. Here is the link to *Rento* - <https://playrento.com/>

You can play with team members, but you must hand in your own team's transactions.

The following is a list of detailed instructions. You must save your game periodically. We've had games crash before. When you play on zoom, make sure the host has a good internet speed.

I recommend playing the game and recording your entries ASAP.

1. Initial Requirements

- a. Form a Monopoly group of co-owners of properties.
- b. The online version keeps the bank for you. These transactions will not be recorded, so you will need to record each transaction.
- c. If a particular transaction is not noted in these detailed instructions, the Monopoly group must agree on an acceptable accounting solution. A short paragraph is required to explain the transaction and the agreed-upon resolution.

2. Playing Monopoly

- d. The first transaction is the contribution of capital for \$2,000 (make sure your game is set to this).
- e. Every roll must create a business transaction. Several potential scenarios do not require a business transaction.
- f. Each rental company is required to complete a minimum of 36 transactions. You are to play until each team has 36 transactions. Every four rolls are a month. Remember, your company is formed on April 1, so 36 rolls later, take your company to Dec. 31.
- g. Each time you land on a property, you must buy it (if the program allows you to). Each company must own at least one property. At least one house or hotel must be purchased as soon as you can buy one when you own all the colored "properties." If you can't get this done during the game, you must buy them by the end of the game, so you have something to depreciate. You can trade properties to obtain the ones you need to build houses and hotels.
- h. If you land on a property owned by another company, you must pay rent equal to the amount stated on the Title Deed card. If you do not have available cash, you must record Rent Payable.
- i. If you land on a Utility, Income Tax or Luxury Tax, you must pay the amount stated on the board as an expense.
- j. If you land on Railroad, this is treated the same as a "colored" avenue. Buy it.
- k. If you land on Chance or Community Chest, do as the card states, and record the transaction to an appropriate income or expense account.
- l. If you get doubles, you can roll again unless you end up in jail.
- m. Common Sources of Income:
 - i. Pass Go, earn \$200, you can record this as rental income for your Airbnb business.
 - ii. Receiving Rental Income equal to the amount on the Title Deed card.
 - iii. If you receive a "Get out of Jail Free" card, this is a Short-Term Investment. You may set the value of this card, and it can be sold to any other company if you do not need it.
 - iv. Chance or Community Chest cards
- n. Sources of Expense
 - v. Landing on property owned by another company
 - vi. Paying to get out of jail
 - vii. Landing on Utilities

- viii. Chance or Community Chest cards
 - ix. Depreciation Information:
 - 1. USE TAX DEPRECIATION and FOLLOW MACRS RULES. You will have non-GAAP financial statements since you are recording MACRS depreciation.
 - x. You must trade a property with another team before the game ends.
3. End of the Game
- o. The game ends when ALL companies have 36 transactions. As a reminder, every four transactions equal a business month. Don't forget to buy at least one house and one hotel at the end of the game if you don't have time during the game.
 - p. Count and record your cash on hand. Note this balance at the end of your list of transactions.
 - q. Complete the following assignments [75 points total]:
 - xi. Complete Chart of Accounts, 5 points
 - 1. The Chart of Accounts must include, at a minimum, the following accounts: Cash, at least one Property, Capital, specific Revenues, and detailed Expenses.
 - xii. 36+ Journal Entries with the list of recorded transactions compiled while playing Monopoly, 20 points; 3 points for trade journal entries
 - xiii. T-Accounts, 5 points
 - xiv. Trial Balance, 2 points
 - xv. Balance Sheet and Income Statement, 10 points
 - xvi. Schedule E, 10 points
 - xvii. Form 4562, 10 points
 - xviii. 1040, 5 points
 - xix. Form 8842, 5 points
4. Deliverables:
- The chart of accounts with the correct ordering of accounts beginning with assets, then liabilities, equity, revenue, and expenses.
 - A log of each transaction in a three-column Excel file. The column headings are "Number Rolled, Space Landed on, and Action Taken with the dollar amounts." For example, if you roll 6, she would move to Oriental Avenue and purchase land for \$100. Even though this is not explicitly assigned a point value, your journal entries are graded against the log. If the log does not exist, the journal entries cannot be graded.
 - T-accounts with journal entries posted.
 - A trial balance to be compared to the chart of accounts with expected normal balances and debits equaling credits.
 - The financial statements with proper formatting, the use of all accounts on the appropriate balance sheet and income statement.
 - The 1040 form with Sch. E and Form 4562.
 - Form 8842 (like-kind exchange form).