

**PLAYING THE DOUBLE ENTRY MONOPOLY GAME – ACTIVE LEARNING IN
ACCOUNTING PRINCIPLES AND PRACTICES**

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PLAYING THE DOUBLE ENTRY MONOPOLY GAME – ACTIVE LEARNING IN ACCOUNTING PRINCIPLES AND PRACTICES

Worldwide sales of the famous board game Monopoly exceeded 250 million in 103 countries (Daffey, 2008). An estimated half a billion people are believed to have played the game Monopoly (Dixon, 2009), and more than 200 editions have been released in 37 languages (Daffey, 2008). Have you ever wondered why Madonna is so successful and rich? Apparently her favourite board game as a 10-year old child was Monopoly (Day, 2008). There is even a Monopoly World Championship for this popular game (Dixon, 2009). Why not use this famous board game in our accounting classroom? Needles (2011) explain that the diverse group of students in introductory principles of accounting classes makes it necessary to present the subject matter that will arouse their interest because motivating them to want to learn accounting is always a major challenge.

The double entry rules in financial accounting are often taught in an abstract manner in the classroom. For example, we often intone: “To increase an asset account, you put an entry on the debit side. Emphasis is frequently placed on memorizing the rules and many students have little or no practical context from which to draw and help them understand this sometimes esoteric subject. There are contrary views held as to whether or not such technical skills should actually be taught in a tertiary level accounting curricula. Nevertheless, in universities that do offer accounting principles and practices courses (also termed as introductory financial accounting), lecturers often face an uphill battle imparting an understanding of the double entry effects of transactions. How to present this information to students, to ensure that effective learning is taking place, to lay the foundations of financial accounting is an on-going challenge. To address this process, seen by some as tedious and boring, we have taken this famous board game into the classroom. We have incorporated the accounting equation into playing this game so that learners not only come to understand the double entry effect of transactions but also have ‘fun’. A sense of practical reality is achieved as they need to continually ‘balance their books’ during game play, while they progress around the board, either receiving or paying out money and ‘even going to jail’. This paper explains the teaching approach taken to making it fun for students to actively learn the double entry effects of transactions that lays the foundations of financial accounting.

PLAYING THE DOUBLE ENTRY MONOPOLY GAME

The rules of the Monopoly game were modified to suit the classroom situation and to enable students to progress more quickly to recording transactions as they moved round the board. The basic strategy of the Monopoly game is to purchase as many properties as possible so that you can build on them to maximise the amount of rental that you can collect from your opponents in order to bankrupt them. This is unchanged. To allow the game to progress faster, students were allowed to build on property without having to collect the whole colour-group set of properties first. They were even allowed to build immediately upon purchase of the property without having to go around the board as per the original rules of the game. Our introductory financial accounting paper has 2 lecture hours, 2 workshop hours and 1 lab tutorial. Students enrolled for the paper have to sign on for workshop sessions with a class size of 15 – 20 students for smaller group interactions with their tutors; it is a requirement that students attend weekly workshops. The objective of these sessions was to allow students to become involved in hands-on problems solving. The double entry monopoly game is played in the very first workshop session and serves

as both an icebreaker for students to socialise and interact with their peers as well as to become actively engaged in the learning process.

In essence the playing of this game enables students to learn the double entry effect of increasing or decreasing the five fundamental elements depicted in the Accounting Equation (Assets, Expenses, Liabilities, Owner’s Equity and Income) without the need to worry about the confusing double entry concepts of debits and credits. This initial step of getting students comfortable with balancing the accounting equation through increases and decreases of the five elements will subsequently be extended to the application of the double entry rules through a transaction analysis chart.

Transaction Analysis Chart					
Transaction:	Accounts Affected:	Type of Account: A, E, L, OE, I	Increase/ Decrease	Debit/ Credit	Amount

Rules and illustration of applying the double entry through the Accounting Equation:

You have \$1,500 to invest into your rental property business. Cash (Asset) increases by \$1,500 and Capital (Equity) increases by \$1,500.

Asset			+	Expenses	=	Liabilities	+	Owner’s Equity	+	Income
Cash	Property	Building						Capital		
+1,500								+1,500		
1,500					=			1,500		

You must use the accounting equation to maintain a running record of what is happening in your business. It must remain in balance and the amount of cash in your hand should actually agree with what your equation says.

Every time you pass GO and collect \$200, record this as a Cash increase of \$200 and an Income increase of \$200.

Asset			+	Expenses	=	Liabilities	+	Owner’s Equity	+	Income
Cash	Property	Building						Capital		
+1,500								+1,500		
1,500					=			1,500		
+200										+200
1,700					=			1,500	+	200

When you purchase a PROPERTY, record this as an increase in Property (Asset) and a decrease in Cash (Asset) with the appropriate amount. The money for the property goes to the

BANKER. Say for example, you purchase Queen Street (the most expensive property in the New Zealand edition) for \$400.

Asset			+	Expenses	=	Liabilities	+	Owner's Equity	+	Income
Cash	Property	Building						Capital		
+1,500								+1,500		
1,500					=			1,500		
+200										+200
1,700					=			1,500	+	200
- 400	+ 400									
1,300	400				=			1,500	+	200

YOU are allowed to build on that property straight away if you wish (i.e. if you have spare cash or you are prepared to take a risk). This will be an increase to Building (Asset) and a decrease to Cash (Asset) with the appropriate amount that you have spent on paying for the buildings (see the property card you have for the cost of building on your property). The money for the buildings goes to the BANKER.

For example, it costs \$200 to put a house on your Queen Street property. You might want to do this because the rental that you can get on the Unimproved Site is only \$50 whereas with 1 House built on it, you will be able to collect \$200, with 2 houses \$600 and with a Hotel, the rental will escalate to \$2,000. This is the amount you will get every time an opponent lands on your Queen Street property (compared to only \$50). YOU decide to spend only \$200 on 1 House to be built on the property at this stage of the game.

Asset			+	Expenses	=	Liabilities	+	Owner's Equity	+	Income
Cash	Property	Building						Capital		
+1,500								+1,500		
1,500					=			1,500		
+200										+200
1,700					=			1,500	+	200
- 400	+ 400									
1,300	400				=			1,500	+	200
- 200		+200								
1,100	400	200			=			1,500	+	200

If you pay Rent to other players as a result of landing on their property, or pay Income Tax as a result of landing on that space, or any other expenditures as instructed by the Chance and Community Chest cards, YOU must record this as a decrease to Cash (Asset) and an increase to Expenses.

Say you throw the two die and land on Income Tax space where you have to pay 10% or \$200. You decide to pay \$200.

Asset			+	Expenses	=	Liabilities	+	Owner's Equity	+	Income
Cash	Property	Building						Capital		
+1,500								+1,500		
1,500					=			1,500		
+200										+200
1,700					=			1,500	+	200
- 400	+ 400									
1,300	400				=			1,500	+	200
- 200		+200								
1,100	400	200			=			1,500	+	200
- 200				+ 200						
900	400	200	+	200	=			1,500	+	200

Income Tax and other payments like Doctor's fees, Get out of Jail money (\$50) as indicated by the Chance and Community Chest cards will be placed in the centre of the playing board and anyone landing on FREE PARKING will take all that money and record it as an increase to Cash and Income.

If you receive rent from another player that lands on your property, YOU must record this as an increase to Cash and Income. For example, you collected \$200 rent from an opponent who lands on your Queen Street property that has a house (one green house) built on it.

Asset			+	Expenses	=	Liabilities	+	Owner's Equity	+	Income
Cash	Property	Building						Capital		
+1,500								+1,500		
1,500					=			1,500		
+200										+200
1,700					=			1,500	+	200
- 400	+ 400									
1,300	400				=			1,500	+	200
- 200		+200								
1,100	400	200			=			1,500	+	200
- 200				+ 200						
900	400	200	+	200	=			1,500	+	200
+200										+200
1,100	400	200	+	200	=			1,500	+	400

If you are running short of cash and want to remain in the game, you can borrow up to \$1,000 from the BANKER. Once you reach that limit and you run into debt with other players, you will have to start selling off your assets (buildings and property). You must show these as decreases to your assets. If you use one of your properties as payment for RENT to another player then you must record this as a decrease to Property asset and an increase in Rent Expense.

YOU just landed on an opponent's property. He owns Lambton Quay and has built a hotel on it. You have to pay him \$1,500. You quickly count your cash and find that you only have \$1,100. You see only two possible choices at this stage, either sell off some of your own assets or borrow from the bank to pay this rent. You decide to borrow \$500 from the bank.

Asset			+	Expenses	=	Liabilities	+	Owner's Equity	+	Income
Cash	Property	Building						Capital		
+1,500								+1,500		
1,500					=			1,500		
+200										+200
1,700					=			1,500	+	200
- 400	+ 400									
1,300	400				=			1,500	+	200
- 200		+200								
1,100	400	200			=			1,500	+	200
- 200				+ 200						
900	400	200	+	200	=			1,500	+	200
+ 200										+200
1,100	400	200	+	200	=			1,500	+	400
+500						+500				
1,600	400	200	+	200	=	500	+	1,500	+	400
-1,500				+1,500						
100	400	200	+	1,700	=	500	+	1,500	+	400
	700		+	1,700	=	500	+	1,500	+	400
\$2,400					=			\$2,400		

You may if you wish, enter into a partnership with another player but you will still need to maintain proper records depending on your partnership agreement.

At the conclusion of the game, you will need to determine your 'WEALTH' or lack of it by paying off any debts to the bank and other players and totalling up your cash, buildings and property values at the cost you acquired them for.



IF YOU HAVE MANAGED TO KEEP PROPER RECORDS WHILE TRYING TO MAKE ALL THAT MONEY, EXCELLENT WORK! WE CAN TRULY SAY THAT YOU ARE A "BORN ACCOUNTANT"!!

Students are encouraged to 'balance their books' and measure their performance and position by determining their profit and net assets value. The above illustration can be used to show that the student made a loss of \$1,300 (Income – Expenses whereby Income was only \$400 and Expenses totalled \$1,700). Net assets will therefore only be \$200 (Total Assets – Total Liabilities where total assets equated \$700 with total liabilities being \$500; alternatively, students can work this out by having Owner's Equity of \$1,500 subtract the loss of \$1,300 to give Capital at end of \$200).

To keep the atmosphere in the classroom festive, fun and exciting, students were also given lollipops for the duration of the 'game'. Student feedback, not just from the younger students, but also more mature 'adult' students have remained positive in the years that we have introduced this active learning tool into the accounting classroom. This game not only encourages students to learn the double entry effect on transactions in a fun and meaningful manner but it also creates a more conducive learning environment for a first year accounting class. Positive feedback from former students, including one who is now a Tax Manager and another an Audit Manager (both working for one of the big four accounting firms) and other accounting professionals suggest that the teaching approaches used in our introductory financial accounting has made a significant impact on their technical knowledge of accounting and its application in the real world.

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