**Factors that affect the ability of AB English first year students of Polytechnic University of the Philippines in answering some topics in Mathematics.**

A Research Paper

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Bachelor of Arts in English

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**Chapter 1**

**The Problem and its Background**

According to *thefreedictionary.com*, Mathematics  is group of related sciences, including algebra, geometry, and calculus, concerned with the study of numbers, quantity, shape, and space and their interrelationships by using a specialized notation. In a more simple meaning, it involves a lot of computation; some of these computations are addition, subtraction, multiplication, and division. These four basic mathematical operations are taught in all school levels. The given Mathematical operations are also used in our daily lives. So, Mathematics is definitely an important element of human life.

 College Mathematics is a lot different from any Mathematics like in high school and elementary level. In college, professors expect that their students have enough knowledge about the subject and already prepared (*clubtnt.org*). Therefore, those who still cannot cope up with the lessons will be left behind. In order for them to catch up with the lessons, they have to learn on their own.

Dealing with numbers is a hard task for some believed that Math is Hard. This research will allow us to discover or know the factors that affect English Majors’, AB English Freshman students in particular, knowledge about Math. *I am only fifteen, but don't doubt my abilities, I know how to do and understand mathematics better than I know how to breathe. If I don't know how to work out something I WILL find out and then work it.*

**Statement of the Problem**

 Mathematics is one of the hardest subjects for some English majors nowadays, so this study will try find out the answer for “why some English Majors are having a hard time dealing with numbers.”

**Significance of the Study**

 This study will examine or observe the factors that affect AB English first year students’ knowledge about the subject, Mathematics. Only one section is expected to cooperate. The students that will cooperate are only from ABE 1-2, Polytechnic University of the Philippines, Sta. Mesa Campus, from school year 2011-2012.

**Scope and Limitations**

 This study will find out the barriers that affect some of the AB English first year students’ apprehension about Math.

 The result of this study will help AB English first year students to have different strategies how to learn Math in the easiest way as possible. This study may also help Math professors’ strategies in teaching.

**Background of the study**

Mathematics is one of the hardest subjects that AB English first year students will encounter. This study could help them understand the factors and difficulties that effects confusion in learning the subject. After this study, they could probably make an effective strategy that would help them compromise with the subject.

Figure 1 represents the parts and the system of the methodology which this study will be using for the attainment of its goals.

The arrows represent the chronological motion of the methodology which we are going to use to meet and comply with the main purpose of the said study.

The first box indicates the first part of the methodology which this study will be using to complete and attain all of its goals. On the first part of the methodology, our research team will be having a classroom survey with thirty AB English first year section 2 students as respondents for this study. The results of the survey will be our guide to find out the possible reasons why the main problem occurs particularly on AB English first year students.

The second box points out the analysis and observation that our study will going to use for the refinement of our knowledge which will feed the necessity of this study to attain all the goals that this study have.

The third box represents the part where our research team is going to tally all the given results from our respondents taken from the survey.

The fourth box is the part of the methodology where our research team is going to identify and analyze all the possible problems which are the main reasons why AB English first year students are taking Math in a hard way.

The fifth box or the last part of the methodology is the part where it reveals all the possible strategies which can be used for the innovation of Math learning for AB English first year students.

**Definition of Terms**

Mathematics a group of related sciences, including algebra, geometry, and calculus, concerned with the study of number, quantity, shape, and space and their interrelationships by using a specialized notation (*thefreedictionary.com)*.

College Mathematics The College Mathematics is designed to enhance classroom learning and stimulate thinking regarding undergraduate mathematics. It publishes articles, short Classroom Capsules, problems, solutions, media reviews and other pieces. All are aimed at the college mathematics curriculum with emphasis on topics taught in the first two years ([*http://www.maa.org/pubs/cmj.html*](http://www.maa.org/pubs/cmj.html)).

**Work Cited**

Mathematics (*thefreedictionary.com)*.

([*http://www.maa.org/pubs/cmj.html*](http://www.maa.org/pubs/cmj.html)*)*

(*clubtnt.org*)

**Chapter 2**

**Research Methodology**

**Research design**

The study entitled “the factors and attitudes that affects the ability of AB English first year section two students of the Polytechnic University of the Philippines in answering some topics in mathematics” is a quantitative research which is focused in gathering factual information and data for the innovation of math learning strategies. The researchers conducted a survey on a one whole class. The questionnaire has two parts: the first part is composed of ten questions that observes or tests the attitudes that affect the learning ability of the chosen respondents in mathematics while the second part is only a few samples of math problems which is given to confirm the respondents’ answers on the first part of the questionnaire.

**Respondents**

AB English first year section two students are considered as one of those problematic students in terms of dealing with math. This study will help them improve their learning ability in the subject. The respondents of this study are composed of 30 students which include 5 males and 25 females. The respondents are chosen by the adviser of the researchers.

**Research Instrument**

The main tool used in gathering all the data and information needed for the study is the questionnaire called “Attitude Test for First Year College Students.” It is a two-part questionnaire developed by Prof. Rafael Michael O. Paz. By his assistance, the researchers have suited all the needs of the present study. This instrument is composed of two parts; the first part observes the attitudes of those students who have taken the questionnaire towards math while the second part is given only for the confirmation of their answer on the first part of the questionnaire.

**Data-Gathering Procedure**

The researchers observed the results of the questionnaires taken by the AB English first year section two students of the Polytechnic University of the Philippines, tallied the result of the given test, and separated the number of students who answered “yes” from those who answered “no”.

**Statistical Treatment**

1. Percentage was used to determine how many students answered a particular question.
2. To determine the number of those who answered “yes” and “no” in each number, the researchers used the formula P = N / E (100%)

Where: **N** is the number of students who answered yes or no

 **E** is the total number of the students who had taken the survey

 **100%** = constant

**Chapter 3**

**Summary of Findings, Conclusions, and Recommendations**

**Introduction**

The study entitled “the factors and attitudes that affect the ability of AB English first year students of the Polytechnic University of the Philippines in answering some topics in mathematics” is a study which is focused for the development of math learning strategies. The survey used for this study is critically evaluated which has the purpose to understand the attitudes of those students who have taken the survey and also to construct and innovate math learning strategies. After tallying all the results, the researchers computed the percentage of those students whose answer is similar to what is expected answer in a particular number or question. The researchers also calculated the percentage of those persons whose answer is contrast to what is expected in a particular number or question. The researcher’s purpose is to understand the students’ attitude towards the subject and also to create or improve math learning strategies and not to criticize their ability.

**Figure 1**



 **Table 1**

|  |  |  |
| --- | --- | --- |
|  |   **YES** |  **NO** |
| 1. | 89.7 | 10.3 |
| 2. | 62 | 38 |
| 3. | 66 | 34 |
| 4. | 34 | 66 |
| 5. | 6.7 | 93.1 |
| 6. | 28 | 72.4 |
| 7. | 62 | 38 |
| 8. | 69 | 31 |
| 9. | 55.17 | 45 |
| 10. | 55.17 | 45 |
|  |  |  |

**Figure 1** shows the graphical representation of the students who answered “yes” and “no” in a particular number.

**Table 1** explains the percentage of students who answered “yes” and “no” in a particular number.

**Chapter 4**

**Summary of Findings, Conclusions, and Recommendations**

This study focused in finding out the factors that affect the learning ability of AB English first year section two students of the Polytechnic University of the Philippines in Mathematics. The researchers used questionnaires in taking the individual survey for the students involved.

**Summary of Findings**

From the analysis of data, the findings are:

1. The minds of the students are already set that Math is difficult that leads in lacking of interest in learning the subject.
2. The allotted time for the activities is not enough for them to comply with the subject’s requirements.
3. The classroom where the discussion is held, really affects the apprehension of the students toward the subject.
4. The teacher’s way of discussing the topics affects the students’ apprehension and creates boredom.
5. Students who are not reviewing their lessons also cause failures in adding knowledge in their own minds.

**Conclusions**

After conducting the study or investigation, the researchers have drawn the following conclusions:

1. The first question in the first part of the survey showed that the students are pessimistic. That’s one of the reasons why they’re not able to learn the subject well.
2. The boredom on the subject creates drifting thoughts in the minds of the students that leads in not learning every topic being discussed.
3. Reviewing the lessons discussed by any teacher is a very important thing. It is a form of refreshing what was fed into your mind.
4. The assigned teacher in the subject really affects the interest of the student in listening attentively.

**Recommendations**

Based on the findings and conclusions drawn in this research, the researchers recommend the following:

1. The responsible in assigning the teachers in the subject should select a teacher who has not only the skills in teaching but also has a great sense of humor.
2. Since the students are English majors, the time allotted for the subject should be extended for at least 30 minutes per meeting.
3. If possible, change or evacuate from the original/assigned room to another room where the students can concentrate well.
4. The teacher should have a regular assignment, for the students are obliged to review and study the lessons.
5. The teacher should have an alternative strategy in teaching his/her subject for those students who cannot follow the discussion.

**Curriculum Vitae**

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**Curriculum Vitae**

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