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Misperceptions of First Year Business Students

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Abstract

The factors influencing students' success or otherwise in university or college business courses have attracted the attention of many researchers. One dimension that has not been explored fully is the effect of feedback on students' study behaviour. This paper examines the effect of feedback on 40 university students in the first six weeks of a Year 1 introductory financial accounting course. The research contributes to our knowledge by ascertaining whether there is a potential relationship between study behaviour of students and feedback on their examination performance. There are several courses offered each week to students on this subject and we chose an evening course which had 45 students enrolled. A self-completion questionnaire was used to identify students studying habits. The results show that the range of hours spent each week in personal study is from less than I hour to more than 7 hours per week. Attendance at classes also varied from one class per semester to every class. The students were also asked to forecast the grade that they would achieve in the mid-term examinations that were to be held a few days after the distribution of the questionnaire. A second, shorter questionnaire was distributed following the announcement of the mid-term examination results. The release of the midterm examination results led to a statistically significant increase in the number of students claiming to spend more time studying. Although the mid-term examination results influenced the studying behaviour of some students, it did little to modify their unrealistic predictions of the grades that they would achieve in the final examinations. It would seem that frequent feedback to students of their progress may increase the study time spent by some students. The feedback, however, may not influence their prediction of the grade they expect in the final examinations.

Keywords: Education, Examinations, Students, Study Time.

Introduction

The research examined in this paper was conducted in a Canadian University which offers a four-year Degree in Commerce. Additionally, students from other faculties also register in the course as it is mandatory for some other degree programs, for example, students studying Sports Management. The course is also an elective that students from other faculties can choose to take if they wish. In the first year of the degree program, the course *Principles of Financial Accounting* is offered as a foundation course that is required to be completed by all students in that business degree program.

There are a number of courses offered each week and we selected an evening course for the study as it had a manageable number of students (approximately 45) and was known to be well attended. The course is presented on traditional lines with a lecture theatre and a professor who uses a "slide" presentation. These slides can be easily accessed by students using "Blackboard" and the professor has office hours that are open to students. There are two, one and half hour lectures each week.

The structure of the course would be familiar to professors from any other university or college offering Introduction to Financial Accounting. The course text used on the program is originally a well-established U.S. book that has been Canadianised to a high standard and the following content was covered prior to the mid-term examination.

Introduction to the main financial statements
Accounting concepts
Double entry bookkeeping
Accruals accounting
The trial balance
Cash control procedures (including bank statement reconciliation)
Revenue recognition

The possible difference to some other course is that Canada adopted in 2011 International Financial Reporting Standards as issued by the International Accounting Standards Board. Many other countries have also adopted international standards with the U.S. being a notable exception. There is a substantial volume of material and guidance for professors taking this first year course and the International Accounting Standards Board has a helpful website.

For this present study our working hypothesis, assuming that other factors were equal, was that feedback to the students on their performance would impact their study habits. This hypothesis does not only apply to the accounting discipline but also to other subjects.

All business or commerce degrees include a study of financial accounting in the first year. Generally, on such courses, it is assumed that the student has none or little prior knowledge of the subject. The first semester normally includes accounting information system, accruals accounting, the four main financial statements and such topics as revenue recognition, inventory

valuations and cost of sales. In countries that have adopted International Financial Reporting Standards such as Canada, it is probable that the first semester also includes a study of the Conceptual Framework issued by the International Accounting Standards Board and which underpins international accounting regulations.

As in most disciplines, educators and students are very interested in individual achievement. From the educators view it can be considered a measure of their own abilities in conveying knowledge. From the students view, a good grade can be a reward for hard work, a measure of their ability and a stepping-stone towards their final degree.

Given the importance of performance in accounting courses, it is not surprising that there is a rich literature examining all aspects of it. Research studies in this area are normally organized into five major sections (Apostolou, Dorminey, Hassell, Rebele, 2016). These are:

1. Curriculum and instruction, including assessment practices and assurance of learning.
2. Instruction by content area and section
3. Educational technology.
4. The student perspective of accounting education, including career issues, skills, and approaches to learning.
5. Faculty research, teaching, and other issues.

Essentially, studies are considering the delivery of the material, the nature of the content and the response of the recipients. One robust strand of research concentrates on the recipients and, importantly, the factors that can affect their performance. In our present research, we concentrate on performance in examinations and whether this is influenced by feedback the student receives. Many studies have explored student characteristics that may affect performance and we contribute towards those studies by considering the students' perception of their own performance and potential changes in studying behaviour.

The next section reviews the relevant literature and this is followed by an explanation of our own pilot study and the results we obtained. The final section reflects on the strengths and weaknesses of our study and posits tentative proposals on the further conduct of such research. The key research question embedded in this current research is whether students studying behaviour is influenced by their examination performance and whether feedback on their actual performance leads to changes in study behaviour.

Literature Review

Many studies have considered the effect of the instructional method on student performance. These have ranged from the use of learning journals (Daff 2013) and the use of clickers on performance. Chui, Martin, and Pike

(2013) reported that students using clickers considered they had more confidence about their grade and spent significantly less time studying than students who did not use clickers). Whether clickers contribute towards better examination performance is uncertain. A comparison of two groups by Eng, Lea, and Cai (2013) found that students using clickers performed better on two examinations, but students not using clickers also performed better on two other examinations. Both groups performed about the same on the two examinations.

Other studies concentrated on the background or characteristics of students to explain their differing levels of performance. One aspect of a study by Einig (2013) revealed that prior accounting knowledge and country of origin were also associated with exam performance. This finding was confirmed by Sargent (2013) in a quasi-experimental analysis that examined the association between prerequisite knowledge and student performance. One group had no prerequisite knowledge but another group was given an online prerequisite training/tutoring tool. The results show higher performance in intermediate accounting for the treatment group.

However, caution must be exercised in interpreting these results. A study in the UK (Rowbottom 2013) examined whether accounting courses taken prior to university entrance were associated with student performance. The results revealed that students with an Accounting A-Level (the examination qualification in the final year of high school in the |U.K.) have an initial advantage, which dissipates over time and is associated with lower overall performance at the end of university studies.

Several studies have explored the potential influence of the student's background. Coetzee, Schmulian, and Kotze (2014), in a South African study, explored accounting students' communication apprehension and its association with culture and language. The analysis revealed significant differences in communication apprehension across culture groups. Communication apprehension was higher for students from poor communities. The study also found that students who received instruction in the business language that was to be used upon graduation showed less communication apprehension, regardless of their home language.

Some studies have included International Financial Reporting Standards and hence the International Accounting Standards Board's Conceptual Framework. Janse van Rensburg, Coetzee, and Schmulian (2014) in a South African study evaluated students' reading comprehension of the Conceptual Framework using the Cloze procedure. There was a significantly positive association between the students' Cloze reading comprehension scores and the language of instruction. Students who had attended a prior reading course also received significantly higher Cloze scores. The conclusion was that language and reading comprehensive instruction affected learning.

A number of researches have concluded that students with English as their first language can significantly outperform students with a first language other than English. Tan and Lazwad (2006) reports that in their study that, although international students met language entry requirements, their language skills appeared to impact negatively on their performance. It was also hypothesised that

some international students were not used to the learning style which requires them to demonstrate their understanding and application of the subject matter rather than regurgitate the material studied.

One study most relevant to our investigations was conducted by Scully and Kerr (2014). They surveyed students about their study times and perceptions of workload in undergraduate and graduate accounting courses at a large Australian public university. The results suggested a mismatch between hours students spent studying and their reported perception of meaningful learning. The findings suggested that the curricula of accounting units might be improved by managing student perceptions and setting expectations of course workload. The study did not consider the potential relationship between workload and examination performance which is the focus of this present paper.

Methodology

The aim of the project was to establish whether the performance of students in examinations was related to the time spent studying and the impact of examination results on their studying habits. Time studying includes both lecture attendance and time spent on home study.

Two short self-completion questionnaire were completed by 40 first year students. The first questionnaire was completed at the end of the first six weeks of the course and two days prior to the mid-term examinations. One week after the mid-term examination results had been announced a shorter follow up questionnaire was completed. This focussed on the studying behaviour of 40 students. As 45 students were enrolled on the course, we cannot confirm that the same 40 students answered both questionnaires

The questionnaires were anonymous and the students were informed that the questionnaires would be destroyed within one week of collection and no attempt would be made to identify individual students. We emphasise that the responses from students are their own estimation of their studying habits.

For this study, no hypotheses were constructed for the surveys but statistical testing was conducted to identify any potential fields worthy of further study. We discuss those findings where a chi square test demonstrated significant differences.

Findings

Levels of Difficulty

Little attention has been paid in the research to the level of difficulty the students are experiencing with particular topics in their studies. One might anticipate that if students experienced little difficulty then this would impact on the amount of time they spent studying and the number of lectures they attended.

We considered this could be an important factor and one question asked students the level of difficulty they experienced with the different topics that had

been covered. In designing the questionnaire, we allowed students to express "no opinion" as we accepted that after only 6 weeks of the course opinions may not have been fully formed. The results are shown in the following table (Table 1).

Table 1. *Level of Difficulty with Topics*

Topic	Difficult		No opinion		Easy	
	No	%	No	%	No	%
The elements of the four financial statements	8	20.0	5	12.5	27	67.5
The relationship of the four financial statements	9	22.5	8	20.0	23	57.5
The accounting information system	15	37.5	13	32.5	12	30.0
Accrual accounting	18	45.0	4	10.0	18	45.0
Internal control and cash	19	47.5	3	7.5	18	45.0
Revenue recognition	18	45.0	5	12.5	17	42.5
Matching concept	16	40.0	8	20.0	16	40.0
Cost of goods	13	32.5	4	10.0	23	57.5
Inventory valuations	15	37.5	13	32.5	12	30.0

We held no preconceptions on the possible responses, although our experience suggested that many first year students find both internal control and accrual accounting formidable hurdles. Studies by Weil (1989) and Weil and McGuigin (2010) have identified students' difficulties in understanding bank reconciliations and the distinction between cash movements and transactions can be puzzling to the inexperienced.

Discussions held with students afterwards suggested that these topics, in particular, would fall under the category of threshold concepts (Meyor and Land 2005). Concepts can be considered as abstract ideas and can cause students to struggle or get stuck in their learning process. There are no specific definitions of the terms "internal control" and "accruals" terms in the accounting literature although the "Conceptual Framework" offers some guidance. However, the students in our interviews frequently stated that they had not encountered these terms before and they had nothing in their experience to help them understand how they applied.

Revenue recognition does have formal definitions and explanations as it is covered in an accounting standard issued by the IASB (IFRS 15) but even experienced business people can experience problems in understanding the requirements of this accounting standard.

One pertinent question to ask students was where they sought advice if they were experiencing difficulties. The responses are shown on the following table (2).

Table 2. *Sources of Advice*

	Number	**Percent**
Google	21	52.5
Friends and relatives	2	5.0
Text book	7	17.5
YouTube	5	12.5
Professor	5	12.5
Total	40	100.0

It may be disappointing to lecturers that they rank only second equal with YouTube and so far behind Google. In discussions with students, they claimed that the advantages of Google were immediate accessibility and a potential range of explanations on a particular topic. An issue that arises from these findings that we do not explore is the use of Google on all University courses and the attitude of professors to this source of information.

#*Studying Behaviour and Performance*

A central core of the present study was the studying behaviour of students. We measured this in two ways. First was based on hours studying accounting each week and the second was the number of classes attended. The results are shown below and we would emphasise that these are based on students' self-assessment.

One question asked student to state (honestly) how many hours did they spend approximately each week studying Financial Accounting (excluding lecture hours). The results are shown in Table 3.

Table 3. *Number of Hours Studying*

	Number	**Percent**
5 hours or more	8	20.0
3-4 hours	14	35.0
2 hours or less	18	45.0
Total	40	100.0

Almost half of the students responded that they spent 2 hours or less studying each week. A closer examination of these results revealed that a few students claimed to spend less than one hour.

A second question relevant to studying behaviour asked the students how many classes they attended approximately in the first six weeks of the semester. We assumed that as this was a relatively short period, students would be able to remember the attendance frequency and would not be tempted to exaggerate. The results are shown on the following table (4).

Table 4. *Number of Classes Attended*

	Number	Percent
All	15	37.5
Most	16	40.0
Half or less	9	22.5
Total	40	100.0

We expect that the above results would not be far different to the experiences of some of our colleagues. We would add that the professor on this course has a high ranking in the teaching evaluations by students.

There seems to be a general opinion in several universities and colleges that class attendance has been declining over recent years. One reason that has been voiced is that many students now must take part-time work because of financial obligations. Further research to determine whether there is a decline in class attendance and the possible reasons would be useful. The findings from this survey on the use of Google and YouTube may offer an explanation. If there are other authoritative sources of information available, rather than the accounting professor, students may seek these first.

We accept that time spent on studying and class attendance is not, by itself, necessarily reflected in examination performance. However, without significant feedback, students may consider that the amount of work they do is sufficient to obtain a good grade. Where professors use frequent testing or quizzes this may provide useful feedback to the students on how they are progressing. On the course we researched, there was only a mid-term and a final examination.

Universities usually have their own regulations on grading. The University in this study, like many others, has an alphabetical system to measure the performance of students. The grades are given a letter (A – F) and each letter represents a percentage range. For example, Grade A range is as follows:

A+ 90-100%
A 85- 89.9%
A- 80-84.9%

The following table (5) shows the grade that the students in our study *expected* to obtain in the mid-term exam. Perhaps a more appropriate term would be "hoped" to obtain.

Table 5. *Expected Performance in Mid-term Exam*

Grade	Expected performance	
	Number	Percent
A	11	27.5
B	27	67.5
C	2	5.0
D	-	-
	40	100

An important factor in the grading assessment is the University's grading policy. For first year courses, the prescribed mean for students' course grades must fall between 60% and 72.9%. Thus, the instructor reserves the right to adjust and curve the final marks as necessary in order to conform to the University's prescribed average.

Grade B starts at 70% (B-) and the top range is 79.9% (B+). It is evident that as the prescribed mean, under University policy must fall between 60% - 72.9%, several students were going to be disappointed in their achievement. The next table (6) compares the actual grade they achieved compared to the expected grade.

Table 6. *Expected and Actual Performance at Mid-term Exam*

Grade	Expected performance		Actual performance	
	Number	**%**	**Number**	**%**
A	11	27.5	5	12.5
B	27	67.5	22	55.0
C	2	5.0	9	22.5
D	-	-	3	7.5
F	-	-	1	2.5
	40	100	40	100

Even allowing for some optimism, there is a substantial gap between expectations of achievement and the actual grade for performance. One question we did not explore was how students, taking their first accounting examination, developed their expectation of how they would perform and how this might influence their study habits.

The following table (7) shows the changes students claim to have made to their studying hours after they had received their mid-term marks. It shows their reported hours spent on studying before the midterm examination and their reported hours spent studying after they received feedback on their performance in the mid-term examination. It is important to note that students were not informed of the original statement they had made in the first questionnaire on the hours they spent studying. Unless, they kept a record of their earlier responses to questionnaire one, we can assume that their current answers were unbiased.

Table 7. *Adjustments to Studying Hours*

	Prior studying hours		Current studying hours	
	Number	**Percent**	**Number**	**Percent**
7 hours or more	1	2.5	1	2.5
5-6 hours	7	17.5	7	5.6
3-4 hours	14	35.0	21	52.0
1-2 hours	13	32.5	7	17.5
1 hour or less	5	12.5	4	10.0
Total	40	100.0	40	100.0

There has been little change at the top end and at the bottom of the scale. The big difference is the movement from the 1-2 hour range to the 3-4 hour range. Using the chi test, this is a significant movement. We are unable to state whether this is a permanent movement or an immediate, but temporary response, to their performance in the mid-term examination. As far as class attendance was concerned, there were no statistically significant differences in class attendance before and after the mid-term examinations.

The above table demonstrates that some students claim to have changed their studying behaviour after the mid-term examination results. This leads to the question whether the feedback from the mid-term may have influenced their perceptions of the performance in the final examinations. The following table (8) shows their expectations in the mid-term examinations, their actual performance and their expectations of their performance in the final examination at the end of the course.

Table 8. *Perceptions of and Actual Performance in Examinations*

Grade	Expected performance in mid-term test		Actual performance in mid term		Expected performance in final exam	
	No	**%**	**No**	**%**	**No**	**%**
A	11	27.5	5	12.5	12	30.0
B	27	67.5	22	55.0	18	45.0
C	2	5.0	9	22.5	9	22.5
D	-	-	3	7.5	1	2.5
F	-	-	1	2.5		
	40	100	40	100	40	100

There are shifts that are interesting. The number of students expecting to obtain a grade in the 'A' range is high. Due to curving of marks under university regulations, this is not possible unless a large number of students fail. None anticipate doing so! Those who expected to obtain a B grade in the mid-term seemed to have adjusted to a C Grade.

Conclusions

The characteristics or attributes that may affect students' performance in their course has attracted a substantial number of research studies. One underexplored area is the link between students' performance to their study behaviour and their perceptions of the performance they will achieve in the examinations.

This study attempts to address that link and also to form a basis for a future more comprehensive study. Given the nature of this research, some caveats must be given. The relative small sample size of 40 students makes statistical analysis insufficiently rigorous. In addition, the students had only been studying accounting for six weeks, although one third had some previous instruction. However, the initial findings of this research present an interesting insight into students studying

habits and their changing perceptions of their expected performance in examinations.

The hours student spend studying vary considerably and future research should relate this to both to any previous studies of accounting and the level of difficulty students' experience with the topics that have been addressed in the first six weeks of the semester. The finding that some lecturers may find disappointing is that students having difficulty are far more likely to refer to Google that the lecturer for an explanation.

The hours spent studying and the attendance at class vary considerably. Future studies could investigate a possible relationship between the characteristics and attributes of the students and their studying behaviour.

Given the studying behaviour of the students and the University regulations on grading, many students are overly optimistic of their potential performance in the midterm examinations. It is apparent that the feedback from their mid-term examination prompted many students to revise their studying habits. There was a statistically significant increase in the number of students studying 3-4 hours per week from 1-2 hours per week.

It is difficult to conclude whether this change in time spent studying is a temporary phenomenon. The findings reveal that a number of students are over optimistic of the achievement they will have in the final examination. However, the evidence from this research is that student's perceptions and studying behaviour are shaped by feedback. In this case, the feedback is through examination performance. It is open to further research to determine whether regular feedback by various methods, for example, weekly tests have the same effect if it is not linked to the student's final grade at the end of the course.

Although this study was conducted with students studying Introduction to Financial Accounting, we assume that our findings would be applicable to other disciplines. We suspect that our findings may not be applicable to students who have completed their first year and therefore have a better knowledge of their abilities.

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