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ACCOUNTING STUDENT'S LEARNING APPROACHES AND IMPACT ON ACADEMIC PERFORMANCE

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Abstract

The objective of the study is threefold. Firstly, the study explores the learning approaches adopted by students in completing their Business Finance. Secondly, it examines the impact that learning approaches has on the student's academic performance. Finally, the study considers gender differences in the learning approaches adopted by students and in the relationship between learning approaches and academic performance. The Approaches and Study Skills Inventory for Students (ASSIST) was used to assess the approaches to learning adopted by students whilst the student's final examination result was considered in examining the performance of the students. The results indicate that majority of the accounting students, both male and female groups prefer to use the deep approach in studying Business Finance. The findings also reveal that there were significant relationships between learning approaches and academic performance with positive direction appears for deep and strategic approaches whilst negative relationship reveals for surface approach.

Keywords: *learning approach, performance, accounting students, deep, strategic*

INTRODUCTION

Biggs (1979) learning model suggests that student's learning embraces three fundamental elements that are input, process, and output. Input refers to the contents of curriculum or knowledge being delivered to students, whilst process

reflects the means, techniques, or approaches in which the input (i.e. knowledge) is transformed into output. Subsequently, output is the quality or achievement of the students resulting from the prior two elements (Biggs 1979).

Learning approach which represents the second element of learning refers to the way students handle their study tasks (Bryne et al. 1999 and 2002). Early researchers undertaking research on learning approaches had revealed three approaches that are commonly adopted by students namely; deep, instrumental (surface), and strategic approaches (Biggs 1979; Marton and Soljo 1976; Ramsden 1979; Enwistle 1987). In particular, back in 1976, Marton and Soljo identified two distinct ways in which students went about their learning task. These are called deep and surface approaches to learning. Deep approach is often associated with the learning to actually understand the subject matter by trying to integrate the subject with other relevant subjects. In other words, it is a learning process whereby students actively participate, relate their own experience and prior knowledge, express intrinsic interest and seek meaning from the subject they learn (Enwistle and Ramsden 2003; Lucas 2001; Marton and Soljo 1976). In contrast, surface approach is about learning without having clear understanding of the subject. It is also illustrated as rote-learning and memorizing the fact, mastering the format with the intention to reproduce the material learnt (Enwistle and Ramsden 2003; Lucas 2001; Marton and Soljo 1976). In addition of the two approaches, Ramsden (1979) identified the third approach that is strategic approach whereby students undertake the subject with aim to get high marks in the examination. Essentially, the adoption of a particular approach of learning is in relation to certain specific intentions or motivations to learning.

Furthermore, it is well-acknowledged that the quality of graduates as revealed by their academic performance (i.e. output element) has a direct relationship with the approach to learning (i.e. process) undertaken by students in completing their academic modules (Biggs 1987a and 1987b; Svensson 1977). The current study, hence, focuses on the two learning elements that are process and output. In particular, the objective of the study is threefold: 1) to identify accounting students approaches to learning Business Finance course, 2) to examine the relationship between student's approaches to learning and their academic performance, and 3) to consider gender differences in the results for objective 1 and 2.

This study is motivated by the fact that most of the previous research on student's learning approaches has been carried out on students in the developed countries such as the United States, United Kingdom and Hong Kong. Furthermore,

this research is undertaken due to calls for more research in this area with particular focus on accounting students (Lucas 2001). Therefore, this study contributes to the existing literature on learning approaches in at least two ways: (1) providing some insights on the relationship between academic performance and the learning approaches adopted particularly by accounting students in developing countries; (2) assisting educators in understanding their student's approaches to learning.

The remaining of the paper is organized as follows. The following section reviews literature on the relevant issues of learning approaches. This is followed by a section on the research methodology adopted in this study. The subsequent section discusses the analysis and findings of the study. Then, the next section offers discussion on the limitations and suggestions for future research. The final section provides conclusion of the study.

LITERATURE REVIEW

Prior studies in relation to learning approaches that are of relevance to the present study can be categorized into two main subheadings namely 1) learning approaches and relationship with academic performance and 2) gender differences of 1 above.

Learning Approaches and Impact on Performance

An immense amount of research work on learning approaches that specifically examines the relationship with student's performance has been carried out by researchers since 1970s (Biggs 2003; Entwistle 1998; Marton and Booth 1997; Marton and Soljo 1976; Marton et al. 1997; Prosser and Trigswell 1998; Ramsden 1979 and 2003).

A significant amount of studies has attempted to investigate the relationship between approaches to learning and the performance of students (Marton and Saljo 1976; Ramsden 1992; Booth 1997; Booth et al. 1999; and Prosser and Trigswell 1998).

In an early study by Marton and Saljo (1976) which investigated the relationship between approaches to learning and performance, they found that high achievers adopted a deep approach to learning while low achievers adopted a surface approach. Similar findings are prevailed in several other studies such as Dahlgren (1984), Prosser and Millar (1989), Bryne et al. (2002), Jackling (2005). Moreover, several researchers including Bryne et al. (2002), Jackling (2005), and

Paver and Gammie (2005) in their study found not only the use of deep approach to have positive impact on academic achievement, but reported that similar significant relationship is also valid for strategic approach to learning.

Booth et al. (1999) in their research on accounting students from two Australian universities, although revealed consistent finding as other studies on the association between the use of surface approach and low academic performance, but found no significant relationship between high academic performance and the adoption of deep approach. In contrast, the research by Davidson (2002) found a significant positive relationship to exist between study approach and academic result of complex examination questions, but for less complex question and for surface approach there are no significant relationship. A research by Duff (2003) also demonstrates no significant relationship exist between student's performance and the learning approaches used in studying financial management module.

Despite the inconclusive findings, most studies claimed that there is somehow an association between the approaches to learning used and performance, with majority researchers agreed that deep approach to learning is positively associated with the outcome or performance of students, whilst the use of surface approach is linked with lower performance.

Gender Differences in the Approaches to Learning and Relationship with Academic Performance

Of the prior studies which looked at the relationship between approaches to learning and performance, few studies have also explored the relationship based on gender.

Richardson and King (1991) found no empirical evidence for gender differences in the approaches to learning. Likewise, study by Severiens and ten Dame (1994) also reported that the mean gender difference in the learning styles is only little. A later study conducted in Ireland by Byrne et al. (1999) also lent to the claim of no significant differences in the learning approaches of male and female students in a first year accounting course.

On the other hand, Jones and Hassal (1997) found a significantly higher score for surface approach among female students compared to male students. This was supported by Duff (1999) and Paver and Gammie (2005) whose studies also found a statistically significant different between genders in the learning approaches adopted where female students were more likely to adopt a surface approach than males. Moreover, Byrne et al. (2002) who examine the relationship on gender basis

claimed that the significant relationship on the use of deep and strategic approaches with higher achievement, and the use of surface approach with lower achievement only applicable for female students.

Therefore, there would appear no consensus in the findings of prior studies which have tested for gender differences in the approach to learning adopted by students and on the relationship with the student's academic performance.

HYPOTHESIS DEVELOPMENT

Student's approaches to learning have always been associated with the academic achievement. Students who learn a subject matter with full understanding and able to relate their prior knowledge and personal experiences to the newly learnt subject matter seem to be adopting deep approach which normally result in high academic performance. Likewise, there are students who strategize their study mainly to obtain good grades. In contrast, students who studied a subject matter with low level of understanding tend to memorize information with the intention to complete the task requirement are adopting surface approach. As a result of their lack of understanding of the subject matter, their academic achievement is relatively low. In short, the adoption of deep and strategic approaches to learning are often claimed to result in better academic performance whilst the surface approach is associated with a lower academic performance (Marton and Saljo 1976; Dahgren 1984; Prosser and Millar 1989; Ramsden 1992; Booth 1997; Booth et al. 1999; Prosser and Trigwell 1998; Bryne et al. 2002; Jackling 2005).

Based on the above discussion, the following alternative hypothesis will be tested in answering research objective two (2):

H1: There is statistically significant positive (negative) relationship between deep and strategic approaches (surface approach) to learning and academic performance

RESEARCH METHODOLOGY

Participants

The respondents of this study consist of students who are taking Business Finance course in Semester 2 2007/2008. These students are currently pursuing their Bachelor Degree in Accounting and Business Finance course is compulsory to all accounting students. The study purposely aims at assessing student's approaches

to learning Business Finance as it is the first finance subject learn by students and the subject was newly introduced and made compulsory to all accounting students. The survey was conducted in week 12 of Semester 2, 2007/2008 during formal lecture period where students were given approximately 20 minutes to respond to the questionnaire. Students were reminded to provide honest respond to all the items in the questionnaire and were told that there is no right or wrong answer to those items. Also, they were assured that their response will be treated with a complete anonymity. A total of 158 responses were received, representing 91.9 per cent of the total students who were taking the subject during the semester.

Questionnaire Instrument

The Approaches and Study Skills Inventory for Students (ASSIST) developed by Entwistle and Tait in 1996 was adapted and used to measure the approaches to learning adopted by accounting students in International Islamic University in studying Business Finance course.

The questionnaire (i.e. ASSIST) consists of three parts. Part A of the questionnaire requires the respondent to complete the background information which includes the information such as student identification number, year of study, gender, and country of origin. Part B of the questionnaire aims to explore the student's interpretation and understanding of the term learning, whilst Part C seeks to measure the respondent's approaches to studying. The final part, Part D inquires about student's preferences for different types of course and teaching. Part B, Part C, and Part D of the questionnaire require the respondents to indicate their perception or agreement with the statements on a five-point-Likert scale (score 5= definitely like, score 4= like to some extent, score 3= unsure, score 2= dislike to some extent, and score 1= definitely dislike). This paper, however, mainly dealt with two parts of the questionnaire (Part A and Part C).

The grades achieved in the examination of Business Finance examination were used to measure the performance of the students. Specifically, the examination results were categorised into five categories (1= 0-20 marks; 2= 21-40 marks; 3= 41-60 marks; 4= 61-80 marks; 5= 81-100 marks). Information on the student's results for the subject was retrieved from the university's student result database.

Statistical Tests

In analyzing the data, several relevant statistical tests were undertaken using SPSS. In particular, descriptive statistics results such as mean, standard

deviation, minimum and maximum values are obtained to report findings on the preferred learning approach adopted by accounting students in studying Business Finance. In examining the relationship between learning approaches and academic performance, spearman's correlations was conducted. Finally, the results by gender were obtained to explore for the differences in the learning approaches and their impact on academic performance for male and female groups.

RESULTS AND ANALYSIS

Background Information

The analyses were embarked based on 158 completed questionnaires representing 91.9 per cent response rate. Of the total respondents, 74 per cent are female and 26 per cent are male. Of the total students, only five per cent are international students, whilst the remaining 95 per cent are local students from Malaysia. Students responded to the questionnaire comprised of second and third year students, with a vast majority of them (84 per cent) are in their second year. This proportion is expected because based on the student's study plan they are recommended to do Business Finance course in the second year of the study.

Analysis on Learning Approaches

In ASSIST, each of the 52 statements represents any of the three approaches to learning that are deep, surface and strategic approaches. The statements are classified into 13 sub-scales of which each consists of four statements. Of the 13 sub-scales, five represent deep approach, while surface and strategic approaches contain four sub-scales each. The average score for each sub-scale is obtained by adding the student's responses to relevant statements on a 1-5 scale. Then, the scores of the sub-scales are aggregated accordingly to reach at the three different approaches. To make the results comparable, the average scores were calculated to obtain a standardized result. The maximum score for the average (mean) is five. Table 1 below represents the summary of results on the student's approaches to learning Business Finance course for the overall sample and also based on gender.

Based on Table 1 above, deep approach has the highest mean score (i.e. 3.777) for the total sample, followed by strategic and surface approaches with mean scores of 3.652 and 3.287 respectively. The similar pattern prevails for both female and male student's group, even though male students scored slightly higher for deep approach than their female counterparts while female students scored higher than

Table 1
Students Approaches to Learning

Learning Approach	Mean Score			Standard Deviation			Minimum			Maximum		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Deep	3.777	3.766	3.811	0.413	0.390	0.474	2.50	2.75	2.50	4.88	4.69	4.88
Strategic	3.652	3.693	3.534	0.526	0.502	0.579	1.90	2.20	1.9	4.80	4.80	4.55
Surface	3.287	3.317	3.203	0.473	0.460	0.503	1.56	2.31	1.56	4.44	4.44	4.19

male for both strategic and surface approaches. This is a positive scenario because when business finance course was first designed, it is aimed at encouraging students to acquire an in depth understanding of the subject matters in order for the students to get through the course.

Learning Approaches and Impact on Performance

Table 2 shows the correlations of examination results with the scores on learning approaches.

Table 2
Spearman Correlations of Learning Approaches and Examination Results

Correlation with results	Total	Female	Male
Deep	0.199**	0.159*	0.356**
Strategy	0.427***	0.379***	0.537***
Surface	-0.214***	-0.176*	-0.336**

*significant at 10 per cent; **significant at 5 per cent; ***significant at 1 per cent

Even though the correlations seem to be relatively low, they are all statistically significant. In general, the association between the performance and learning approach for the full sample as well as by gender are in the favorable directions. The deep and strategic approaches of learning are positively correlated with the examination results which mean students adopting deep and strategic approaches are performing better in their examination. Furthermore, the correlation between academic performance and strategic approach seems to be the highest as compared to other learning approaches and it is significant at 1 per cent level. This interesting finding may imply that students who carefully strategize their learning technique

will achieve good academic standing. Contrary, the use of surface approach in learning resulted in lower performance in the examination. This revealed that those who were adopting surface approach have little understanding of the subject matter and therefore they were not able to correctly answer the examination questions. These findings are consistent with the studies by Byrne et al. (2002) and Duff et al. (2004). The hypothesis, H1, cannot therefore be rejected as there were significant relationships between learning approaches and academic performance.

In exploring the results based on gender, Table 2 indicates that the correlations for male students mirror the correlations of the total sample with greater degree of correlations. More importantly, the relationships between examination results and learning approaches for male students are found significant. For female group, although similar direction appears, the degree of correlations is slightly lower than its counter group. This lower degree of relationship for female group may be due to female students inappropriately revealing their actual approaches to learning or they were adopting different learning approaches for different topic in Business Finance subject.

LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDY

Although this study has provided some insights on the learning approaches adopted by accounting students, it is not without its own limitations. These limitations do provide opportunities and suggestions for future research.

The results obtained might not reflect the actual approach of learning adopted by the students if when responding to the questionnaire the students tend to respond in the way they thought would be desired, rather than reflecting their actual approaches.

Moreover, it might not be appropriate to claim a specific preferable approach to studying Business Finance course by mainly based on the outcomes of this study because it only involved one cohort of students in only one higher learning institution in Malaysia. Future study should consider administering this similar questionnaire to the future batches of students taking this course in several higher learning institutions.

The study only use examination results to represent student's performance and this can be misleading as there are other measurements that can better reflect the student's achievement such as the student's level of understanding of the subject. Future study may want to consider these other measurement of student's

performance in assessing the relationship with learning approaches adopted by accounting students.

CONCLUSIONS

This study sought to identify the approaches to learning preferred by accounting students in studying Business Finance course. The findings of this study provide some evidence that the students prefer to adopt deep approach to learning as compared to other learning approaches with female students scored slightly higher for both deep and strategic approaches. More importantly, the study revealed that those adopt deep and strategic approaches in tackling their Business Finance subject had outperformed those who use surface approach.

The implication of this study is that lecturers teaching the subject need to encourage the usage of deep approach among students in order to ensure better performance of the students. This can be done via teaching method used in conducting the classes as well as in the question setting for class exercises and examination. These important roles of the lecturers may give significant benefit to the students.

In addition, the inculcation of critical thinking skills to students is also important in promoting the usage of deep approach. This is because if students think critically, they will not only accept the lesson on the surface but will try to get clear the subject matter being thought by relating it other subjects that are relevant.

BIBLIOGRAPHY

- Biggs. "Individual Differences in Study Processes and the Quality of Learning Outcomes." *Higher Education* 8 (1979): 381-394.
- _____. *Students Approaches to Learning and Studying*. Melbourne, Victoria: Australian Council for Education Research, 1987b.
- _____. *Teaching for Quality Learning at University 2nd*. Buckingham: Society for Research into Higher Education and Open University Press, 1987a.
- Booth et al. "The Quality of Learning in Accounting Education: The Impact of Approaches to Learning on Academic Performance." *Accounting Education* 8, no. 4 (1999): 277-300.
- Bryne et al. "Approaches to Learning: Irish Students of Accounting." *Irish Accounting Review* 6, no. 2 (1999): 1-29.

- _____. "The Relationship between Learning Approaches and Learning Outcomes: A Study of Irish Accounting Students." *Accounting Education: an International Journal* 11, no. 1 (2002): 27-42.
- Dahlgren. "Outcomes of Learning." In *The Experience of Learning*, edited by F. Marton et al. Edinburgh: Scottish Academic Press, 1984.
- Davidson. "Relationship of Study Approach and Exam Performance." *Journal of Accounting Education* 20, no. 1 (2002): 29-44.
- Duff. "Access Policy and Approaches to Learning." *Accounting Education* 8, no. 2 (1999): 99-110.
- Duff et al. "Understanding Academic Performance and Progression of First-year Accounting and Business Economics Undergraduates: the Role of Approaches to Learning and Prior Academic Achievement." *Accounting Education* 13, no. 4 (2004): 409-430.
- Entwistle and P. Ramsden. *Understanding Student Learning*. London: CroomHelm, 1983.
- Entwistle. *Approaches to Learning and Forms of Understanding*. In *Teaching and Learning in Higher Education*, edited by B. Dart and G. Boulton-Lewis. Melbourne: Australian Council for Educational Research, 1998.
- Jackling. "Perceptions of the Learning Context and Learning Approaches: Implications for Quality Learning Outcomes in Accounting." *Accounting Education: An International Journal* 14, no. 3 (2005): 271-291.
- Lucas. "Deep and Surface Approaches to Learning Within Introductory Accounting: A Phenomenographic Study." *Accounting Education* 10, no. 2 (2001): 161-184.
- Marton and Booth. *Learning and Awareness*. New Jersey: Lawrence Erlbaum Associates, 1997.
- Marton and Saljo. "On Qualitative Differences in Learning: Outcome and Process." *British Journal of Educational Psychology* 46 (1976): 4-11.
- Marton et al. *The Experience of Learning*. Edinburgh: Scottish Academic Press, 1997.
- Paver and Gammie. "Constructed Gender, Approach to Learning and Academic Performance." *Accounting Education: an International Journal* 14, no. 4 (2005): 427-444.
- Prosser and Millar. "The 'how' and 'what' of Learning Physics: A Phenomenographic Study." *European Journal of Psychology of Education* 4, no. 4 (1989): 513-528.

- Prosser and Trigwell. *Understanding Learning and Teaching: The Experience in Higher Education*. Buckingham: Open University Press, 1999.
- Ramsden, P. *Learning to Teach in Higher Education*. London: Kogan Page, 1992.
- _____. *Learning to Teach in Higher Education*. London, New York: Routledge Falmer, 2003.
- _____. "Student Learning and Perceptions of the Academic Environment." *Higher Education* 8 (1979): 411-427.
- Richardson and King. "Gender Differences in the Experience of Higher Education: Quantitative and Qualitative Approaches." *Educational Psychology* 11 (1991): 363-382.
- Severiens and Ten Dame. "Gender Differences in Learning Styles: A Narrative Review and Quantitative Meta-analysis." *Higher Education* 27 (1994): 487-501.
- Svensson, L. "On Qualitative Differences in Learning: III – Study Skills and Learning." *British Journal of Educational Psychology* 47 (1977): 233-234.