

Another Way Of Learning Double Entry In Accounting: The Mnemonic Approach

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Introduction

Students typically associate accounting subjects with negative perceptions. When the word “accounting” is mentioned, students think it is a scary subject. As a beginner, learning accounting is considered very tough. Such a negative presumption towards learning accounting subjects is widespread.

As for an educator, it is very challenging nowadays to deliver especially accounting knowledge to the current generation who is widely exposed to social media; Facebook, Twitter, Instagram, WhatsApp, YouTube, etc. Today’s generation’s learning styles are mostly dependent on digital technology and they do not learn without the internet. Moreover, preparing towards Education 4.0 is more challenging as we acknowledge that innovation is a key driver towards Education 4.0.

Learning double entry is a basic accounting of bookkeeping. Double entry is beautiful, scientific and beguilingly simple as we know that many things are created in twos; day and night, man and woman, sky and earth, mountain and river, positive and negative ions, Ying and Yang and similarly every debit has its credit. A Quranic verse also shows everything is created in pairs (Surah Az-Zaariyaat)(51:49): “And of all things We created two mates; perhaps you will remember”. This indicates the beauty of the balance of life from the accounting view, this means keeping books and allowing businesses to record things properly.

History of Double Entry

The author of the first book on double entry accounting was published in 1494 by Luca Pacioli (Previts, Parker, & Coffman, 1990; Sangster & Scataglinibelghitar, 2010; Yamey, 1967). He is well-known as the “Father of Accounting” (Sangster & Scataglinibelghitar, 2010). He wrote the mathematical book titled ‘Summa de Arithmetica, Geometrica, Proportioni et Proportionalita’ which means ‘Everything about Arithmetic, Geometry and Proportions’ (Sangster & Scataglinibelghitar, 2010). Luca Pacioli described the use of journals and ledgers in accounting systems and warned that the accountant must not sleep until the debits are equaled to credits (Smith, 2018).

Luca Pacioli is also said to have described the method used by the merchants of Venice at that time. He is not considered as the inventor of double entry because even before Luca Pacioli published his book, the merchants of Venice had actually maintained this particular way of accounting records (Smith, 2018). Luca Pacioli wrote the text and Leonardo da Vinci, his friend, drew the practical illustrations to support and explain the text in the book (Murtinho, 2015). The book was divided into various sections and the one that talked about the double entry system was entitled as “Particularis de computis et scripturis” (Sangster & Scataglinibelghitar, 2010). It was further divided into many smaller chapters describing double entry, journals, trial balance, balance sheet, income statement and many tools and techniques subsequently adopted by many accountants and traders. This spillover effect of Luca Pacioli’s work has given a positive impact towards development of doing business and accounting record-keeping until today.

Concept of Double Entry Bookkeeping

Double entry is based on the dual concept which emphasizes that every business transaction requires the recording of two different accounts. One account is to be debited and another account is to be credited. The words debit and credit came from the old Italian “debito” and “credito” which came from the Latin “debitum”, (debt), and “creditum”, (trust), from “debeo” which means to owe and “credo” which means to trust (Hassapis & Cantzos, 2014). The terms debit and credit appear to have evolved from Pacioli's terms "Per" and "A." "Per" denoted a debtor, while "A" denoted a creditor (Peters & Emery, 1978).

Some have wondered why the ‘debit’ has the abbreviation ‘DR’ and ‘credit’ is abbreviated to ‘CR’. One theory asserts that the ‘DR’ and ‘CR’ came from the Latin past words of debitum and creditum which are "debere" (to owe) and "credere" (to entrust), respectively (Drucker., 1920).

The amount to be debited must be equal to the amount to be credited. This is to satisfy the accounting equation of $\text{Asset} = \text{Liability} + \text{Equity}$. This is also the basic accounting equation that functions as a tool to minimize errors when recording accounting data. The image of the balance scale (Figure 1) depicts the concept of double entry accounting whereby the left-hand side weigh must be equal to the right-hand side weigh and as far as the accounting record is concerned, the monetary value would be measured. Thus, the total amount of monetary value at the left-hand side (debit) must be equal to the total amount of monetary value at the right-hand side (credit).

Dual Aspect Concept



Figure 1: Visualization of double entry concept

Students and double entry accounting

Students struggle in learning double entry accounting as posited by Sangster (2010). Many students have difficulties in deciding whether to debit or credit an account (Sangster, Franklin, Alwis, Abdul-Rahim, & Stoner, 2014).

Before students decide to debit and credit an account, they have to understand the classification of accounts. The main classification of accounts comes from the basic accounting equation; $A=L+E$. Thus, the main categories of accounts are asset, liability and equity.

Furthermore, the basic accounting classifications can be expanded in the equity part whereby we subtract drawing and expenses from capital and add to revenues: $\text{Asset (A)} = \text{Liability (L)} + \text{Capital (C)} - \text{Drawing (D)} - \text{Expenses (E)} + \text{Revenues (R)}$. To simplify, the accounting equation is rearranged as follows: $A+D+E= C+L+R$

Basic accounting equation

A	=	L	+	E
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Expanded accounting equation

A	=	L	+	C	-	D	+	R	-	E
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Rearranged expanded accounting equation

A	+	D	+	E	=	C	+	L	+	R
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Mnemonic Approach

Carrithers (1951) emphasizes students' ability to reason intelligently and apply the skill and technique of 'know why' and 'know how' in learning bookkeeping. Realizing the importance of the 'know why' and 'know how' techniques in applying double entry, the mnemonic approach has been integrated in learning the topic. The ADE=CoLoR has been formed as an educational tool to understand and remember the group of accounts (ADE group and CoLoR group). The arrangement of all letters is done to create words that represent the best to-be-remembered information.

CATEGORY	CATEGORY
A	C
D	L
E	R

For Category ADE, 'DE' at the back would represent Debit when this category account has increased while Category CLR or pronounce it as CoLoR, letters C and R would represent Credit when this category account has increased as shown in Table 1. As for the decreasing situation incurred for the account, the opposite entry will take place.

Table 1: Adapted Rule of Double Entry

Category	Effect	Entry
A D E	↑	DEBIT
C L R	↑	CREDIT

Yin (2012), Laing (2010), Seay and McAlum (2010) give an overview of the effects of the implementation of mnemonic devices in economic study and first year elementary accounting, and auditing courses in their studies. Research indicates that students respond favourably to the use of mnemonic learning strategies (Mastropieri, Sweda & Scruggs, 2000; Yin, 2012). Laing (2010) has shown that using a mnemonic device would improve learning in elementary accounting.

Conclusion

The mnemonic approach serves as a motivating incentive and element that would change the perception of students towards the accounting field. Given the wide use of accounting learning tools, this approach would serve as an important contribution to the accounting education literature.

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