Success indicators in accounting 1 in the college of management and information technology (CMIT), Northwest Samar State University (NwSSU), Calbayog City

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ABSTRACT

The study attempted to find out the success indicators in Accounting 1 of students in the College of Management and Information Technology (CMIT), Northwest Samar State University (NwSSU) with the end view of proposing an enrichment program in Accounting 1.

It utilized the descriptive-correlational method with a set of research instrument for students and teachers distributed to the respective respondents. Several factors were discussed in this study, namely: age, sex, parents' monthly income, IQ, average grade in Mathematics, average grade in English, home environment, self-esteem, attitude towards Accounting, or teachers' teaching competence, such as: instructional skills, communication skills, management skills, guidance skills, evaluation skills, and socio-personal skills. The data were analyzed using frequency and percentage, mean, standard deviation, pearson r, and stepwise multiple regression analysis to determine the best success indicators in Accounting 1. Taking all the different variables, the research stressed that the average grade in English and Math came out as the best success indicators in the performance in Accounting 1.

Introduction

Background of the Study

Accounting is a math-related subject in that most of its processes involve the applications of mathematical knowledge and skills. It usually involved a very simple Math made complicated only by centuries old concepts and language.

Accounting is a significant and growing discipline at tertiary level and has become a part of our day-to-day life. As an essential part of our education, accounting helps us calculate our income, savings, even financial strength. In general, every person needs accounting education for maintaining his personal record. Hence, Institutions of Higher Education have already recognized the importance of accounting education in non-business courses.

Moreover, the Commission on Higher Education (CHED) has been supporting the thrust of the education sectors, especially for business courses. CHED Memorandum Order (CMO) No. 22 for Bachelor of Science in Office Administration (BSOA) programs, CMO No. 30 for BS in Hospitality and Restaurant Management (BSHRM)/BS in Tourism Management (BSTM)/BS in Travel Management (BSTrM), and CMO No. 53 series of 2006 for Information Technology Education specifically stated that students should have acquired technical understanding in Principles of Accounting. Thus, institutions of higher education stress the importance of accounting education in non-business courses. As a result, the Institute initiated

revisions of its various curricular programs. This move was primarily geared towards providing students with extensive and optimum learning opportunities.

However, failure rates in Accounting 1 courses cause concern on many campuses. Accounting instructors face a dilemma each term knowing that enrolled student will differ greatly in their diligence in attending class, completing assignments, and exerting effort in learning the material. In fact, students from the College of Business and Public Administration of Eulogio-Amang Rodriguez Institute of Science and Technology also experienced the same difficulty in Basic Accounting. Castillo (2002) in his study reported that 189 freshmen students enrolled in basic accounting encountered difficulty in some areas where the application of the basic concepts and principles of accounting were applied.

Furthermore, in Northwest Samar State University (NwSSU), the Registrar's records show that students enrolled in Basic Accounting experienced difficulty in this subject. For SY 2009-2010, out of 419 students enrolled in Accounting 1, 213 had difficulties. In BSBA program, some 107 students enrolled in Accounting 1; 20 or 18.69 percent got a grade of 75; 15 or 14.02 percent got a grade of above 75 but below 80; 5 or 4.67 percent got incomplete grade; and 2 or 1.87 percent dropped the subject. For BSOAd program, 56 students enrolled in Accounting 1; 23 or 41.1 percent got a grade of 75; 10 or 17.86 percent got a grade above 75 but below 80; 1 or 1.79 obtained incomplete grade; 14 or 25 percent got a failing grade; and 1 or 1.79 percent dropped the subject. For BSIT program, of 68 students enrolled in Accounting 1; 11 or 16.18 percent got a grade of 75; 7 or 10.29 percent got a grade of above 75 but below 80; 1 or 1.47 percent got an incomplete grade; 4 or 5.88 percent failed; and 2 or 2.94 percent dropped the subject. For BSHRM program, some 152 students enrolled in Accounting 1; 25 or 16.45 percent got a grade or 75; 27 or 17.77 percent got a grade above 75 but below 80; 10 or 6.58 percent got an incomplete grade; 14 or 9.21 percent failed; and 5 or 3.29 dropped the subject. For

BSTM program, of 36 enrolled in Accounting 1; 7 or 19.44 percent got a grade of 75; 13 or 36.11 percent got a grade above 75 but below 80; 1 or 2.78 percent got an incomplete grade; 3 or 8.33 percent got a failing grade; and 1 or 2.78 percent dropped the subject.

With the above data, this study was conceptualized. The researcher investigated and established the underlying causes of higher failure rate in Accounting 1 as well as found out the possible indicators that could help the students in the College of Information and Technology (CMIT) to pass in Accounting 1 with the end view of proposing an enrichment activity for the course.

Most specifically, this study sought to answer the following questions:

(1) What is the profile of the students who have taken Accounting 1 in terms of: age, sex, parents monthly income, IQ, average grade in English and Mathematics, home environment, self-esteem, and attitude towards Accounting?

(2) What is the teaching competence of the Accounting 1 instructors, as assessed by the students, instructors themselves, peers, and dean in terms of: instructional skills, communication skills, management skills, guidance skills, evaluation, and socio-personal skills?

(3) What is the scholastic performance of CMIT students in Accounting 1?

(4) Is there a significant relationship between the scholastic performance of the CMIT students who have taken Accounting 1 and of the following: students' profile and teaching competence of Accounting instructors?

(5) What is the best indicator for success in accounting 1 of the CMIT students at NwSSU?

(6) What problems do CMIT students meet in Accounting 1?

(7) What Accounting 1 enrichment activities can be proposed based on the findings of the study?

In this study these null hypotheses were tested:

1. There is no significant relationship between the scholastic performance of the CMIT students who have taken Accounting 1 and their profile.

2. There is no significant relationship between the scholastic performance of the CMIT students who have taken Accounting 1 and the teaching competence of Accounting 1 instructors.

More pointedly, this study holds the idea that the leaner's scholastic performance could be influenced by several internal and external factors, such as his age, sex, parents' monthly income, IQ, average grade in Mathematics, average grade in English, home environment; self-esteem, attitude towards accounting, and the Accounting Instructors' level of teaching competence.

Figure 1 shows the conceptual framework of the study. As indicated by the first box, the study was conducted at CMIT with the accounting students, the Accounting Instructors, peers, and dean as the respondents. From the first box, an arrow points to the process part, the centermost box which bears the scholastic performance of students in Accounting 1. The different factors that influence the performance of accounting students were identified by correlating the accounting students' profile and the Accounting instructors' level of teaching competence, as indicated by the two-way arrows. From the process part, another arrow points to the last box that presents the output of the study, a proposed enrichment activity.

Accounting Students' Profile in terms of:
1.1 age
1.2 sex
1.3 parents' monthly income
1.4 IQ
1.5 average grade in Mathematics
1.6 average grade in English
1.7 home environment
1.8 self-esteem
1.9 attitudes towards Accounting

CMIT, NwSSU
- Students
- Instructors
- Peers

Scholastic Performance in Accounting 1

Seminar/Workshop for CMIT Students Enrolled in Accounting 1

Accounting Instructors' Teaching Competence as to:
2.1 instructional skills
2.2 communication skills
2.3 management skills
2.4 guidance skills
2.5 evaluation skills
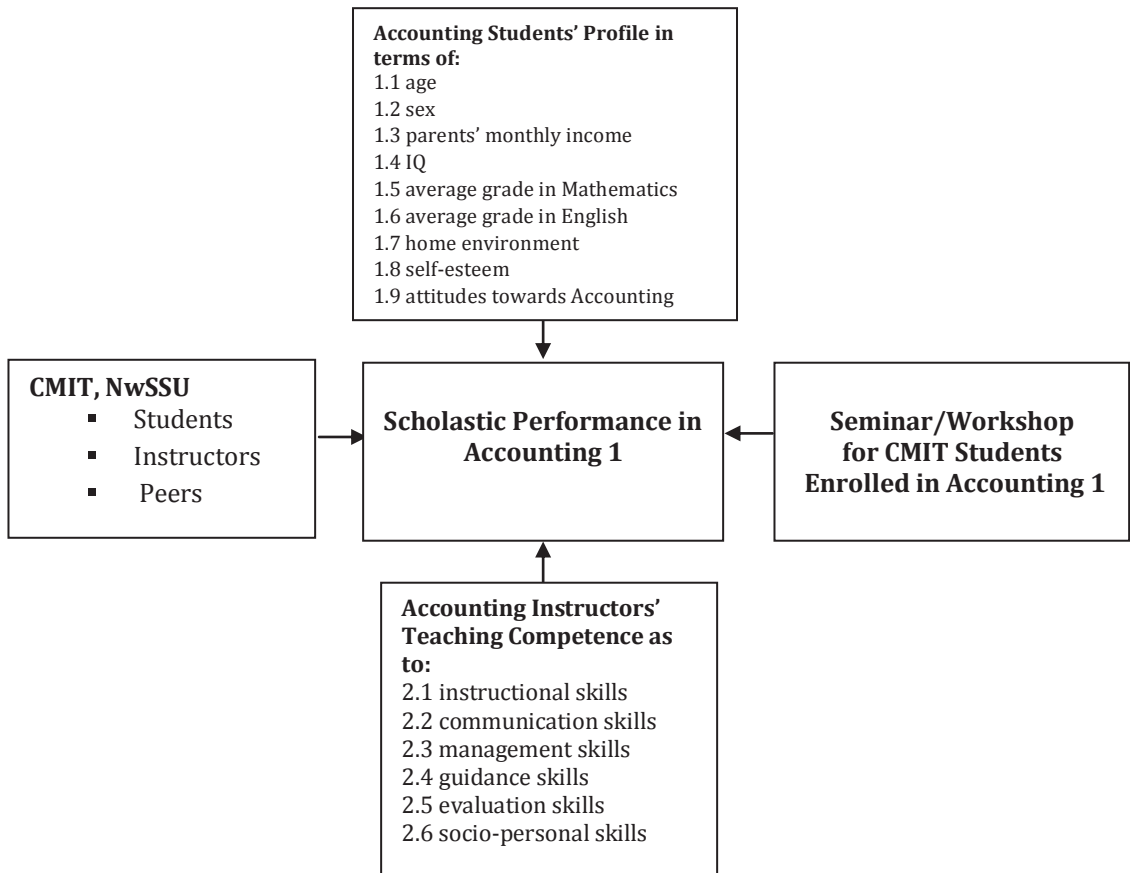2.6 socio-personal skills

Figure 1. Conceptual Framework Depicting the Success of Students who have taken Accounting 1 at the College of Management Information and Technology NwSSU

Method

With the descriptive-correlational method of research, the study made use of the research instrument for students to elicit their profile and research instrument on modified teaching competence- Modified Teaching Observation (QMTOP). Descriptive-correlational studies describe the variables and the relationships that occur naturally between and among others (Sousa, et al., 2007).

The respondents of the study were the Students of the College of Management and Information Technology, Northwest Samar State University (NwSSU) who actually enrolled in the second semester of School Year 2010-2011 and answered the instruments, their respective Accounting instructors, peers, and the dean of the aforesaid college. The respondents indicated in Table 1 served as sources of data collected.

Table 1
Distribution of the Respondents of the Study

Respondent	f	%
Dean	1	0.4
Accounting Instructor	3	1.2
Students:		
BSBA	64	25.6
BSOAD	41	16.4
BSInfoTech	48	19.2
BSHRM	78	31.2
BSTM	15	6.0
SUTOTAL	246	98.04
TOTAL	250	100.00

The list of the students who took Accounting 1 during the second semester of the SY: 2010-2011 was first obtained from the office of the University Registrar. To select the number of the student-respondents from the given program included in this study, a random sampling was done. By contrast, complete enumeration or universal sampling was employed to determine the Accounting instructors, peers, and college dean who participated in the study.

Two sets of instruments were used in this study; Questionnaire for Students (QS) and Questionnaire on Modified Teaching Observation Protocol (QMTOP).

Questionnaire for Student (QS)

The Questionnaire has five parts. Part I (Personal data) inquired the student's name, age, sex, parents' monthly income, IQ, average grade in Mathematics, average grade in English, home environment, self-esteem, attitude towards Accounting, while Part II with a 25-item researcher-made questionnaire asked about the students' home environment Part III was a 25-item on self-esteem; Part IV, a checklist on attitude towards accounting which has 25–items some of which were adapted from Catamora (2005). The respondents were asked to check the appropriate column corresponding to their responses using the following scale: 5 – strongly agree; 4 – agree; 3 – undecided; 2- disagree; 1- strongly disagree. Part V reported on the attitude towards Accounting 1. This part has 25 items, some of which were adapted from the instrument of Bergado (1995). The students were asked to enter a check mark on the space provided if they agreed with the statement.

Questionnaire on Modified Teaching Observation Protocol (QMTOP)

Some of the items in the QTMOP were adapted from Canaman (2009) instrument with six parts that assessed the teaching competence of the Accounting instructors, namely: instructional skills, communication skills, management skills, guidance skills, evaluation skills, and management skills. The student- respondents, teacher-respondents, peers, and the dean were asked to check the column appropriate to their corresponding responses using the following scale and description: 5– Outstanding (O), 4- Very Satisfactory (VS), 3- Satisfactory (S), 2- Fairly Satisfactory (FS), 1- Unsatisfactory (U).

The following statistical tools were used in this study: Frequency and percentages, mean, standard deviation, pearson r, stepwise multiple regression analysis, ranking.

In determining the profile of the students, frequency and percentages, mean, standard deviations were used. These included the variable of age, sex, parents'

monthly income, average grade in Mathematics subjects, average grade in English subjects, self-esteem, attitude towards Accounting, and scholastic performance of students in Accounting 1.

In investigating the relationship of the students' scholastic performance in terms of: age, parents' monthly income, average in Mathematics, average in English 1, home environment and self-esteem, pearson r was used to determine the degree of its relationship.

Moreover, Multiple Regression Analysis helped describe the scholastic performance in Accounting 1 and the student's and instructors' profile, with the student's average grade in English and Math as independent variables. The same tools were used to identify the success indicators in Accounting 1 of students in the College of Management and Information Technology (CMIT), Northwest Samar State University (NwSSU).

An alpha level of 0.05 was used to determine the statistical significance of the differences and relationships of the perceptions of the respondents on the variables in this study.

All the data gathered were processed through the computer statistical software.

Results and Discussion Scholastic Performance in Accounting 1

Table 2 presents the mean and standard deviation on the scholastic performance in Accounting 1 of the student-respondents. Data signified that BSTM students performed better in Accounting 1 when compared to other student-respondents. The BSBA students did not perform any better either in Accounting 1. Hence, Accounting instructors should follow-up and supervise their BSBA students, especially in their performance in Accounting 1 because this is one of the subjects considered in the course retention policy.

Table 2
Mean and Standard Deviation on the Scholastic Performance in Accounting 1

Course	Mean	Standard Deviation
BSBA	80.71	3.72
BSSOAd	80.50	4.64
BSInfoTech	82.02	4.13
BSHRM	80.27	4.59
BSTM	85.13	5.14
OVER-ALL	81.06	4.47

Test of Significant Relationship between Scholastic Performance in Accounting 1 and the Students' Profile

The test of correlation on the relationship between the student-respondents scholastic performance in Accounting 1 and other student-respondents' profile, such as: age, parents' monthly income, average grade in Mathematics, average grade in English, home environment, and self-esteem is revealed in Table 3.

Data showed that age, parents' monthly income, home environment, self-esteem were described as "not significant"; hence, the null hypothesis was accepted. This means that there was no significant relationship between the student-respondents' scholastic profile of the student-respondents. Recent findings on parents' monthly income and home environment confirmed those revealed by Syed, et al. (2006), Beblo & Lauer (2004), and Navarro, as cited by Poquiz (2008), in their study. However, recent findings on self-esteem do not support those revealed by Poquiz (2008), in her study.

By contrast, Table 3 further revealed that the average grades in Mathematics and English were described as "moderately low correlation" and "highly significant". The null hypothesis which states that there is no relationship between the scholastic performance of the CMIT students who have taken accounting and their profile in terms of the following: average grade in Mathematics and average grade in English was rejected. This finding means that the relationship was highly significant; hence, student-respondents skills in Mathematics and English contributed very much to their performance in Accounting 1.

Table 3
Test of Relationship between Scholastic Performance in Accounting 1 and the Students' Profile

Students' Profile in terms of:	r	Description	p-value
Age	-0.73ns	MHC	0.253
Parents' Monthly Income	-0.01ns	LC	0.885
Ave Grade in Math	0.41**	MLC	0.000
Ave Grade in English	0.46**	MLC	0.000
Home Environment	-0.03ns	LC	0.691
Self-Esteem	-0.03ns	LC	0.602

Legend:

**	=	Highly Significant
*	=	Significant
ns	=	Not Significant

Interpreting r:

r	Decriptive Level
±1.00	Perfect Correlation (PC)
±0.75 to ±0.99	High Correlation (HC)
±0.51 to ±0.74	Moderately High Correlation (MHC)
±0.31 to ±0.50	Moderately Low Correlation (MLC)
±0.01 to ±0.30	Low Correlation (LC)
±0.00	No Correlation (NC)

Test of Significant Relationship Between Scholastic Performance in Accounting 1 in terms of Teaching Competence

To determine the relationship between the scholastic performance of the student-respondents in Accounting 1 and the profile of the teachers the person r was computed. Table 4 presents the results.

As shown in the table, the over-all computed r of -0.05 described "low correlation" and computed p-value of 0.421, greater than0.05 level of significance, described as "not significant". These results imply that the Accounting instructors' profile in terms of their teaching competence was not a factor in the students' scholastic performance in Accounting 1. Moreover, results also matched with the Performance Evaluation System (PES) of the Accounting instructors.

Table 4
Test of Relationship between Scholastic Performance in Accounting 1 and the Teachers' Profile in Teaching Competence

Teaching Copetence in term of:	r	Description	p-value
Intructional competence	-0.03ns	LC	0.601
Communication Skills	-0.07ns	LC	0.273
Management Skills	-0.06ns	LC	0.370
Guidance Skills	-0.05ns	LC	0.462
Evaluation Skills	-0.06ns	LC	0.370
Socio-Personal Skillls	-0.04ns	LC	0.488
Over-all	-0.05ns	LC	0.421

Legend: ns = Not Significant

±1.00	Perfect Correlation (PC)
±0.75 to ±0.99	High Correlation (HC)
±0.51 to ±0.74	Moderately High Correlation (MHC)
±0.31 to ±0.50	Moderately Low Correlation (MLC)
±0.01 to ±0.30	Low Correlation (LC)
±0.00	No Correlation (NC)

Table 5
Scholastic Performance in Accounting 1 and the Students' and Instructors' Profile

Dependent Variable:	Independent Variables	Beta coefficient	t-value	p-value
	Ave Grade in English	0.525	3.741**	0.000
Scholastic Perpormance in Accountin 1	Ave Grade in Math	0.409	4.960**	0.000
R-Square		0.274		
Adjusted R-Square		0.239		
F-ratio		7.976**		
p-value		0.000		

*= Significant at 0.05 level (p<0.05)
** Highly Significant at 0.05 level (p<0.01)
Ns = Not Significant at 0.05 level

Table 5 presents the multiple regression analysis on the scholastic performance in Accounting 1 and the students' and instructors' profile. Multiple regression analysis was used to determine which among the independent variables were related to the dependent variables.

As gleaned from the table, the contribution of the average grade in English and Math to the scholastic performance in Accounting is dependable. With the two (2) independent variables, average grade in English came out as the best success indicator on the scholastic performance in Accounting 1, student-respondents' profile and Accounting instructors' profile. This means

that student-respondents' knowledge and ability in English made the strongest unique contribution to explain their scholastic performance implying that the better they perform in these subjects the better is their performance in Accounting 1. The finding of this study was supported by the claims of Drennan & Rohde (2002) which considered the effect of having English as second language (when the course was taught in English). And Siegler's (2003) claim that not-so-good math students cannot hold as much numerical information in working memory as stronger math students are, therefore, correct.

Problems Encountered by the Accounting 1 Students

The data presented in Table 6 presents the problems encountered by the student-respondents in Accounting 1.

Table 6 discloses that having no audio and visual aids implies that presentation of the subject matter is limited to the traditional lecture-type of teaching. Besides, poor classroom setting, improperly ventilated, and limited facilities imply that the student-respondents are not comfortable, thus, they consider these as added burden to their difficulty. This finding confirmed the claim of Graham & Gisi, as cited by Karemera 2003, that environment factors were indicators influencing academic performance and that the key to enhanced learning is the creation of an environment that encourages students to pursue educational activities in-and-outside classrooms. Also, class size matters. The findings revealed that most of the student-respondents considered the top five cited problems as an influential factor in attaining a satisfying performance in Accounting 1.

Table 6
Ranking on the Problems Encountered by the Accounting 1 Students

Problems	n	Rank
No audio and visual aids provided by the school for the subject.	135	1
The classroom condition is generally not conducive to learning	132	2
The classroom is crowded due to many students in one class	131	3
Poor scheduling	122	4
I do not know how to prepare the principal accounting report	113	5
I cannot identify the term asked for in statement	108	6
I cannot relate a term in a new situation	98	7
I cannot determine theories, law and principles referred to a new situation.	93	8
I cannot relate the theories and principles to a new situation	91	9
I do not know how to make adjusting and closing entries	90	10
I cannot understand and explain concept and principles	88	11
I cannot identify the term asked for in an example	86	12.5
I cannot understand and explain theories	86	12.5
I cannot understand causes and nature of balances reflected on Financial Statements.	85	14
I cannot determine what mathematical operations will be used in computing numbers and balancing accounts.	80	15
I cannot Identify the nature of increases or decreases in each part of the accounting equation.	77	16
I cannot identify the term referred to in an example.	75	17.5
The available reference books in the library are generally outdated or obsolete	75	17.5
Lack of reference in the library.	73	19
I cannot differentiate one term from another.	71	20
There is no prescribed book on the subject.	69	21
I cannot determine net income, capital, etc. asked for in a given period.	60	22
No permanent assigned room after classes has started.	57	23
Blackboard is too near.	50	24
Blackboard is too far.	43	25

Proposed Seminar / Workshop in Accounting 1

Rationale

The basic function of an academic institution is instruction. Its strength also lies in its faculty and their ability to teach and improve learning. Hence, the kind of education that the school provides is directly dependent upon the quality and competence of its faculty. Moreover, Article XIV, Section 5, paragraph 4 of the 1987 Constitution of the Republic of the Philippines states that "The state shall enhance the right of teachers to professional advancement." It is, therefore, necessary for administrators of higher education institution to provide for the faculty professional growth needs and relevant learning to students as well.

Objectives

This seminar/workshop is generally aimed to help Accounting Teachers develop personalized instructional materials that enhance students' performance in Accounting 1.

Proposed Seminar / Workshop Activities

TOPIC	ACTIVITIES/STRATEGIES	SPECIFIC OBJECTIVES	PERSONS INVOLVED
1. The art of teaching 2. a) Literal Comprehension, such as; identifying the topic and supporting details; noting details. b) Interpretative comprehension such as getting the main idea, making inferences, conclusions, analogies, generalization, and predicting outcomes. 3. The different teaching aids and their advantages / disadvantages.	1. Lecture, discussion, and problem solving. Ask interesting pivotal and convergent questions. Make provisions for students'discovery. Make effective use of multi-sensory aids. 2. Lecture and discussion Answer exercises. 3. Attend tutorial classes or workshop in constructing of instructional materials or supplemental learning aids in Accounting 1. -Lecture, discussion, and demonstration -Workshop -Integrating the ICT in teaching Accounting 1 and making IM's construction	1. Enhance advanced mathematical thinking skills of the Accounting students. - Provide some additional procedures that Mathematics and Accounting instructors will find useful in their daily teaching. 2. Increase students reading comprehension/ students' vocabulary. Raise students performance in English. 3. Gain inputs on the uses of varied teaching or supplemental learning aids, particularly in Accounting 1. - Create instructional materials or supplemental learning aids. - Identify target skills that need the use of instructional materials or supplemental learning aids.	1. Students enrolled in Accounting 1. Accounting instructors. Math instructors. 2. Students enrolled in Accounting 1; Accounting instructors; English instructors. 3. Resource speakers/trainers or expert on material development. - Accounting instructors - CMIT instructors (willing to attend)

Conclusion

Based on the findings of the study, the following conclusions were drawn:

The study revealed that the student-respondents skills in Mathematics and English contributed very much to their performance in Accounting 1, with the two (2) independent variables, the average grade in English came out as the best success indicator on the scholastic performance in Accounting 1. Moreover, poor classroom setting, improperly ventilated, and limited facilities implied that the student-respondents were uncomfortable; thus, they considered these as added burden to their learning process.

Recommendations

In light of the data gathered, the following recommendations are given:

1. Based on the results in Table 3, Students focus more on their studies, especially in their English and Mathematics subjects because the better their performance in these subjects, the better achievement they have in Accounting 1.

2. Since the traditional method of teaching no longer suffices the need for a fast-growing discipline like accounting course, be met, if budget is available; hence, it is recommended that the administration give sufficient classroom facilities to enhance students' learning.

3. In pursuit of Article XIV, Section 5, paragraph 4 of the 1987 Constitution of the Republic of the Philippines which states that "The state shall enhance the right of teachers to professional advancement.", Accounting instructors should continue to grow professionally. They should be given new relevant trainings to keep them abreast of the new trends in Accounting.

4. More related studies be done, using the same variables, but in other schools within Region VIII to validate the findings of this study which is vital to the improvement of the teaching- learning process in Accounting 1.

5. It is highly recommended that the proposed enrichment activities based on the findings of this study be adopted.

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