The meta language of accounting: What's the level of students' understanding?

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ABSTRACT

Students rely on rote knowledge to learn accounting concepts. However, this approach does not allow them to understanding the meta language of accounting. Meta language is simply the concepts and terms that are used in a profession and are easily understood by it users. Terms such as equity, assets, and balance sheet are part of the accounting meta language. The authors used a pre-test in upper level accounting courses at several universities over multiple semesters to evaluate students' understanding of the accounting meta language. The students' average scores on the pre-test were less than the anticipated average scores. The paper offers some suggestions on steps that can be used by educators' to strengthen students' understanding of accounting meta language.

Keywords: Meta language, Accounting literacy, Accounting concepts, Accruals, Accounting language

INTRODUCTION

Every profession, organization, society and group, has its own meta language. Every entity has its own "shop talk" with which the insiders of that entity are familiar. Accountants are no different, and the trade of accounting has a deep and developed meta language, which to some may be a bit confusing, but to the knowledgeable insider it can seem like the only way to convey ideas. It is important for accountants to practice in their meta language, because this allows them to talk professionally and exactly, and not leave anything up to chance or interpretation.

All languages have their quirks, and meta language is no different. Just like somebody who speaks English from birth will know it more fluently than someone who learned it later in life, one who studied or is studying the meta language of accounting will have a better grasp of it. Although meta language is not always easy to understand we believe it is part of accounting literacy. Therefore, learning how and when to use the meta language of accounting is critical for students' success in future years. The understanding of meta language begins in the accounting program since this is students first exposure to the language. The goal of the paper is assess students understanding or memory of basic accounting concepts (i.e., the meta language) covered in earlier accounting courses (Pasternak, 2011)

MOTIVATION

The paper resulted from one of the author's frustration with students' grasp of adjusting journal entries in a senior level accounting course, auditing. This knowledge was critical for students to be able to complete the projects demanded in this course. Earlier accounting courses exposed students' to such accounting terminology as 'allowance,' 'adjusting journal entries,' 'accruals,' among others. This is part of accounting literacy or meta language. However, students appeared to have learned the concepts in earlier classes but were not embracing them as part of the language of accounting.

LITERATURE REVIEW

Meta language is not just one concept, instead it is broadly defined as a "language or symbols used when language is being discussed or examined" (wikipedia.com). Such language has always existed in accounting. The use of terms such as "balance sheet", 'assets', "liabilities", 'equity", and "net income" among others, creates specific meaning to accounting and business personnel. This is meta-language and so the need for definitions and explanations becomes less important.

A more recent meta language in accounting is Extensive Business Reporting Language or XBRL. XBRL is a collaboratively developed framework for creating standardized and customizable digital representations of financial statements, tax returns and other detailed and summarized business reports and data extracts (Cohen et al, 2005). Companies are now required to file financial information with the SEC or other government regulators using XBRL. This meta language is so important to the accounting profession that it should be integrated across the accounting curriculum (Debreceny & Farewell, 2010)

Accounting literacy is not a common term used in the literature instead the much broader term 'financial literacy' is widely used. Financial literacy has various meanings. For instance, Giacomino et al (2009) defines financial literacy as the ability to understand the important

accounting judgments management makes, why management makes them, and how management can use those judgments to manipulate financial statements. However, Rosacker et al (2009) sees it as the ability to make informed judgments and to take effective actions regarding the current and future use and management of money.

However, accounting literacy is not easily defined but the authors define it as the ability to understand and use the meta-language of accounting to solve problems. The use of the term 'accounting literacy' does have precedence and its importance cannot be ignored. Carnas & Hedin (1999) sees accounting literacy as important to those who would succeed in business. Furthermore, accounting courses are a basic requirement in most university business programs, both at the undergraduate and graduate levels to help students develop their literacy.

In reviewing an accounting text, Williams (2005) noted that students who master the concepts contained within the text would be well on their way to business and accounting literacy. Since litigation is often triggered by large price declines and earnings restatements, Glover et al (2005) expects (or at least hope) the educational aspect of a facts-forecasts separation would both help juries in cases involving allegations of improper estimates (e.g., cookie jar reserves) and in general improve their accounting literacy, resulting in fairer outcomes and fewer frivolous lawsuits.

THE STUDY

The authors used adjusting journal entries to understand the level of students' understanding of accounting meta-language. The authors created a quiz consisting of ten multiple choice questions covering core concepts from financial accounting, primarily intermediate accounting. As noted earlier, students are taught the key financial accounting concepts (i.e., meta-language) in these courses and so they are expected to carry this knowledge forward to future courses such as auditing and into their careers.

The accounts and topics covered on the quiz included accounts receivable - adjusting the allowance account; prepaid asset – determining the correct balance at year end; revenue and inventory – ensuring the timely reporting of a sale; asset sale - recording the loss; and contingencies and accrued liabilities - determining if an adjusting journal entry is necessary. Students are provided with scenarios and asked to determine the appropriate adjusting journal entry(ies). The authors believed that the quiz adequately reflected the meta language that was taught to students in the financial accounting courses. The quiz is located in Appendix 1.

The quiz was given to students during the first class period over multiple semesters at three universities during the fall 2009 to fall 2011 semesters. The students are undergraduate and graduate students in auditing and government and nonprofit accounting. In all cases, intermediate accounting was the pre-requisite course required of students enrolling in these classes. Two of the universities are located in a large metropolitan area in the northeast; one is a private university (School #1) and the other, a large public university (School #2). The third university is a public regional university in the southeast (School #3).

RESULTS

The quiz was administered separately at the respective universities and graded by one instructor to ensure consistency in grading. The quiz was a review of the meta language that the students learned in their early courses (such as Intermediate Accounting). Therefore, the

expectation was that students would be able to achieve an average grade of 7.0 (or C) from a possible ten points from the quiz. The actual results are shown in Table 1 below:

Table 1: Average Results Achieved from Quiz

	Students' Type	Period Covered	n=	Avg
School #1	Graduate	Spring 2011	46	3.85
School #2	Undergraduates	Spring 2011	80	2.34
School #3	Undergraduates	Spring 09-Fall 11	227	3.19
			353	

It is clear from the above table that the expected results were not achieved. The data was further analyzed to determine if there was any statistically significant difference. The graduate students resulted were compared to the undergraduate results to determine if the scores were statistically significantly different. The t-test showed that the differences in mean between these two student groups was not statistically significant ($p>0.2665$) at the .05 level.

In examining the results from the three schools, the ANOVA showed a significant difference among the three schools ($p>0.0023$) at the.05 level. Furthermore, the ANOVA showed that the results for School #1 and School #3 were significantly higher than the results for School #2. However, although School #1 scored higher than School #3 (3.85 versus 3.19), the differences were not statistically significant. There were not enough observations for School #1 to provide enough power to find a significant difference from School #3. To address this problem, the authors compared the results for School #1 and School #3 for the same semester but the difference was still not statistically significant.

CONCLUSION AND RECOMMENDATIONS

The results of the pre-test assignment suggest that students' level of understanding of the meta language of accounting is fairly low. As a result, there are not able to use the meta language to process accounting information and transactions required in upper level undergraduate and graduate accounting courses. The authors' believe that this lack of understanding might be attributed to (a) students reliance on rote learning in that they memorize course material but quickly forget them once the exam and course is completed, (b) the wide variation in the meta language coverage by accounting professors across programs, and (c) a combination of the two factors.

To address the problems identified in the paper, the authors recommend that instructors adopt the following correction actions. First, add comprehensive final examinations to the core accounting courses to encourage the retention of material discussed throughout the course. Second, provide students with practical application of accounting concepts such as the preparation of bank statements and financial statements, whenever possible. Finally, use graded pretest assignments such as the one discussed in the paper, in upper level accounting courses, to reinforce the importance of accounting concepts. The authors believe that these steps will improve students' level of understanding of the accounting meta language.

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