PROBLEMS AND DIFFICULTIES ENCOUNTERED BY STUDENTS TOWARDS MASTERING LEARNING COMPETENCIES IN MATHEMATICS

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ABSTRACT

This study determined and analysed the problems and difficulties encountered by Bachelor of Elementary Education sophomore students towards mastering learning competencies in mathematics. The problems and difficulties are categorized into personal problems, emotional problems, problems on teacher's instruction, problems with school adjustment, problems in adjusting to classmates and boardmates, and problems arising from over-extended schedule/workloads for practice in different competitions.

Using the descriptive-survey method and frequency count and percentage, findings revealed that, in general, the respondents encountered personal problems relating to school expenses, lack of interest and negative attitude towards the subject. The emotional problems encountered are excessive stress in doing academic tasks and low self-esteem or not believing in one's capabilities. On problems relating to teacher's instruction, these are no effective motivation and introduction, and not creative enough to adapt his/her method to the learner's capability. As to problems with school adjustment, the most frequent are difficulty in adjusting to life/role of a college student, and not doing the tasks well. The problems in adjusting to classmates/boardmates are how to be accepted by classmates and boardmates, and working effectively with different kinds of classmates. With regard to problems arising from over-extended schedule/workloads for practice in different competitions, the most common problems are too many academic tasks and projects assigned, and studying and reviewing too many subjects every day.

Keywords: problems, learning competencies, strategies, motivation, instruction.

INTRODUCTION:

It is commonly accepted that math is difficult, obscure, and of little interest to certain people. The study of math carries with it a stigma and people who are talented in math are often treated as though they are quite normal. Mathematics has importance over and above the application of basic numeracy skills. It is also the prime vehicle for developing student's logical thinking and higher-order cognitive skills. Mathematics also plays a major role in a number of other scientific fields, such as physics, engineering and statistics. In this connection, a positive attitude towards mathematics among students is an important goal of mathematics education in many jurisdictions.

Generally, it is an alarming observation among Filipino students that they excel in knowledge acquisition but fare considerably low in lessons requiring higher order thinking skills. This sorry state is evident in the performance of students in national and international surveys on Mathematics and Science competencies. Separate studies on the mathematics performance of preservice teachers (Philippine Daily Inquirer, 1988, p. 14 in Ayap,2007) and mathematics teachers on the 1993 and 1994 Professional Board Examination for Teachers (Ibe, 1995 in Aguinaldo,2008) reveal the same dismal picture of mathematics competencies of those who intend to teach it as well as those who have been teaching at the elementary and secondary levels.

In the same vein, mathematics anxiety is the result of the student's negative attitude or embarrassing experience with their mathematics teachers in previous years. Such an experience can leave a student believing him or her deficient in mathematics ability. This belief results in poor performance, which serves as confirming evidence to the student. This phenomenon is known as the ''self-fulfilling prophecy''. Mathematics anxiety results in poor performance rather than the reverse.

From the International Mathematics Olympiad, details showed that the Philippines ranked 79th out of 82 countries in 2003 and 80th out of 85 countries in 2004. Based on the possible maximum points of 225, China got the highest score of 220 points, Vietnam 126, Thailand 9, and the Philippines 16 points (DepEd, 2003). It is alarming that Filipinos are found lacking in the ability of basic mathematics. Research studies being done regarding the basic mathematical knowledge of teachers show their deficiency.

Gathering evidences of the problem at the national level helps administrators to find ways to remedy the situation. But interventions can also start at the classroom level. Teachers can also do their share of investigation and exploration of the problems students encounter in learning mathematics. Since changing times require schools to develop critical, creative and independent thinkers, teachers can initially identify impediments to the attainment of these goals (Leongson,2002; and Limjap, 2002).

Mateo (2011) in his study concluded that teaching strategies are not correlated with mathematics achievement but further stated that good teaching strategies resulted in more positive attitude and lesser anxiety towards math.

Carabbacan (2003 in Ayap,2007) asserted that the teacher in the classroom is the central figure who provides the structure within which the children can learn. In fact, the way the teacher presents an activity or concept, strongly influences the way the learners react to it. An effective teacher utilizes a variety of techniques and strategies to develop productive discipline and to motivate learners.

The study of House (2001) on the relationship between instructional activities and mathematics achievement of adolescents in Japan found out that students tended to show higher mathematics achievement when their teachers more frequently explained rules and definitions. Similarly, students performed higher mathematics test scores when their teachers more frequently solved an example related to the new topic.

In a recent large-scale study, one of the most important factors in students' motivation and achievement was their perception of whether they had a positive relationship with the teacher (McCombs, 2001). In another study, the value of math increased for middle school students when they had a teacher whom they perceived to be high in support (Eccles, 1993).

Maurillo (1999) undertook a study on the assessment of grade five pupils' mastery of the basic mathematics skills in the division of Tacloban city. He revealed that the extent of mastery of the pupils in the different mathematics skills was determined by the strategies, techiques, approaches, evaluative measures, follow-up activities, and utilization of instructional materials employed by teachers.

The teacher's knowledge of the subject matter and his/her ability to communicate it are very important factors in the teaching and learning processes. The problem is that these two factors alone will not ensure effective teaching. The learning styles are central factors that must be included in the equation (Sims and Sims, 1996).

It cannot be denied that mathematics plays an important role in life but the reality is majority of students find it very difficult to acquire the different mathematical skills and processes that are useful in their everyday lives. Some students view mathematics as their waterloo as result, students perform poorly in mathematics.

As a whole, the schools' continuing endeavours toward a better education today have challenged and inspired the researchers to conduct this study to identify and analyse the problems and difficulties encountered by students towards mastering learning competencies in mathematics. Identifying the problems commonly faced by students is important for teachers to reduce or better eliminate them so that students can in a large and meaningful way achieve the competencies in mathematics as showcased in their improved performance. As other researchers have pointed out, the teachers are the primary cause of students' failure in mathematics. Poor performance in mathematics can be traced back to teachers' failure to impart the necessary knowledge, skills, attitudes, and values to students. According to Sin Son (2003 in Mateo,2011), the teacher is the most critical factor in attaining quality education and the single most potent element in the complete structure of an effective mathematical program. Does the teacher motivate the students, create a desirable classroom climate conducive to learning, transmit knowledge and implement effective instructional strategies? These are the key functions for teacher that directly contribute to students' academic achievements. If these functions are not performed by the teacher, the students' academic performance will suffer.

It is in this context that the present study was conceptualized, to identify and analyse the problems and difficulties encountered by students towards mastering learning competencies in mathematics. The problems and difficulties are categorized into: personal problems, emotional problems, problems on teacher's instruction, problems in adjusting to classmates/board mates, problems with school adjustment and problems arising from over-extended schedule/workloads for practice in different competitions.

The schools' continuing endeavour toward a better education today have challenged and inspired the researchers to conduct this study to identify and analyse the problems and difficulties encountered by students towards mastering learning competencies in mathematics. It cannot be denied that teachers can make and unmake a learner. Poor performance in mathematics can be traced back to teachers' failure to impart the necessary knowledge, skills, attitudes, and values to students. Anything a teacher does and fails to do in the classroom affects the learner. In addition, Sin Son (2003) confirmed that the teacher is the most critical factor in attaining quality education and the single most potent element in the complete structure of an effective mathematical program. Hence, the teachers should be aware of the problems and difficulties that affect the performance of their students.

It is in this context that the present study was conceived, to identify and analyse the problems and difficulties encountered by students towards mastering learning competencies in mathematics. The problems and difficulties are categorized into personal problems, emotional problems, problems on professor's instruction, problems with school adjustment, problems in adjusting to classmates/board mates, and problems arising from over-extended schedule/workloads for practice in different competitions.

STATEMENT OF THE PROBLEM:

The study specifically answered the following questions:

1. What are the problems and difficulties encountered by the respondents in mastering learning competencies in Mathematics in the following areas:
   - 1.1 personal problems?
   - 1.2 Emotional problems?
   - 1.3 Problems on professor's instruction?
   - 1.4 Problems with school adjustment?

1.5 Problems in adjusting to classmates/boardmates? and
1.6 Problems arising from over-extended schedule/workloads for practice in different competitions?

2. What are the implications of the problems and difficulties encountered by students in mastering competencies in Mathematics to the teachers, parents and students themselves?

METHODOLOGY:

This study employed the descriptive-survey design to identify and analyze the problems and difficulties encountered by students towards mastering learning competencies in Mathematics. Descriptive research is concerned with ascertaining conditions which prevail in group cases chosen for the study. It is essentially a method of quantitative description of the general characteristics of the group. According to Adanza (1995), survey research typically employs questionnaires and interviews and it serves the purpose of describing current or prevailing conditions, opinions, attitudes, impressions, perceptions of a group of people, or variety of subjects taken from representative or problem samples for the purpose of inferring the properties of the population.

The participants composed of ninety (90) sophomore students in the Bachelor of Elementary Education (BEEd) program of Philippine Normal University- Isabela Campus, Alicia, Isabela enrolled during the first semester of school year 2011-2012. The respondents were selected using the simple random sampling particularly the Table Random from the one hundred sixty five (165) students.

In general, the respondents are aged 17, females, single, and graduated from public secondary schools. The grades most of the respondents received in G-MAT 01 (Fundamentals in Mathematics) a course during the first semester school year 2010-2011fall within the range 75% to 80%. In like manner, the grades of the respondents in G-MAT 02 (Contemporary Mathematics) during the second semester generally were within 75% to 78%.

A questionnaire was the instrument used to gather data. After all the questionnaires were retrieved, the data were tallied and tabulated, and further statistically treated using frequencies, percentage and rank to answer the specific problem.

RESULTS AND DISCUSSION:

Table 1. Profile of Participants on Final Rating in Mathematics for School Year 2010-2011

Final Rating First Semester	Frequency	Percentage	Final Rating Second Semester	Frequency	Percentage
90	0	0%	94	1	1%
89	1	1%	89	0	0%
88	1	1%	88	1	1%
87	0	0%	87	1	1%
86	0	0%	86	0	0%
85	2	2%	85	1	1%
84	2	2%	84	1	1%
83	5	6%	83	3	3%
82	2	2%	82	8	9%
81	5	6%	81	3	3%
80	6	7%	80	4	5%
79	9	10%	79	3	3%
78	8	9%	78	12	14%
77	11	12%	77	8	9%
76	12	13%	76	15	16%
75	25	28%	75	28	32%
70	1	1%	70	1	1%
Total	**90**	**100%**		**90**	**100%**

The Table displays the final ratings of respondents in mathematics for first and second semesters, school year 2010-2011. It can be surprising to note that during the first semester, 25 or 28% of students were rated with 75%; 12 or 13% have a grade of 76%; 11 or 12% received a rating of 77%; 8 or 9%; 9 or 10%; and 6 or 7% received grades of 78%, 79% and 80% respectively. One respondent failed with a grade of 70%. Only few were rated 80% up to 89%.

A gleaned of ratings of respondents for second semester also shows that 28 or 32% got a rating of 75%; 15 or 16% have 76 rating; and 8 or 9% were rated 77%. Moving on, it is striking to know that 12 or 14%, 3 or 3% and 4 or 5% were evaluated with ratings 78%, 79% and 80% respectively. Again few of the respondents have ratings higher than 80%.There is only 1 student who got a grade of 90% and 1 also failed with a rating of 70%.

Most of the respondents are generally rated low in their mathematics courses.

Problems connected with learning Mathematics are common in many countries. According to experts, students described as low achievers have very limited knowledge that can only be applied to a few and familiar situations. The weak students cannot demonstrate mathematical literacy in situations which may impede their functioning in society and economic environment (Wisniowski,2014). Mathematical competence has been identified as one of the competencies essential for personal fulfilment, active and productive citizenship, social belongingness and employability in the modern society. If students do not acquire and possess these much needed competencies for life, then inevitably they will not possibly be very successful in personal and professional life.

The teachers may consider to use other approach or strategy in teaching weak students in Math. Mastery learning as a strategy for optimizing learning considers the individual capacity and needs of the learner. The learner is treated as a unique being. Instruction is individualized within the context of the regular group instruction by means of an on-going feedback-correction process.

Mastery learning offers a new approach for raising the achievement level of a learner, thereby immunizing him from mental health problems. Mastery learning aims to insure that each student will develop to his maximum potential and thus acquire successful learning experience which will engender self-confidence and ward off mental problems. It proposes strategies whereby each learner's instruction and learning can be managed within the context of an ordinary group based on classroom instruction in order to foster his optimum development (Lardizabal, 1998). Specifically, mastery learning is a method whereby students are not advanced to a subsequent learning objective until they demonstrate proficiency with the current one. Students who do not satisfactorily complete a topic are given additional instruction until they achieved competencies successfully. Students who master the topic early engage in enrichment activities until the entire class can progress together. Mastery learning includes many elements of successful tutoring and the independent functionality seen in high-end students. In mastery learning environment the teacher directs a variety of group-based instructional techniques, with frequent and specific feedback by using diagnostic, formative tests, as well as regularly correcting mistakes students make along their learning path. Teachers evaluate students with criterion-referenced tests rather than the norm-referenced tests.

In line with the Behaviour Theory, mastery learning focuses on obvert behaviours that can be observed and measured (Baum, 2005). The material that will be taught to mastery is broken into small discrete lessons; students must be able to overtly show evidence of understanding of the material before moving to the next lesson (Anderson, 2000). In general, mastery learning programs have been shown to lead to higher achievement in all students as compared to more traditional forms of teaching.

Table 2: Personal Problems

Personal Problems	Frequency	Percentage	Rank
1. School Expenses	46	19.17%	1
2. Lack of interest	43	17.92%	2.5
3. Negative attitude toward the subject	43	17.92%	2.5
4. Poor study habits	42	17.50%	4
5. Being away from parents, siblings and other relatives	20	8.33%	5

6. Involvement in school activities	18	7.50%	6
7. No/Lacks creativity	14	5.83%	7
8. Poor grammar competency	12	5.00%	8
9. No/Lacks resourcefulness	2	.83%	9
Total	**240**	**100%**	

Table 2 presents the personal problems and difficulties encountered by the respondents. As reflected, school expenses ranks 1st or it is the most common problem with 46 or 19.17%; followed by lack of interest and negative attitude towards the subject with 43 or 17.92%; poor study habits ranks 4th with 42 or 17.50%; being away from parents, siblings and relatives stays 5th with 20 or 8.33%. Moving on, the 6th problem is on involvement in school activities 18 or 7.50%; not being creative 14 or 5.83% which gets the 7th rank, poor grammar 12 or 5.00%, 8th rank. The personal problem with 2 responses with .83% is not being resourceful. It could be gleaned that the respondents are affected much with school expenses incurred. They have to budget well the allowance given by their parents to meet the other equally important and immediate needs in their studies. Socioeconomic status contributes towards the academic performance of student. Researches claim that low socioeconomic status has negative effect on the performance of students because the basic needs of students remain not met, hence they do not perform well in their subjects (Adams,1996;Farooq,et al.2011).

Mwamwenda (1995) found that achievement of students in a subject is influenced by their attitudes rather than inability to study. Failures in school is not due to inadequate instruction but by strong resistance of students (Haimowitz,1989). These arguments imply that positive attitudes towards Mathematics should be developed to improve performance in the subject.

Also, it could be expressed that the participants experience high anxiety level because of embarrassing experiences with their mathematics teachers and classmates before which caused lack of interest, negative attitude towards mathematics, and poor study habits.

Finally, involving themselves in different school activities consume much of their time from studying their lessons. Their inabilities and inadequacies also hinder them from achieving mathematics competencies.

The result supports the idea that parents should make their children feel they are understood, cared for and well-provided financially because being away from the family is difficult for them.

Table 3: Emotional Problems

Emotional Problems	Frequency	Percentage	Rank
1. Excessive stress in doing academic tasks	35	25.36%	1.5
2. Low self-esteem or not believing on one's Capabilities	35	25.36%	1.5
3. Undesirable development of a relationship between the teacher and student such as attention and affection with each other	15	10.87%	3
4. Feeling of insecurity	12	8.70%	4
5. High anxiety in working so hard at winning the teacher's belief on good impression	11	7.97%	5
6. Feeling of immaturity	7	5.07%	7
7. Feeling of timidity	7	5.07%	7
8. Frustration over one's inadequacies	7	5.07%	7
9. Difficulty in establishing desirable relationship with parents and siblings	5	3.62%	9
10. Difficulty in establishing desirable relationship with classmates, boardmates, and other school personnel	4	2.90%	10
Total	**138**	**100%**	

Data reveal that most of the respondents are excessively stressed in doing academic tasks, have low self-esteem or not believing on their capabilities with 35 or 25.36% each. The 3rd problem is undesirable development of a relationship between the teacher and the student such as attention and affection with each other which obtains 15 or 10.87%. The problem which places 4th is feeling of insecurity, 12 or 8.70%; and next to it is having a high anxiety in working so hard at winning the professor's belief on good impression, 11 or 7.97%. A small number of the respondents also have problems on feeling of immaturity; feeling of timidity; and frustration over one's inadequacies with 7 or 5.07% each. Furthermore, other respondents encountered difficulty in establishing desirable relationship with parents and siblings, 5 or 3.62%; and difficulty in establishing desirable relationship with classmates and boardmates and other school personnel with 4 or 2.90%. It is notable that the respondents have inevitably experienced a variety of emotions ranging from too much stress, timidity, insecurity, to frustrations and difficulty in establishing desirable relationship with classmates, boardmates, and other school personnel. It is in this context that emotions directly influence undesirably the respondents' ability and interest in achieving mathematics competencies because of differences in personality, cognitive level, and development.

Gonzales (2006) included in her studies the following factors. A) Classroom factor, b) Teacher factor, c) Teaching methodology, d) Mathematical ability, e) Self-confidence, f) Attitude towards mathematics, g) Parent factor, h) Sex-role socialization, i) Psychological Factor, all the nine factors showed relationship with academic achievement in College Algebra. Only one factor, sex role socialization showed a negative relationship. The other eight factors showed a positive relationship. There are four factors out of nine which showed a very little/negligible relationship namely; Classroom factor, Teacher factor, Teaching Methodology, and sex role socialization. The remaining five factors slight relationship and these were Mathematical ability, Attitude towards Mathematics, Parent factor, and psychological factor. When considered collectively, the two most prevalent of all anxiety-related factors were Psychological Factor and Attitude towards Mathematics.

Another study conducted by Arellano (1997) as cited by Mercado (2002) identified mathematics learning style and preferences of secondary school student in regard to the fine dimension of learning-environment emotional, sociological and cognitive. Part of the results of the study revealed that among the environmental stimuli. Mathematics learning style elements included motivation on the persistence to get the work done with confidence. In the emotional dimension, the high achievers were highly motivated and more persistent; they were highly motivated/ teacher dependent.

The result of this study on attitude of students negate the findings of Aguinaldo (2001) that the students have positive attitudes towards mathematics as measured in the mathematics measured scale, although he affirmed that students are more inclined to fear mathematics. Hence, he strongly recommended that mathematics teachers should promote and develop positive attitude of college students towards mathematics so that students may obtain higher academic performance in the subject. They should make their lessons responsive to the ability and interest of the student in order to make learning meaningful and pleasant.

Matusalem (2000) in her study confirmed that among the teacher behaviors with positive and significant relationship with the mathematical performance of students are mastery of the subject matter, expending an extra time in explaining topics which students do not understand, clarify explanations, adjustment of teaching styles to the students level of intelligence, use of visual aids in teaching the subject and encouragement of teachers to students to ask questions regarding the subject matter.

Researches aver that teachers should encourage the students to participate in school activities through student organizations. They can get a chance of exposure to various activities related to academic, social, economic and community concerns. Thus, the students gain approval from peers and authorities, strengthen self confidence and self-esteem (Cabansag,2012.)

Table 4: Problems on Professor's Instruction

Problems on Professor's Instruction	Freq.	Percentage	Rank
1. Lacks ability to give clear directions and logical explanations	38	12.75%	1
2.No effective motivation and introduction	35	11.74%	2
3. Not creative enough to adapt his/her method to the learner's capability	29	9.73%	3
4. Lacks the ability to encourage critical and creative thought	25	8.39%	4
5. No visual aids and other examples were used to illustrate the lesson	24	8.05%	5
6. No sufficient and concrete examples to create meaningful learning experiences	22	7.38%	6
7. Not asking appropriate and different types of questions that direct students' thinking	20	6.71%	7
8. One approach, method and strategy in teaching is used	17	5.70%	8
9. Questions not properly distributed to all learners	15	5.03%	9
10. Method is not suited to the needs and capabilities of learners	13	4.36%	10
11. Inability to relate lessons to actual life situations	11	3.69%	11.5
12. Not recognizing the value of lifelong learning	11	3.69%	11.5
13. No effective use of formative test after teaching	10	3.36%	13.5
14. Overlooks to link learning with prior experiences	9	3.02%	13.5
15. Overlooks to provide students with practical applications of content learned	7	2.35%	15.5
16. Not demonstrating in-depth knowledge of the subject matter	7	2.35%	15.5
17. Constructed evaluation tools and measures are not valid	3	1.01%	17
18. No provision of varied learning tasks	2	0.67%	18
Total	**298**	**100%**	

Table 3 shows data regarding problems on professor's instruction. It is evident that the respondents have problem on the professor's inability to give clear directions and logical explanations which is 38 or 12.75% which ranks 1st. The 2nd problem is no effective motivation and introduction, 35 or 11.74%. Not creative enough to adapt his/her method to the learner's capability, 29 or 9.73% or ranked 3rd. Lacks ability to encourage critical and creative thought receive 25 or 8.39%. Another problem encountered was the professor does not use visual aids and other examples to illustrate the lesson, 24 or 8.05%; followed by no sufficient and concrete examples to create meaningful learning experiences, 22 or 7.38%. The Table moreover presents problems on not asking appropriate and different types of questions that direct student's thinking with 20 or 6.71% and one approach, method and strategy in teaching is used, 17 or 5.70% respectively. Moving on, the Table further reflects that professor does not distribute questions properly to all learners with 15 or 5.03%, method is not suited to the needs and capabilities of learners, 13 or 4.36%. Very few of the respondents encountered problems on inability to relate lessons to actual life situations, 11 or 3.69%, overlooks to provide students with practical applications of content learned, 7 or 2.35 % to constructed evaluation tools are not valid, 3 or 1.01% and no provision of varied learning tasks, 2 or 0.67%. It can be concluded that the professor's inadequacies in the classroom create problems and difficulties to students. The present findings support Mateo's (2011), Carabbacan's (2003), and Maurillo's (1999) conclusions, that good teaching strategies, approaches and techniques; and effective evaluative measures, follow-up activities and utilization of instructional materials make students more motivated, achieve mastery of content, develop more positive attitude, productive discipline and higher performance in mathematics. Teachers as a whole need to know and understand that differences and uniqueness among learners exist and are widespread. They should endeavour to make the necessary and appropriate adjustments to the general capabilities, needs and interests of students to produce better learning outcomes. Anything the teacher does and fails to do in the classroom redound to the learners. Understanding and application of the different principles of teaching and learning are necessary.

The results of this study may spur the curriculum implementers to design and organize realistic, appropriate and meaningful programs, activities and projects that would improve and increase further the competencies and effectiveness of teachers. This may likewise demand them to conduct regular and objective monitoring, supervising and evaluating teachers at work to measure their effectiveness and efficiency to improve learning outcomes.

This study may make teachers revisit existing competencies in mathematics and do appropriate and urgent revision and modification to make it more relevant to the present needs, interests and situations of learners and to the conditions and demands of the society as a whole. This may pave the way to reflect further and benefit of the reflection as regards of their most crucial roles and functions as developers and providers of accurate, useful, and relevant concepts, principles and theories in mathematics. This may commit them to deliver quality instruction that will redound to students' improved attitudes and performance in mathematics.

Table 9: Problems with School Adjustment

Problems with School Adjustment	Frequency	Percentage	Rank
1. Difficulty in adjusting to life/ role of a college student	32	28.32%	1
2. Not doing the learning tasks well	30	26.55%	2
3. Difficulty in establishing good relationship with the professor, university campus officials, students and other school personnel	25	22.12%	3
4. Feeling of not being accepted by professor	14	12.39%	4
5. Feeling of not being accepted by classmates and boardmates.	12	10.62%	5
Total	**113**	**100%**	

Table 4 shows the respondents' problems with school adjustment. It is proven that difficulty in adjusting to life/role of a college student is generally the problem most of the respondents encountered with 32 or 28.32%. The problem on not doing the learning tasks well follows with frequency of 30 or 26.55%; and difficulty in establishing good relationship with the professor, university campus officials, students and other school personnel ranks third with 25 or 22.12%. The problems on feeling of not being accepted by professor and feeling of not being accepted by classmates and boardmates with 14 or 12.39% and 12 or 10.62 respectively are met by few respondents. The respondents come from different family culture. The foundations established by the home are to a large extent build and influence their adjustments to environmental conditions, situations and of course their personality. Some of the respondents indicate to have built good relationship with school personnel, classmates and boardmates which made them to make easy and fine adjustments to university life while others failed. This proves of the importance of socialization on the holistic development of the individual. Therefore, it can be concluded that the school as a whole is a potent factor in the determination of whether or not students achieve learning goals and objectives. The school culture directly affects student's learning either favourably or unfavorably. The findings of this study parallel with McCombs (2001) and Eccles (1993) who concluded that students increase in motivation, achievement and value mathematics more if they perceive of a positive relationship and supportive attitude of the teacher.

Table 5: Problems in Adjusting to Classmates and Boardmates

Problems in Adjusting to Classmates and Boardmates	Freq.	Percentage	Rank
1. How to be accepted by classmates and board mates	19	21.84%	1
2. Working effectively with different kinds of classmates or board mates	17	19.54%	2
3. Winning the esteem, confidence and respect of classmates or	16	18.39%	3

board mates			
4. Being unpopular to some classmates or board mates	13	14.94%	4
5. Insecurity with other classmates or board mates who are better intellectually and economically	12	13.79%	5
6. Superiority complex of classmates or board mates who are more superior cognitively and financially	10	11.49%	6
Total	**87**	**100%**	

The Table provides information about the respondents' problems in adjusting to classmates and boardmates. The problem on how to be accepted by classmates and board mates gets 19 or 21.84% and ranks 1st; working effectively with different kinds of classmates or boardmates ranks second with 17 or 19.54%; winning the esteem, confidence and respect of classmates and boardmates is third with 16 or 18.39% and being unpopular to some classmates or boardmates is fourth with 13 or 14.94%. The Table moreover reveals that there are 12 respondents or 13.79% who feel insecure with other classmates or boardmates who are better intellectually and economically and having a problem with superiority complex of classmates and boardmates who are more superior cognitively and financially which shows a frequency of 10 or 11.49%. It can be stated that people have both favourable or unfavourable impressions and treatments on others. These in a way cause and leave either good or bad effects on performance, achievement and attitude. These concur with the findings of the present study that classmates and boardmates with different personality characteristics, socio-economic and cultural background stand as problems to the respondents in their goal toward mastering learning competencies in mathematics because of the former's values, behaviour or character which are inconsistent with theirs (the respondents).

Table 6: Problems Arising from Over- extended Schedule/Workloads for Practice in Different Competitions

Problems Arising from Over-extended chedule/Workloads for Practice in Different Competitions	Frequency	Percentage	Rank
1. Too many academic tasks and projects Assigned	39	32.77%	1
2. Studying and reviewing too many subjects Everyday	38	31.93%	2
3. Going back to Philippine Normal University Campus to work on a project, for practice in different competitions	29	24.37%	3
4. Doing household chores for family	10	8.40%	4
5. Attending to part-time job that requires additional work time	3	2.52%	5
Total	**119**	**100%**	

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Table 6 reflects the problems arising from over-extended schedule/workloads for practice in different competitions. As gleaned from the Table, the problem on too many academic tasks and projects assigned reveals a frequency of 39 or 32.77% which occupies the 1st rank; studying and reviewing too many subjects everyday comes next with 38 or 31.93%; and going back to Philippine Normal University Campus to work on a project or for practice in different competitions is third with 29 or 24.37%. Data also present that the problems on doing household chores for the family and attending to part-time job that requires additional work time occupy the least problems among the respondents with 10 or 8.40% and 3 or 2.52% respectively. From the data presented, it can be concluded that the respondents are too much occupied with many academic and non-academic activities and projects. Moreover, the participants are required to do household chores before and after coming home from school and others accepted part-time jobs to augment the allowance given by their parents. These activities get most of their time and energy to study and review their lessons. Thus, they lack the mastery of mathematics competencies required of them to achieve.

FINDINGS:

The data discussed above reveal the following:

1. Most of the respondents encountered personal problems relating to money, lack of interest, negative attitude, poor study habits, and homesickness. Only few have problems on involvement in school activities, not creative, having poor grammar and not being resourceful.
2. In general, the emotional problems encountered are stress, low self-esteem, and poor relationship with family, classmates and boardmates.
3. Generally, the professors have overlooked the implementation of the principles of teaching and learning.
4. The problems and difficulties with school adjustment relate to adjustment to college life such as inability to do tasks well and poor relationship with school personnel and boardmates.
5. The problems with regard to adjusting to classmates and boardmates are acceptance, winning the esteem, confidence and respect, and insecurity with other classmates or boardmates.
6. With regard to problems arising from over-extended schedule/workloads for practice in different competitions, the problems relate to many academic and non-academic tasks, projects, and home/family responsibilities.
7. There is a need to prepare a program of activities to insure an organized and systematic participation of students to help them manage the problems and difficulties encountered in Mathematics.

IMPLICATIONS:

The foregoing findings imply that the University to the following measures to solve the problems and difficulties encountered by the students in Mathematics:

1. Sustain the conduct of class advisement activities to explore and identify problems of students and explore possible solutions with their own problems. Topics on finances, attitude, time anagement, personality development and study habits should be overly emphasized.
2. Frequent supervision by academic heads is needed to improve teaching practices and learning outcomes.
3. Provide advance organizers in presenting and developing lessons to motivate students and to link their schemata with the lesson.
4. Benchmark on the present needs, problems, and interests of learners as bases in selecting the most appropriate approach, method and techniques of teaching.
5. Instruction should be supplemented with a variety and suitable visual materials and educational technology.
1. Natural social settings should be used to explain difficult concepts, rules and principles.
2. Use brief, mini-lessons for specific skills with the whole class or targeted groups.
3. Divergent questions can be used in problem solving activities.
4. Confirm student understanding of mathematical language.
6. Personal and maximum engagement of students in the different academic tasks be given for maximum learning.
7. For socialization purposes among students, the use of games and other socially oriented activities can be applied.
8. If possible, requirements of students should be reduced for them to have more time to attend to other equally important academic tasks.
9. The Mathematics Club may implement competitions catering to the general problems, difficulties and needs of students.
10. Teachers should show empathy, understanding and patience to students with problems and difficulties in learning.
11. Intermittent reinforcement should be delivered to help sustain student's improvement.

The results of this study suggests school administrators should design, organize and implement realistic, appropriate and meaningful programs, activities and projects that would improve further the competencies and effectiveness of teachers. This may likewise demand them to monitor and supervise teachers at work to measure their effectiveness and efficiency in the program. This paves the way for curriculum implementers to reflect meaningfully and benefit of the reflection as regards of their most crucial roles and functions as facilitators and providers of useful, accurate and relevant concepts, theories and principles in mathematics. This may commit them to deliver quality instruction that would redound to students' improvement in attitudes and performance in mathematics.

The results of this study may make Mathematics teachers revisit existing competencies in mathematics and do urgent and immediate revision to make mathematics more relevant to existing needs, demands and conditions of students and of the society as a whole.

Students should reveal to their teachers the problems and difficulties they encountered in mastering learning competencies in Mathematics. This will also help them to gain more interest and to improve their grades in Mathematics.

Parents should guide and support their children more to perform better..

CONCLUSION:

The study reaffirms that poor achievement in Mathematics are caused by problems and difficulties that include personal problems (students' ability and attitudes), psychological (emotional) problems, instructional problems (teachers' strategies in teaching and attitude), family problems (finances and relationship), adjustment to college life, peer problems (adjustment to classmates and boardmates), and co-curricular activities.

Mathematics is a way of thinking, a way of organizing a logical proof, and a powerful way of communicating that forms a crucial discipline of teaching-learning programs. Hence, the learning environment should be structured in a way that it fosters and nurtures the unique capabilities of students.

RECOMMENDATIONS:

From the foregoing findings and conclusions drawn, the following recommendations are offered:

The Mathematics professors should prepare an intervention syllabus that meets the needs, abilities, and interests of the low achievers in the subject.

The University should allow students to choose co-curricular programs they are interested to join to enhance their performance not only in mathematics but in other courses as well.

The present study deserves further enrichment by using descriptive-correlational. The study will include profile of respondents and will be correlated to the problems and difficulties encountered to determine and analyse the relationship that occur.

REFERENCES:

[1] Aguinaldo, Clemente M. (2001). The Academic Performance of Students, their Attitudes Towards Mathematics Courses and their Teacher. *REL Journal* Vol.2 (1),1-10

[2] Aguinaldo, Rebelyn P. (2008). Non-Intellective Factors Affecting the Performance of Students in Mathematics in all Public High School of Santiago City in the National Achievement Test (NAT). *A Research Report.*

[3] Ayap, Liezl S. (2007). Factors Affecting Mathematics Performance of Students of Cabarroguis National School of Arts and Trades. *Master's Thesis.* Philippine Normal University, Isabela.

[4] Contreras, Josephine. (1980). Factors Affecting the Teaching of Mathematics Subject in the Non-government Institution of Iriga City. *Unpublished Master's Thesis*, University of North-eastern Philippines, Iriga City.

[5] DepEd (2003). Highlights of Results from TIMSS. *Dep Ed Bulletin*

[6] Eccles, J. (1993). School and Family Effects on the Ontogeny of Children's Interests, self-perception and Activity Choice. *Nebraska symposium on motivation. Lincoln University of Nebraska Press.*
[7] Farooq, M.S., Chaudry, A.H. Shafiq, M. and Berhanu, G. (2011). Factors Affecting Students' Quality of Academic Performance: A Case of Secondary School Level. *Journal of Quality and Technology Management.* Vol. 7 (2).
[8] Guevarra, Fortunato G. (1984). Factor Associated with the Academic Performance in Mathematics of Grade Six pupils in School of Jones, North Central Region. *Unpublished Master's Thesis*, Isabela State University, Echague, Isabela.
[9] Guimaray. Imelda B. (1994). Mathematical Difficulties of freshmen High School Students in St. Michael College Cantillan Surigao Del Sur, School Year 1993-1994. *Unpublished Master's Thesis,* Mindanao State University, General Santos City.
[10] Haimowitz, M.L. (1989). *Human Development*. New York: Thomas Y. Crowell.
[11] House, D. (2001). Relationship between Instructional Activities and Mathematics Achievement of Adolescent Students in Japan. *Finding from the Third International Mathematics and Science Study (TIMSS). International Journal of Instructional Media*, New York, 28 (1).
[12] Lardizabal, A. (1995). *Principles and Methods of Teaching*. Quezon City: Phoenix Publishing House.
[13] Leongson, J. A. (2002). Assessing the Mathematics Achievement of College Freshmen using Piaget's Logical Operations. Competencies in Mathematics. *Unpublished Master's Thesis.* Bataan Polytechnic State College, Bataan, Philippines.
[14] Limjap, A. A. (2002). Issues on problem solving: Drawing implications for a Technomathematics Curriculum at the Collegiate Level. *Tanglaw.*, 8, 55-85.
[15] Mabalo, Luco. (1990). Difficulties in Solving Verbal Problems in College Algebra of the First Year Engineering Students at the Western university. *Unpublished Master's Thesis*, Western Mindanao State University Zamboanga City.
[16] Maurillo, A. (1999). An Assessment of Grade Five Pupils on the Mastery of Basic Mathematical Skills in the Division of Tacloban City. Proposed measures for Mathematics Teaching. *A Research Report*. Vol. 1 (2), 2-9
[17] Mateo,A. (2011). Teachers' Strategies and Social Support: Their Influence on Achievement, Attitudes and Social Behavior of Students. *Master's Thesis*. Cavite: Adventist University.
[18] Mwamwenda, T.S. (1995).*Educational Psychology: An African Perspective.* London:Heinemann ButerworthPublishers Ltd.
[19] Nario, Leticia T..(1993). Mathematical Difficulties of second year High School students in the Vocational Schools In the First district of Isabela. *Unpublished Seminar Paper*. Isabela State University, Echague, Isabela.
[20] Pascua, Rodrigo. (1987). Problems Encountered by Teachers in Teaching Algebra in the La Salette High Schools of Isabela. *Unpublished Seminar Paper*. Isabela State University, Echague, Isabela.
[21] Philippine Daily Inquirer (1988).
[22] Sevilla, C. G. et al. (1998). *General Psychology with Values Development Lessons*. Rex Book Store, Manila, Philippines.
[23] Sims and Sims (1996). Formal Reasoning and Science Teaching. Social Science and Mathematics, 96 (2), 99-107. *Trends in International Mathematics and Science Study (TIMSS).*
