

## **A Case Study on the Impact of “Smart Accounting” On Business Students at A Malaysian Polytechnic**

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**Abstract:** *Accounting in education is also important in accounting for business or non-business fields. Due to this awareness, many students engage themselves into this field with the following accounting education at school level up to the Institution of Higher Learning. The challenge faces by them is the difficulty of the course (Fundamentals of Accounting), which is as difficult as learning a foreign language. As a result, most of the students are facing with extreme anxiety. This study found that students who enroll in Fundamentals of Accounting have improved their performance, which is 36.2 percent. Students are also able to resolve the questions related Financial Statements and Adjustments topic in a shorter period of time since they are skillful and enjoy using the steps in “Smart Accounting”. In addition, this approach is practical to be used by students as they can change their attitude towards accounting subject and motivates them to pursue accounting courses at the higher semester. Indirectly, by applying this approach it helps to reduce anxiety among first semester students in Department of Commerce to continue their studies in Politeknik Tuanku Sultanah Bahiyah.*

**Keywords:** *Accounting Teaching Approach, Case Studies, Polytechnic, Malaysia*

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### **I. Introduction**

Education is a continuous effort in building a knowledgeable well-being person in this world and in the hereafter. Curriculum in education plays an important role in achieving the National Education Philosophy such as developing a curriculum for Accounting Education. According to [1], Accounting Principles Curriculum in secondary schools is a basic study which is aimed at producing individuals who are knowledgeable in accounting skills, accountability, able to think critically and reflective, practice ethical working ethics, Information Technology savvy, cultivate lifelong learning, possess good communication skills through meaningful learning approaches and the integration of theory and practice of accounting as described in the learning objectives. In all Malaysia Polytechnics, Fundamentals of Accounting curriculum's goals are to enable students to gain knowledge and understanding of the operational aspects of accounting systems and procedures and also the methods to be used to establish accounting in preparing the financial statements of all business and non-business entities [2].

Accounting Education is very important regardless business or non-business fields. Accounting information is able to describe the performance and financial position of an organization. Accountants are in charge of accounting information in an organization. The career is recognized by the Malaysian government as a professional position which has many privileges such as high income and a satisfactory quality of life [3]. Due to this awareness, many students want to venture into this field and they involve themselves in Accounting Education at school level up to the Higher Learning Institution. Involving in Accounting Education is challenging, especially in secondary schools. [4], understanding factors of the subject being taught and also teaching methods and the teacher's teaching style play a role in influencing the students' results. In addition, care when answering questions and the existence of the difficult topics in Accounting Principles subject will also be another contributing factors which can influence the students' results.

Western researchers such as [5], stated that the new accounting students will view the difficulty of accounting as similar to learning a foreign language. Consequently students experience extreme anxiety. [6], have made a study and found that familiarize with the course materials and the new methods of teaching integrated accounting can reduce anxiety on the subject among the students and educators. Malaysia Public Higher Education Institutions such as polytechnics are experiencing the same situation. This occurs in the first semester students in Department of Commerce who are required to take a course related to accounting (Fundamentals of Accounting).

## II. Statement of Problem

Fundamentals of Accounting is a continuation of Accounting Principles subject in Sijil Pelajaran Malaysia (SPM). This course is a compulsory subject to be taken by Commerce Department first semester students. This Accounting course is considered to be a tough course. This is a familiar view of first semester students with no accounting basis. Lecturers cannot deny the fact that some topics are quite challenging for the students. For Instance, Financial Statements and Adjustment topic. This is proven by the students' result in table 1 below:

**Table 1:** Test 2 Result

No.	Session	Test 2 Average Achievement Percentage
1.	Dec. 2011	61%
2.	June 2012	62%
3.	Dec 2012	44%

Test 2 is the assessment given to semester one students after they have learnt Financial Statements and Adjustments topic. It was found that December 2011 and June 2012 sessions were moderate at around 60% but in December 2012 session, it was so deteriorated (44%). This was not a new phenomena. According to [7], he believed principles of Accounting is a difficult subject and it is difficult to excel. In fact, many classmates considered this subject as a critical subject and they lost their interest and thus failed to master the specific skills.

The researchers believe this continuous problem is due to the technique of answering the questions is still bound by the traditional methods. Therefore the researchers present a new technic called "Smart Accounting". "Smart Accounting" is a systematic process in settling account adjustment and also in preparing financial statement. This method presents some measures that must be followed in producing the answer fast and accurate and gain better marks. The emphasize is on the process and also the skills.

## III. Conceptual Framework

Theoretical framework for this study is based on the model presented by [8] in the 'Approach Against STAD Cooperative Model Form 1 Students in Negative Numbers Topic'. The model states that the teaching methods and learning STAD model have helped in increasing students' achievement and creative thinking skills in the topic of addition and subtraction of negative numbers as well as increased students' interest and understanding in mathematics. Figure 1 shows the independent variables is the "Smart Accounting" and the performance, efficiency and attitude act as the dependent variable. The researcher used the model proposed by [8] in order to obtain the relevant construct in this study.

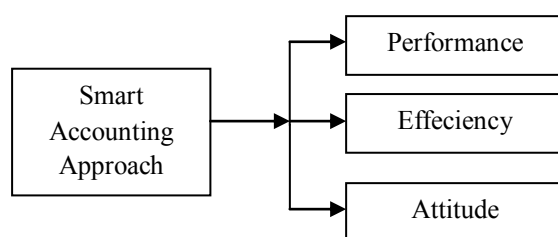


Fig.1: "Smart Accounting" Conceptual Framework

## IV. Purpose and Objectives of the Study

The purpose of this study is to review the students' perception of "Smart Accounting" application as one of the good solution for Financial Statement and Adjustment topic. Specifically the objectives of this study are:

- (a) to know the students' performance for the specific topic after they have learnt "Smart Accounting" concept.
- (b) to determine the effectiveness of "Smart Accounting" concept in solving the problem for specific topics.
- (c) to see the changes of attitudes in learning Accounting courses.

## V. Methodology

This is a case study. According to [9], case studies are the contextual analysis of the corresponding situation for the organizations, where the natural and the definition of the problems that occur will be the same experience in the current situation. A total of 46 Politeknik Tuanku Sultanah Bahiyah Diploma in Accounting students were selected as the respondents. The data was collected from the questionnaires and a test. These

instruments were used to study the students' perceptions who have to use the "Smart Accounting" on performance, efficiency and attitude.

Researchers formed questionnaires consisting of two parts, Part 1 (respondent's personal information) and Part 2 (information on student's perceptions). The data from the questionnaires were analyzed by using SPSS (Statistical Package for the Social Sciences). A pilot study of 30 respondents was conducted to determine the validity and reliability of the instrument. Cronbach Alpha for the questionnaire is  $\alpha = 0.7$ . The data obtained from this study were analyzed descriptively.

Another instrument used in this study is a test which contains a question for Financial Statements and Adjustment topic. The students were required to respond within 30 minutes and then the answers were marked by the researchers. Then the average scores of the marks were determined in finding out whether it has improved or not.

## VI. Result Analysis

The results show that respondents consisted of the first semester students pursuing Diploma in Accounting. They are 46 of them. They are 6 male respondents (13 percent) and 40 female respondents (87 percent). This indicates that majority students in Department of Commerce are female. The details of respondents' gender are shown in table 2.

**Table 2: Respondents' Gender**

Gender	Frequency	Percentage
Male	6	13.0
Female	40	87.0
Total	46	100.0

The main objective of this study is to find out the students' performance in the test taken after they have used the "Smart Accounting" concept. Table 3 shows the percentage of marks obtained by the students from the test. The average scores for the test was 75.8 percent and the highest frequency (frequency=8) is the score of 100 percent.

**Table 3: Students' Test Score**

Mark	Frequency	Percentage
27	1	2.2
50	3	6.5
54	1	2.2
55	2	4.3
57	1	2.2
59	1	2.2
67	1	2.2
68	4	8.7
69	2	4.3
71	2	4.3
72	1	2.2
73	4	8.7
75	2	4.3
77	2	4.3
78	2	4.3
80	4	8.7
88	1	2.2
92	1	2.2
94	1	2.2
95	1	2.2
97	1	2.2
100	8	17.4
Total	46	100.0

The above result is the relevance of the answers given by the respondents in relation to the statement "I obtain better scores after applying this step". This is shown in table 4 below. It was found that 91.7 percent agreed that good marks will be obtained by applying "Smart Accounting" while 8.3 percent disagree towards the question.

**Table 4: Response to Statement on Performance**

Statement	Option	Percentage
I obtain better scores after applying this step.	Agree	91.7
	Disagree	8.3
	Total	100.0

Apart from the achievement scores, students find out that this approach also saves a lot of time in solving problems related to this topic. Most of the students which is 91.7 percent agreed that they took a short time to complete the questions on this topic while 8.3 percent disagreed. This is shown in table 5.

**Table 5:** Response to Statement Regarding Time

Statement	Option	Percentage
I took a short time to complete the question after applying this step.	Agree	91.7
	Disagree	8.3
	Total	100.0

Achieving good marks and time saving proved that the “Smart Accounting” concept has also increased students’ excitement in completing the questions related to this topic. This is shown in table 6, where the percentage of the students who agreed is 94.4 percent and only 5.6 percent disagreed.

**Table 6:** Response to Statement of Excitement

Statement	Option	Percentage
I found the step in solving the problem is interesting.	Agree	94.4
	Disagree	5.6
	Total	100.0

It was found that students are more expert in solving the problems related to the questions by using this method and they were able to solve it properly. 86.1 percent agree on it while 13.9 percent disagreed towards this statement. Table 7 explains more about it.

**Table 7:** Response to Statement on Skills

Statement	Option	Percentage
I am more expert in solving the problem related to the questions after applying this step and I am able to solve it properly.	Agree	86.1
	Disagree	13.9
	Total	100.0

In conclusion, an interesting fact about this approach is that the students recognize that this method is able to increase the students’ interest about Accounting courses and they found out that Financial Statement and Adjustment is actually easy compared to before. Table 8 shows that 97.2 percent of the respondents become more interested in Fundamentals of Accounting course and only 2.8 percent are not interested of the course. 88.9 percent of the respondents felt that the Financial Statement and Adjustment topic is easier after applying this step while 11.1 percent disagreed.

**Table 8:** Response to Statement on Interest and Easy

Statement	Percentage (Agree)	Percentage (Disagree)
I become more interested in learning Basic Accounting after I have been exposed with this step.	97.2	2.8
I found that Financial Statement and Adjustment topic is easier after applying this step.	88.9	11.1

## VII. Discussion and Implication of the Study

The findings of this study can help the students to reduce their fear and stress due to the use of “Smart Accounting” approach. It can also improve their performance in Accounting subject. In addition, a survey conducted by [10] also related to the improvement of problem solving skills on the topic of business documents through the ‘magic letter’ in helping Form Four students. According to [7], a survey was conducted to help Accounting student to encounter a problem of preparing the financial statements accurately. The result showed an increase in all aspects that have been analyzed after Kuala Terengganu Teacher Training College’s students were exposed to 7-E approach.

Similar topic is being studied at PTSB. The study found that the application of this method can improve the students’ effectiveness in solving the questions related to Financial statement and Adjustment topic. They were able to settle it within a short period of time because they are skilled and enjoy using the step in “Smart Accounting” concept. Students felt better after managed to obtain good marks for the test and managed to complete the questions given in their exercises in a short period of time as well as managed to get correct answers. Furthermore, this success will emerge the feeling of excitement in learning this topic. Some researchers did the research pertaining this matter. [11] has applied the method of playing while learning where it can bring lots of benefits to the students such as easy to understand the subject, fun, easy to remember and also the students are more active in the classroom.

The findings of this study can change the students' attitude towards Accounting subject. It was found that they were more interested in learning Fundamentals of Accounting subject. With the interest that they have in them, it will encourage and thus motivate them to pursue Accounting courses at the higher semester. According to a study made by [4], students' interest in Accounting subject itself has shown a significant in influencing the grades of the students' examination results.

Overall, this study shows that students feel well-versed with the Financial Statements and Adjustment topic after using this new approach. This is based on the highest mean score which is 1.14. Table 9 shows the mean scores of students' perceptions who apply this approach.

**Table 9:** Students' Feedback Mean Score

Perception	Fun	Expert	Performance	Time	Interest	Easy
Mean	1.06	1.14	1.08	1.08	1.03	1.11

### VIII. Conclusions and Recommendations

There are some limitations in this study whereby the number of respondents which is first semester students of Diploma in Accounting and majority of them have basic Accounting Education. From a statistical study, 87 percent had basic in Accounting while 13 percent do not have basic in Accounting. In addition, not all populations used the "Smart Accounting" concept (78 percent), yet there were some of them who are still using the traditional methods (22 percent). These circumstances has led to the imbalance of the respondents in this study.

Overall, this study found out that students who enrolled in Fundamentals of Accounting have improved their performance. The marks they obtained were better than before which is 36.2 percent. Students are also able to resolve the questions related to Financial Statements and Adjustment topic in a short period of time because they are more expert and interested to use the steps in "Smart Accounting". In addition, this approach is impractical to be used by the students as it can change their attitude towards Account subject and thus motivates them to pursue accounting courses at the higher semester. Indirectly by applying this approach, it can reduce students' anxiety to further their studies in PTSB. It is suggested that similar studies for the chosen topic will be carried out in the future perhaps with the different approach.

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