Financial Competencies and Mathematical Skills of 1st Year CTE Students at Pamantasan ng Lungsod ng Muntinlupa: Basis for Proposed Financial Literacy Booklet for College students.

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ABSTRACT

Mathematics is an essential part of learning. It is one of the major subjects that students need to study. But it can spell trouble too once applied to personal finances too. Students have to understand basic money management skills such as living within a budget and handling credit and debt. A solid financial foundation can lead to a lifetime of financial success. The central idea caters the financial world which has grown increasingly complex. And in general, individuals have a smaller ability to face these changes and make optimal decisions due to the lack of knowledge of basic financial concepts, leading them to incorrect decisions. Financial literacy is related to the understanding of basic economic and financial concepts and their proper application. The researchers used the descriptive type of research, random sampling technique, and survey questionnaire in this study. One hundred and seven (107) 1st year CTE students were the respondents of the study and it was conducted at Pamantasan ng Lungsod ng Muntinlupa School Year 2018-2019. After completing the one hundred and seven (107) sets of answered questionnaires, tallying and computing were done to come up with the results of the study. There is a need to develop the financial competencies of the respondents and need to expand in their mathematical skills. Based on the findings of the study there is no Signiant difference between financial competencies and mathematical skills of the respondents.

Financial Literacy booklet of Students named "Less Is More" was made as an actual output of the findings of the study.

Keywords: Literacy, Skills, Budget, knowledge, Financial, Ability

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary of the problems, the conclusions drawn from the findings as well as the recommendation based from the conclusions.

Summary of Findings

The following were the findings of the study:

1. **What are the financial competencies of the college students along with:**

   1.1 Borrowing Loan/Lending

   In terms of Borrowing Loan/Lending, the statement no. 4 (I only borrow money when it's necessary.) got the highest rank with a weighted mean of three point sixty-one (3.61) while the statement no. 3 (I easily borrow money from other people.) got the lowest rank with a weighted mean of three point zero three (3.03).

   1.2 Budgeting

   In terms of Budgeting, the statement no. 5 (I consider the needs rather than likes and wants when I do budgeting.) got the highest rank with a weighted mean of three point forty-five (3.45) while the statement no. 4 (I prepare financial plan according to family income.) got the lowest rank with a weighted mean of three point sixteen (3.16).

   1.3 Earning

   In terms of Earning the statement no. 2 (I earn money through part time job.) got the highest rank with a weighted mean of two point thirty-four (2.34) while the statement no. 3, (I earn money through online business.) 4(I earn money from helping my other classmates' projects.) and 5(I earn money through selling basic school supplies.) got the lowest rank with a weighted mean of one point ninety-six (1.96).

   1.4 Saving and

   In terms of Saving the statement no. 5 (I save money by not buying things not necessary.) got the highest rank with a weighted mean of three point thirty-two (3.32) while the statement no. 2 (I don't spend money from my savings.) got the lowest rank with a weighted mean of two point seventy-nine (2.79).

   1.5 Spending

In terms of Spending the statement no. 1(I spend my money according to my needs and not to my wants.) got the highest rank with a weighted mean of three point sixty-four (3.64) while the statement no. 3(I spend money for my school supplies.) and 5(I spend money for my transportation.) got the lowest rank with a weighted mean of three point thirty-eight (3.38).

2. What are the mathematical skills needed by the college students along with:

2.1. Computational skills

In terms of Computational Skills, the statement no. 1 (I do advance listing of expenses before spending.) got the highest rank with a weighted mean of three point twenty-nine (3.29) while the statement no. 5 (I calculate the amount I have spent for the whole month.) got the lowest rank with a weighted mean of three point zero nine (3.09).

2.2. Estimation and Approximation

In terms of Estimation and Approximation the statement no. 1 (I estimate the money I have before I buy my needs.) got the highest rank with a weighted mean of three point forty-seven (3.47) while the statement no. 5 (I do the estimation and approximation for unexpected expenses.) got the lowest rank with a weighted mean of three point twenty (3.20).

2.3. Problem solving

In terms of Problem Solving the statement no. 1 (I find solutions regardless of having problems encountered.) got the highest rank with a weighted mean of three point thirty-five (3.35) while the statement no. 2 (I apply formulas in solving money problem.) got the lowest rank with a weighted mean of two point ninety (2.90).

2.4. Thinking skills

In terms of Thinking Skills, the statement no. 5 (I apply the thinking skills properly to compute an exact value of money.) got the highest rank with a weighted mean of three point forty-three (3.43) while the statement no. 3 (I apply the thinking skills especially in computing the money before spending it.) got the lowest rank with a weighted mean of three point thirty-two (3.32).

3. Is there any significant relationship between financial competencies and mathematical skills of 1st year CTE students at Pamantasan ng Lungsod ng Muntinlupa?

There is no significant difference between financial competencies and mathematical skills of 1st year students at Pamantasan ng Lungsod ng Muntinlupa that's why it implied that the variables with no significant relationship with each other.

4. Based on the study, what kind of Financial Literacy maybe proposed?

From the data analyzed and interpreted, the findings show that there is no significant relationship between the two variables. Taking the result of the findings into consideration, the researchers may organize a booklet entitled *"LESS IS MORE"* Financial Literacy Booklet of Students that would help students in their financial management that may result to financial stability.

Conclusions

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

In terms of Borrowing Loan/Lending, the statement no. 4 (I only borrow money when it's necessary.) got the highest rank. It implies that most of the students borrow when badly needed.

In terms of Budgeting, the statement no. 5 (I consider the needs rather than likes and wants when I do budgeting.) got the highest. It implies that most of them really know what is necessary for living.

In terms of Earning the statement no. 2 (I earn money through part time job.) got the highest rank. It implies that some of the students do part time job but most of the students are still dependent for their allowances from their parents.

In terms of Saving the statement no. 5 (I save money by not buying things not necessary.) got the highest rank. It implies that they know what are their basic needs that is needed in everyday life.

In terms of Spending the statement no. 1(I spend my money according to my needs and not to my wants.) got the highest rank. I t implies that most of the students really know that spending must be put for important things.

In terms of Computational Skills, the statement no. 1 (I do develop listing of expenses before spending.) got the highest rank. It implies that listing needed or the things you want to buy will help you avoid debt.

In terms of Estimation and Approximation the statement no. 1 (I estimate the money I have before I buy my needs.) got the highest rank. It implies that most of the students know how to canvass the amount money to spend.

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In terms of Problem Solving the statement no. 1 (I find solutions regardless of having problems encountered.) got the highest rank. It implies that most of the students may overcome financial problem.

In terms of Thinking Skills, the statement no. 5 (I apply the thinking skills properly to compute an exact value of money.) got the highest rank. It implies that having expense tracker will help them see were there money go.

As a whole result of the study, based on the statistical data, it was determined that there is no significant relationship between Financial Competencies and Mathematical Skills of 1st year CTE students enrolled at Pamantasan ng Lungsod ng Muntinlupa for school year 2018-2019.

Less is more Financial literacy booklet will help students on how to have financial stability that will give them the chance to save more money than to spend it in unnecessary things. This booklet will give them guide and tips in order for them to know how to compute, estimate and approximation solve financial problems through the help of the expense tracker, samples and tips.

Recommendations

In the light of the findings and conclusions drawn, the following were offered as recommendations for possible actions:

For the School Administrators. To adapt the research output to be implemented in college students of Pamantasan Ng Lungsod ng Muntinlupa

For the Teachers. To produce a Financial Literacy Booklet that can be used in Financial Management of the students.

To the Students. To use the booklet as a guide for them to enhance their financial management.

To the Future Researchers. To conduct a follow-up study entitled "(Financial Literacy Booklet).

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DIFFICULTIES ENCOUNTERED AND LEARNING REINFORCEMENT IN CALCULUS AT PAMANTASAN NG LUNGSOD NG MUNTINLUPA: BASIS FOR A PROPOSED CALCULUS ACTIVITY WORKSHEETS.

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ABSTRACT

Calculus is one of the hardest subjects in Mathematics. They believe that although they may not be shining in the said field but if given proper guidance and motivation they can improve their performance in Calculus, a great growth and knowledge can be achieved and they too, can excel greatly. The aim of this research are to identify the difficulties encountered by the students in learning calculus, to help the students to overcome their difficulties in learning calculus and to produce learning activities that will help them to improve their learning in calculus. Experience says learning in mathematics can be made easier and enjoyable if our curriculum includes mathematical activities and the teachers are properly oriented about the proper approach to the learner. The researchers used descriptive type of research, stratified sampling technique, and survey questionnaire in this study. Three hundred and sixty-six (366) students were the respondents of the study and it was conducted at Pamantasan ng Lungsod ng Muntinlupa School Year 2018-2019. After collecting, tallying, and computing the whole data, it reveals that majority of the respondents belong to the group with ages 17-20 years old or teenagers.

Learning reinforcement is very important to the learners in order for them to get motivated to the Calculus wherein the students will be engaged in activities and be rewarded and reinforced with praises for doing well. Based on the findings of the study there is significant relationship between difficulties encountered and learning reinforcement in calculus at Pamantasan ng Lungsod ng Muntinlupa.

A Calculus Activity Worksheet was produced and tested by selected 1st year and 3rd year students at Pamantasan ng Lungsod ng Muntinlupa as an actual output of the findings of the study.

Keyword: Calculus, Reinforcement, Activities, Experience and Learning

Summary of Findings

This research study was being posed in the objective of determining difficulties encountered and learning reinforcement in calculus at Pamantasan ng Lungsod ng Muntinlupa (PLMun). The researchers applied quantitative type of research to statistically analyses the data being gathered. In addition, the descriptive research design was also used by the researchers in order to describe and represent the general response of the given allocated respondents which consist of one hundred ninety-two (192) 4th year mathematics major and 3rd year CITCS students at Pamantasan ng Lungsod ng Muntinlupa. To get the major responses of the students on the given statements, researchers used weighted mean. Pearson r and p- value are formulated to conclude if there is any significance relationship between difficulties encountered and learning reinforcement in calculus. The data were gathered through the use of survey questionnaire which is a self-made by the researchers with the help of related literature and studies and personal experiences. Upon administering the survey questionnaire, respondents are advised about the confidentiality of their answers and identities, and also the purpose and significance of the studies.

1. The demographic profile of the respondents in term of:

1.1 Age

Out of 192 respondents, a frequency of 110 or 57.29 percent falls into the age bracket of 17-19. A frequency of 0 or no students-respondent has the age of sixteen years old and below. The majority of the respondents were 17-19 years old and an indication that respondents are in the right age for 3rd year students who did not took the k-12 program currently taking College of Information Technology and Computer Studies (CITCS) and 4th year taking Bachelor of Secondary Education major in Mathematics and officially enrolled at the Pamantasan ng Lungsod ng Muntinlupa for school year 2018-2019.

1.2 Gender

Out of 192 respondents, 117 or 60.94 percent were male. A frequency of 75 or 39.06 percent reported their gender as female. Number of male is greater than the number of female taking Bachelor of Secondary Education major in Mathematics 3rd year taking College of Information Technology and a Computer Studies (CITCS) and 4th year taking Bachelor of Secondary Education major in Mathematics that are officially enrolled at the Pamantasan ng Lungsod ng Muntinlupa for school year 2018-2019.

1.3 College/Department

Out of 192 respondents, majority of the student- respondents are CITCS with a frequency of one hundred seventy-six (176) or ninety-one point sixty-seven percent (91.6%) while CTE has a sixteen (16) or eight point thirty-three percent (8.33%).

2. Difficulties Encountered in Calculus

Based from the result of the study, researchers found out that the difficulties   encountered in calculus are: a) Limit with a weighted mean of 2.02, b) derivatives with a weighted mean of 2.24 and c) Indefinite Integral with a weighted mean of 2.05. All the three Difficulties Encountered in Calculus have a verbal interpretation of "*Disagree*".

Under Limit, the rank one is statement number 3(I easily analyzed the given problem in limit of sequence). When it comes to Derivatives, statement number 2(I easily understand the product and quotient rule by just looking at the given examples.) and in Indefinite Integral, statement no. 1(I easily understand mathematical terminologies.) got the first rank.

3. Learning Reinforcement in Calculus

Based from the result of the study, researchers found out that the learning reinforcement in calculus are: a) positive reinforcement with a weighted mean of 3.28 and verbal interpretation of "strongly agree", b) Exploration with a weighted mean of 3.44 and verbal interpretation of "strongly agree" and c) Exploitation with a weighted mean of 3.27 and verbal interpretation of Agree.

Under positive reinforcement, the rank one is statement number 3(I easily learn calculus when I receive praises rom my parents.). When it comes to exploration, statement number 2 (I easily learn calculus if the teacher teaches the lesson through games.) got the first rank and in exploitation, statement number 1(I study more to get good grades from the teacher.) got the first rank.

4.**Relationship between difficulties encountered and learning reinforcement in calculus.**

The computed r- value of 0.98411082 was an indication that there was a very high positive correlation between the difficulties encountered and learning reinforcement in calculus. To test its significance, the p-value is used. The computed p value is 0.000007 with a verbal interpretation of very high correlation between difficulties encountered and learning reinforcement in calculus at Pamantasan ng Lungsod ng Muntinlupa. The computed t value was greater than the significance level of .05. Therefore, the null hypothesis is rejected. This value was an indication that difficulties encountered and learning reinforcement in calculus was very highly significant to respondents.

5.**An activity worksheet in calculus to improve difficulties in calculus was produced**.

The activity worksheet is mostly filled by learning activities with different topics in calculus as the result of the findings of the study. Base on the result, students are having difficulties in understanding and contextualizing calculus because they lack positive reinforcement. In that case, the contents of the activity worksheet focus on learning activities that will make the students enjoy and easily learn calculus. This activity worksheet will make the parents become aware on the performance of their children.

Conclusions

The researchers came up to the conclusions based on the following findings being studied:

1. The demographic profile of the respondents according to age shows that the majority of the respondents fall under the age bracket of 17-19 years old. This is considered as the appropriate old normal age bracket for third year students who did not take k-12 here in the Philippines. Also, majority of the respondents are male which is normal math inclined course in the Philippine setting's classroom.

2. The difficulties encountered in calculus of CTE and CITCS students who had taken Calculus subject at Pamantasan ng Lungsod ng Muntinlupa are Limit (I easily analyzed the given problem in limit of sequence.) Derivatives (I easily understand the product and quotient rule by just looking at the given examples) and; Indefinite Integral (I easily understand mathematical terminologies.)

3. The learning reinforcement in calculus of CTE and CITCS students who had taken Calculus subject at Pamantasan ng Lungsod ng Muntinlupa are; Positive reinforcement (I easily learn calculus when I receive praises from my parents.) Exploration (I easily learn calculus if the teacher gives worksheet activities.) Exploitation (I study more to get good grades from the teacher.)

4. Based on the findings of the result, there is a significant relationship between difficulties encountered and learning reinforcement in calculus which came from the data given by the students. Hence Activity Worksheets in Calculus was produced.

Recommendations

In the light of the findings and conclusions drawn, the following were offered as recommendations for possible actions:

For the College Dean. To adapt the research output to be implemented in the College Department who is taking calculus subject and To conduct a seminar for the teachers concerning learning reinforcements that lessen the difficulties encountered not only in calculus but also in other subjects.

For the Teachers. To focus more on enhancing the students in Calculus to overcome difficulties obtained in the study specifically in Limit, Derivatives and Indefinite Integral and consider the importance of learning reinforcement in teaching. Teachers should always consider students' diversity and multiple intelligences in teaching.

To the Students. To overcome the difficulties, reinforcement should be provided by the parents, teachers and even the learning environment and to be attentive in a particular subject that gives them a hardship in learning it.

For the Parents. To be aware of their children's academic status so that whenever the learners need learning reinforcement or motivation on their studies, their parents can help them in overcoming difficulties not only in Calculus but also in other subjects.

To the Future Researchers. To conduct a study about the difficulties of teachers in teaching Calculus teacher's instruction and attitude about the subject; to conduct a study about the effectiveness of the activity worksheet proposed by the present researchers for further improvement and implementation. And to conduct a study concerning other learning reinforcement and solving techniques that can enhance student's ability in dealing Calculus subject.

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MARKETING STRATEGY AND ACCOUNTING SKILLS OF SELECTED SARI-SARI STORE OWNERS AT SITIO SAN ANTONIO: BASIS FOR FINANCIAL – ENTREPRENEURIAL SEMINAR

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ABSTRACT

Sari-sari store is a small neighborhood retail shop that caters to members of the community. The name comes from the Filipino term for "variety" (sari-sari). Evidently, the sari-sari store is a phenomenon that is here to stay; and it is one, if not the main source of livelihood for a great number of Filipino families. It will showcase not the common research of an Education studies regarding with Education but also expanding our boundaries with the entrepreneurial study that aims to reach out for those citizens outside the school. Some government project also will be reached by this study. This study was conceptualized to get the findings and identify purposefully the Marketing Strategy and Accounting Skills Thru Financial – Entrepreneurial Seminar that will address the vulnerability of the stores and/or business and its owners. This study aims to: (1) identify the marketing strategy and accounting skills of the respondents; (2) determine the relationship of marketing strategy and accounting skills experienced by the respondents; (3) make an output that will enhance their financial and entrepreneurial skills thru a seminar based on the findings of the study. The researcher used descriptive type of research, purposive sampling technique, and close-ended survey-questionnaire in this study. This study was conducted in Sitio San Antonio, Poblacion, Muntinlupa City. Twenty-six (26) sari-sari store owners were the respondents of the study. After completing the twenty-six (26) sets of answered questionnaires, tallying and computing were done to come up with the results of the study. Majority of the respondents were female ages 27 years old and above. Based on the findings of the study there is a significant relationship between marketing strategy and accounting skills of the respondents. A Financial – Entrepreneurial Seminar was conducted among the sari-sari store owners in Sitio San Antonio, Poblacion, Muntinlupa City as an actual output of the findings of the study.

Keywords: Marketing Strategy, Accounting Skills, Sari-sari stores, Entrepreneurs, Community

Summary of Findings

   This research study was being proposed in the objective of determining the relationship between the marketing strategies and accounting skills among the selected sari-sari store owners at Sitio San Antonio Poblacion, Muntinlupa City. The researchers applied quantitative type of research to statistically analyses the data being gathered. Furthermore, the descriptive research design was also used by the researchers in order to describe and represent the general response of the given allocated respondents which consist of twenty-six (26) out of thirty-five (35) small scale sari-sari store owners. The data gathered were tallied, tabulated, interpreted and analyzed using weighted mean, frequency, percentage, Four Point Scale, Pearson-r and T-test. In order to obtain the major responses of the students on the given statements, researchers used weighted mean. The researchers used a self-constructed survey questionnaire to gather data with the help of related literature and studies and personal experiences. Upon administering the survey questionnaire, respondents were advised about the confidentiality of their answers and identities, and also the purpose and significance of the studies.

  1. The conducted study was required to have the demographic profile of the respondents in terms of age, gender and years in business. In terms of age, out of 26 respondents, most of the respondents' age range were twenty-seven (27) years old and above with the highest number of twenty-two (22) or eighty-four point sixty-two percent (84.62%) whereas the least number of respondents was zero (0) or zero percent (0%) which lies in the age range of seventeen (17) and below and twenty-one (21) to twenty-three (23). On the other hand, majority of the respondents' gender is female with twenty-five (25) or ninety-six point fifteen percent (96.15%) of them. In terms of years in business, majority of the respondents runs their business for four years (4) and above with eighteen (18) of them or sixty-nine point twenty-three percent (69.23%) and two (2) to three (3) years in business is the least with two (2) or seven point sixty-nine percent (7.69%).

  2. Based on the overall results of the study, researchers found out that Marketing Strategy in terms of (a) Product Quality with an average mean of 3.50 with a descriptive interpretation "Strongly

Agree"; (b) Pricing with an average mean of 3.44 with a descriptive interpretation "Strongly Agree; (c) Accessibility with an average mean of 2.95 with a descriptive interpretation "Agree" and; (d) Promotional Strategy with an average mean of 3.19 with a descriptive interpretation "Agree". Under Product Quality the most beneficial and common for the respondents is stated in statement no. 1 (*I provide good quality products for my customer*). When it comes to pricing the most beneficial and common for the respondents is stated in statement no. 1 (*I offer affordable price*). In terms of Accessibility the most beneficial and common for the respondents is stated in statement no. 1 (*My store is accessible to the people*). And in terms of Promotional Strategy the most beneficial and common for the respondents is stated in statement no. 5 (I have organized display products).

3. Based on the result of the study, researchers found out that the Accounting Skills of the selected sari-sari store owners in terms of: a) Analytical Skill with an average mean of 3.26 with a descriptive interpretation "Strongly Agree"; b) Computation Skill with an average mean of 3.19 with a descriptive interpretation "Agree"; c) Money Handling Skill with an average mean of 3.37 with a descriptive interpretation "Strongly Agree"; and d) Communication Skill with an average mean of 3.45 with a descriptive interpretation "Strongly Agree". Most of the respondents have a poor Accounting Skills under Analytical Skill stated in statement no. 5 (I practice a step by step process plan). When it comes to Computation Skills most of them find it difficult stated in statement no. 3 (I have a competitive price difference with other stores). Under Money Handling Skill, majority of the respondents have a difficulty stated in the statement no. 2 & 4 (I set aside the profit and expenses per day/I always have allotted budget to buy products "old/new"). In terms of Communication Skill, most of the respondents are poor stated in statement no. 4 (I have a good deal with my creditors).

4. The overall result of the study, based on the statistical data, there is significant relationship between the Marketing Strategy and Accounting Skills of the respondents.

Conclusion

The researchers drawn the following conclusion based on the findings of the study:

1. The demographic profile of the respondents in terms of age shows that out of 26 respondents, majority of the respondents' age range were twenty-seven (27) years old and above and most of them is female and runs their business for four (4) years and above.

2. The respondents strongly agreed that Product Quality is the important marketing strategy. Thru Product Quality they can really assure their customers in purchasing products with a good quality and offers a best service.

3. In terms of Accounting Skills, the respondents are highly skilled in Communication. They learn and experience how to have and value a good relationship with their customers such as "suki" or valued customers and creditors. They are skilled in Money Handling because they set aside the profit and expenses every day and they allotted a budget for their products.

4. The computed Pearson r is 0.703 that indicates that there is a high positive correlation between Marketing Strategy and Accounting Skills of selected sari-sari store owners at Sitio San Antonio. Thus, a proposed Financial – Entrepreneurial Seminar was made

Recommendation

In accordance to the conclusions created by the researchers, they formulated the following recommendations:

- **For the CTE Research & Extension.** To plan and implement a series of seminars and programs related to financing and entrepreneurship.

- **For the Muntinlupa Officials,** to promote and provide livelihood programs and financial assistance that will help entrepreneurs and the community as well in order to support, sustain, and succeed in their own business as well as their living status.

- **To the entrepreneurs**. To participate in the seminars conducted in their place to boost their confidence and increase their concepts and ideas on how to promote their business and handle a good financial status of their stores. It will help them to achieve a small success to a much more success in business or "pagnenegosyo".

- **To the future researchers.** To conduct study that is significant to the current study. In order to achieve success in handling their own business whether it is a micro, small or large kind of business, this study will serve as their handbook to explore and discover new things that will need to be improved. The researchers also recommend the future researchers to conduct a series of study and seminars and alternative programs about the promotional strategy, computation skills, money handling skills and especially in terms of financing and keeping of records.
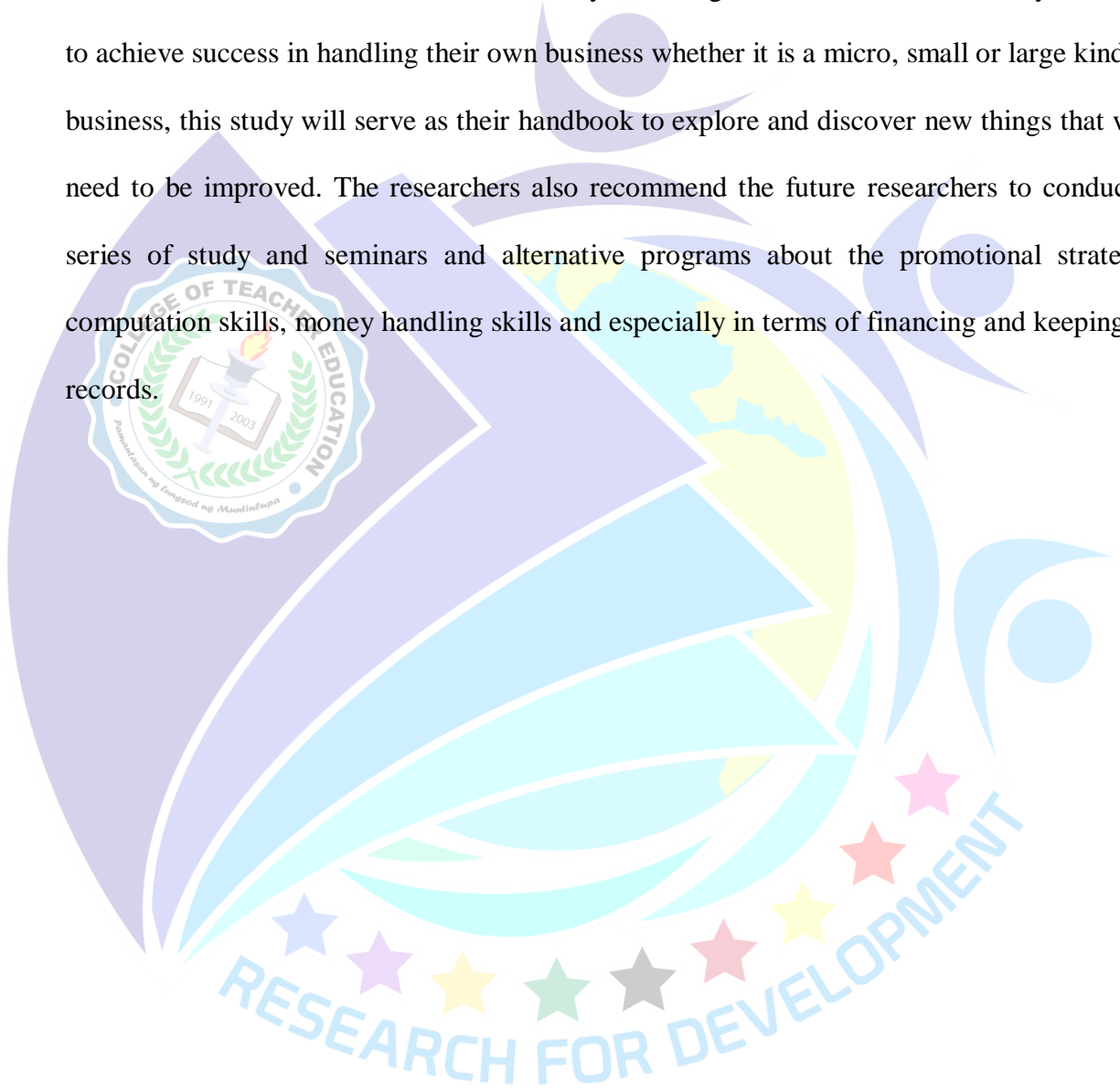
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COMPETENCIES OF FRESHMAN ALGEBRA APPLICATION USER AND NON-USER IN COLLEGE OF TEACHER EDUCATION PAMANTASAN NG LUNGSOD NG MUNTINLUPA: BASIS FOR PROPOSED ALGEBRA LEARNING PAMPHLET

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ABSTRACT

Mathematics is one of the fundamental subject that all institution offers to their students, from pre-schooling up to tertiary level thus, one of the major branch of Mathematics is Algebra. It focuses on mathematical symbols and manipulating this symbols. Even though Algebra is part of the current curriculum of the Philippine Education system especially freshmen students. The competency of students in Algebra varies most especially those who use Algebra Application and those who do not using this kind of Application. Thus, this study was conceptualized to get the findings and identify purposefully the difference of Algebra Application User and non-user of these freshmen. This study aims to: (1) identify the competencies of Algebra Application User; (2) identify the competencies of non-user; (3) create a Algebra learning pamphlet based on the findings of the study. The researcher used descriptive type of research, random sampling technique, and survey questionnaire in this study. This study was conducted in Pamantasan ng Lungsod ng Muntinlupa College of Teacher Education Department Year 2018-2019. One hundred and seven (107) freshmen were the respondents of the study. After completing the one hundred and seven (107) sets of answered questionnaires, tallying and computing were done to come up with the results of the study. Based on the findings of the study there is a significant difference between the competencies of Algebra Application User and Non- User of the respondents.

The Algebra Learning Pamphlet was named Solve Algebra and was made as an actual output of the findings of the study.

Keywords: Algebra Competencies, Algebra Apps, Expression, Matrices, Functions

Summary of Findings

This research study was being proposed in the objective of determining the significant difference in terms of Competencies of Algebra Application User and Non-User of College of Teacher Education Freshmen students at Pamantasan ng Lungsod ng Muntinlupa. The researchers applied quantitative type of research to statistically analyze the data being gathered. In addition, the descriptive research design was also used by the researchers in order to describe and represent the general response of the given allocated respondents which consist of one hundred seven (107) College of Teacher Education freshmen students at Pamantasan ng Lungsod ng Muntinlupa. To get the major responses of the students on the given statements, researchers used weighted mean. t-test is formulated to conclude if there is any significant difference between Competencies of Algebra Application User and Non-User students specifically in Solving Algebraic Expressions, Operation of Polynomials, Combining Like Terms, Multiplying Binomials, Solving Matrices, Solving Exponential and Logarithmic Functions and Solving Linear Inequalities. The data were gathered through the use of survey questionnaire which is a self-made by the researchers with the help of related literature and studies and personal experiences. Upon administering the survey questionnaire, respondents are advised about the confidentiality of their answers and identities, and also the purpose and significance of the studies.

1. The conduct of the study requires the demographic profile of the respondents in terms of age, gender and Algebra Application user. The respondents' age ranges from sixteen to twenty-four years old. There are 31 or 28.97% of the total respondents is in the age bracket of 16-18 years old, while 55 or 51.40% of the respondents is in the age bracket of 19-21 years old. Meanwhile 21 or 19.63% of the total sample has the age 22-24 years old.

   When it comes to their gender, results indicated that the Majority of the student-respondents with a total frequency of 60 or 56.07%. while male has a frequency of forty – seven (47) or forty-three point ninety - three percent (43.93%).

When it comes to the distribution of the student- respondents in terms of Algebra Application User and Non-User. Results showed that the Algebra Application User students has the highest frequency with a frequency of fifty-four or fifty point forty-seven percent (50.47%). And Algebra Application Non-User with a frequency of fifty-three (53) or forty-nine point fifty-three (49.53%).

2. Based from the whole result of the study, researchers found out that the Competencies of Algebra Application User: a.) The Competency in Solving Algebraic Expressions of Algebra Application User students with a weighted mean of 3.31, b.) The Competency in Operation of Polynomials of Algebra Application User students with a weighted mean of 3.25, c.) The Competency in Solving Matrices of Algebra Application User students with a weighted mean of 3.25, d.) The Competency in Solving Exponential and Logarithmic Functions of Algebra Application User students with a weighted mean of 3.29, e.) The Competency in Combining Like Terms of Algebra Application User students with a weighted mean of 3.59, f.) The Competency in Multiplying Binomials of Algebra Application User students with a weighted mean of 3.51 while Non-User students have a weighted mean of 3.22, and g.) The Competency in Solving Linear Inequalities of Algebra Application User students with a weighted mean of 3.08.

Under the Competency in Solving Algebraic Expressions, Application User students agree on statement no. 1(I easily understand the concepts of Algebraic Expression) while Non-Use students agree on statement no. 3 (I easily identify rules in simplifying Algebraic expression.), in the Competency in Operation of Polynomials, both Application User and Non-User students agree on statement no. 1(I easily identify the degree of polynomials), when it comes in the Competency in Solving Matrices, Application User students agree on statement no. 1(I easily understand the concept and uses of Matrices) while Non-Use students agree on statement no. 2(I solve matrices with different method.), in the Competency in Solving Exponential and Logarithmic Functions, both Application

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User and Non-User students agree on statement no. 1(I easily understand concepts about Exponential and Logarithmic), in the Competency in Combining Like Terms, Application User students agree on statement no. 2(I easily organize like terms on the algebraic expressions.) while Non-Use students agree on statement no. 1 (I easily understand the concepts of combining like terms.), in the Competency in Multiplying Binomials, Application User students agree on statement no. 1(I easily understand the concepts of multiplying binomials) while Non-Use students agree on statement no. 3 (I easily multiply binomials with the use of Vertical Method.) lastly, under the Competency in Solving Linear Inequalities, Application User students agree on statement no. 3 and 4(I easily compute linear inequalities and I easily solve and graph linear inequalities) while Non-Use students agree on statement no. 2 (I easily solve problems in linear inequalities with one variable.)

3. Based from the whole result of the study, researchers found out that the Competencies of Algebra Application of the Non-User: a.) The Competency in Solving Algebraic Expressions of Algebra Application Non-User students have a weighted mean of 3.08, b.) The Competency in Operation of Polynomials of Algebra Application Non-User students have a weighted mean of 3.00, c.) The Competency in Solving Matrices of Algebra Application Non-User students have a weighted mean of 2.80, d.) The Competency in Solving Exponential and Logarithmic Functions of Algebra Application Non-User students have a weighted mean of 2.99, e.) The Competency in Combining Like Terms of Algebra Application Non-User students have a weighted mean of 3.26, f.) The Competency in Multiplying Binomials of Algebra Non-User students have a weighted mean of 3.22, and g.) The Competency in Solving Linear Inequalities of Algebra Application Non-User students have a weighted mean of 3.23.

Under the Competency in Solving Algebraic Expressions, Application User students agree on statement no. 1(I easily understand the concepts of Algebraic Expression) while Non-User students agree on statement no. 3 (I easily identify rules in simplifying Algebraic expression.), in the Competency in Operation of Polynomials, both Application User and Non-User students agree on

statement no. 1(I easily identify the degree of polynomials), when it comes in the Competency in Solving Matrices, Application User students agree on statement no. 1(I easily understand the concept and uses of Matrices) while Non-User students agree on statement no. 2(I solve matrices with different method.), in the Competency in Solving Exponential and Logarithmic Functions, both Application User and Non-User students agree on statement no. 1(I easily understand concepts about Exponential and Logarithmic), in the Competency in Combining Like Terms, Application User students agree on statement no. 2(I easily organize like terms on the algebraic expressions.) while Non-User students agree on statement no. 1 (I easily understand the concepts of combining like terms.), in the Competency in Multiplying Binomials, Application User students agree on statement no. 1(I easily understand the concepts of multiplying binomials) while Non-Use students agree on statement no. 3 (I easily multiply binomials with the use of Vertical Method.) lastly, under the Competency in Solving Linear Inequalities, Application User students agree on statement no. 3 and 4(I easily compute linear inequalities and I easily solve and graph linear inequalities) while Non-User students agree on statement no. 2 (I easily solve problems in linear inequalities with one variable.

4. As a whole result of the study, based on the statistical data, there is a significant difference between the Competency of Algebra Application User and Non-User students in Mathematics in Algebra.

5. Based on the findings of the study, what is the Algebra Learning Pamphlet maybe proposed? Since there is a significant difference between Algebra Application User and Non-User, the findings show that students who use application in Algebra become more competent therefore, the researchers proposed pamphlet that contains Application, Sites and tips that will help the students learn algebra in easier and effective ways.

Conclusion

The researchers came up to the conclusions based on the following findings being studied:

Majority of the respondents fall under the age bracket of 19-21 years old.

This age bracket is the new appropriate age for first year college students here in Philippines but nowadays because of K –12 program.

The Competency of Algebra Application User and Non-User has significant difference in terms of Solving Algebraic Expressions, Operation of Polynomial, Solving Matrices, Solving Exponential and Logarithmic Functions, Combing Like Terms, Multiplying Binomials and Solving Linear Inequalities.

Based on the findings of the result, gender does not affect the competency of Algebra Application User and Non-User in Algebra, thus, an Algebra Learning Pamphlet was proposed.

Recommendation

In accordance to the conclusion being created by the researchers, they formulated the following recommendations:

The research came up to the result that Algebra Application User is more competent than Non-User in Algebra. Since the researchers came up to an Algebra Application pamphlet, they highly recommend the teachers to have this pamphlet in order to discover new information on how they can improve their teaching strategies in order to develop the competency of students in learning Algebra. The researchers made sure that this pamphlet is full of information about Algebra Application that can be used in their profession.

For the PLMUN Administration. Must also take their actions in helping the students to raise the competency of students in Mathematics especially in Algebra. The educational institution may

conduct seminars to both teachers and students to introduce this Algebra Application that will help them improve their competency and help them appreciate Algebra.

For the parents. Albersmann and Rolka (2016) parents should support their children more actively in order to overcome the difficulties together and refocus. The conditions for parental support in their children's mathematical education change fundamentally in the course of secondary school years. Therewith, new challenges but at the same time new possibilities for parental involvement in their children's mathematical learning emerge. Base from their statement, researchers recommend that parents must guide and support the studies of their children.

For the future researchers. can conduct study significant to the current study. This is to explore and discover more Application that will help the students so that they can easily and more competent in engaging Algebra. Moreover, they can also use this research to other discipline by finding Application that can be a source of information for the benefits of the students.
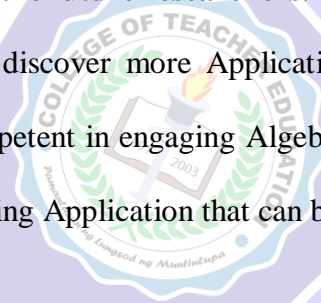
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PICTURE SMARTNESS AND PERFORMANCE TASK IN GEOMETRY OF COLLEGE FRESHMEN: BASIS FOR PROPOSED GEOMETRY MADE EASY BOOKLET

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ABSTRACT

Majority of students in a classroom setting are observably aloof from mathematics and numeracy discussions. Geometry, on the other hand, is one of the branches of mathematics that students thought to be practical and easy but the theories behind it are not as easy to comprehend as many people thought The problem lies on the students' ability to visualize, represent, reason and translate words into symbols and be able to practice them through performance tasks thus, this study was conceptualized to get the findings and identify purposefully the Geometry Made Easy Booklet which may address possible difficulties in the daily encounter of these freshmen. This study aims to: (1) identify picture smartness of the respondents; (2) determine performance tasks needed by the respondents; (3) create a made-easy booklet based on the findings of the study. The researcher used descriptive type of research, random sampling technique, and survey questionnaire in this study. This study was conducted in Pamantasan ng Lungsod ng Muntinlupa College of Teacher Education Department Year 2018-2019. One hundred and seven (107) freshmen were the respondents of the study. After completing the one hundred and seven (107) sets of answered questionnaires, tallying and computing were done to come up with the results of the study.

There is a need to cultivate the picture smartness of the respondents and a need to reformulate performance tasks in the class. Based on the findings of the study there the researcher fails to reject the null hypothesis, indicating that there is no sufficient evidence to reject the null hypothesis. This implies that the relationship between picture smartness and performance tasks in Geometry is not evident based on the conditions that the respondents are in.

The Geometry Made-Easy booklet named "**M**aking your pr**a**ctice **T**urn into a **H**abit" was made as an actual output of the findings of the study.

Keywords: Spatial, Visual, Performance, Home, School, Community

Summary of Findings

The salient of findings of the study are enumerated as follows:

1. What is the **Picture Smartness** of the CTE freshmen along with visualization technique, spatial representation, abstract spatial reasoning and mathematizing?

   1.1 Visualization technique

   In terms of Visualization Technique, the most encountered of the respondents was statement number 5 (I always approach a mathematics problem by visualizing the figures before solving.) It has a weighted mean three point forty-two 3.42. Meanwhile, statement no. 2 (I am good at estimating the measure of figures.) falls on the lowest rank with a weighted mean of three point zero nine (3.09).

   1.2 Spatial Representation

   In terms of Spatial Representation, the most encountered of the respondents was statement number 1 (I always create a pattern to help me understand a concept.). It has a weighted mean three point fifty-one (3.41). Meanwhile, statement number 5 (I am good at distinguishing shapes between two-dimensional and three-dimensional figures.) got the lowest rank with a weighted mean of three point fifteen (3.15).

   1.3 Abstract Spatial Representation

   In terms of Spatial Representation, the most encountered of the respondents was statement number 3 (I take careful reading on statements that seem to be confusing.). It has a weighted mean three point forty-one (3.41). Meanwhile, statement number 1 (I easily explain the given mathematical statements after reading once.) got the lowest rank with a weighted mean of three point sixteen (3.16).

   1.4 Mathematizing

   In terms of Mathematizing, the encountered of the respondents was statement number 4 (I enjoy problems involving mathematizing word statements)). It has a weighted mean three

point twenty-one (3.21). Meanwhile, statement number 2 (I know every key term needed to transform word problems into mathematical statements) got the lowest rank with a weighted mean of two point ninety-one (2.91).

2. What is the **Performance Task** in Geometry needed by the CTE freshmen along with presentations, exhibits, debates and contextualization?

2.1 Presentations

In terms of presentation, the most needed performance task of the respondents was statement number 5 (I find it easy to present if I have a visual aid). It has a weighted mean of three point forty-eight (3.48). Meanwhile, statement number 2 (I am very confident on my grammar and diction) got the lowest rank with a weighted mean of three point fifteen (3.15).

2.2 Exhibits

In terms of exhibits, the most needed performance task of the respondents was statement number 5 (I learn from the feedback of others about my exhibit). It has a weighted mean of three point fifty (3.50). Meanwhile, statement number 3 (I am creative in doing models or miniatures) got the lowest rank with a weighted mean of three point thirty-five (3.35).

2.3 Debates

In terms of debates, the most needed performance task of the respondents was statement number 5 (I make friends, I clear out my opinions to others). It has a weighted mean of three point forty-one (3.41). Meanwhile, statement number 1 (I perform better whenever I have rivals in ideas) got the lowest rank with a weighted mean of three point thirty-two (3.32).

2.4 Contextualization

In terms of contextualization, the most needed performance task of the respondents was statement number 1 (I understand lessons better when they are being taught practically). It has a weighted mean of three point fifty-five (3.55).   Meanwhile, statement number 5 (I am

always challenged to do activities that I am weak at) got the lowest rank with a weighted mean of three point thirty-six (3.36).

3. Is there a **significant relationship** between the picture smartness and performance task of the CTE Freshmen?

The computed r value of 0.5053 was an indication that there was a moderate correlation between the picture smartness and performance task in Geometry of the College of teacher education freshmen students. To test its significance, the t-test is used. The researcher came up with the decision of failing to reject H_o since the computed p-value was greater than 0.05 level of significance.

4. Based on the data gathered, **what Geometry made easy booklet maybe proposed?**

From the data analyzed and interpreted, the findings show that there is no significant relationship between the two variables. Taking the result of the findings into consideration, the researchers may organize a booklet entitled "Making your Practice Turn into Habit" that would reinforce those that have good spatial ability and help those that have weak spatial ability.

Conclusion

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

In terms of Visualization Technique, it implies that most students visualize the problem before starting to solve. In terms of Spatial Representation, it implies that using patterns help most of the students to understand different concepts. In terms of Abstract Spatial Representation, it implies that most students do not recklessly solve mathematics problems. In terms of Mathematizing, it implies that most students that are good at translating word problems into mathematical statements are interested in solving mathematical problems. In

terms of "presentations", it implies that most students would be efficient in presenting if visual aids are available. In terms of "exhibits", it implies that most students must show character of being teachable. In terms of "debates", it implies that most students should be constructive in dealing with other people's opinions. In terms of "contextualization", it implies that most students learn by doing and not just by hearing. There is no significant relationship between the visualization technique and contextualization needed by the respondents. There is no significant relationship between of picture smartness in term of abstract spatial reasoning and performance task in terms exhibits needed by the respondents. There is no significant relationship between of picture smartness in term of mathematizing and performance task in terms debates needed by the respondents. There is no significant relationship between of picture smartness in term of mathematizing and performance task in terms contextualization needed by the respondents. The rest of the picture smartness and performance task of the respondents have significant relationship. Thus, The Geometry made easy booklet entitled "Making your PrActice Turn into Habit" that would reinforce those who have good spatial ability and help those who have weak spatial ability was proposed.

Recommendation

In the light of the findings and conclusions drawn, the following were offered as recommendations for possible actions:

For the teachers. To teach the lessons taking consideration of the Visualization Technique, Spatial Representation, Abstract Reasoning and Mathematizing abilities of the students and strategize in catching the interest and focus of the students in learning Geometry.

For the Students. To practice more in enhancing not only memorizing operations, theorems and shapes, but also their logical reasoning and comprehension and seek guidance from teachers, classmates, school's library and other resources to enhance their knowledge of the fundamental concepts as well as the advanced concepts of Geometry.

For the Future Researchers. To conduct a follow-up study entitled "Picture Smartness and Performance in Problem-Solving Based Learning Activities in Geometry of College Freshmen: Basis for proposed enhanced Geometry Learning Activity Worksheet."

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GENDER ANALYSIS OF ACTIVITY-BASED PERFORMANCE IN MATHEMATICS IN THE MODERN WORLD OF FRESHMEN STUDENTS AT PAMANTASANNG LUNGSOD NG MUNTINLUPA: BASIS FOR A PROPOSED GAD INTEGRATED STUDENT'S WORKSHEET

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ABSTRACT

Throughout history the role of man and woman was different from each other. Man is the dominant and powerful being in all aspects while the woman should be submissive and powerless in their society. This stereotyping affects the mind and behaviour of every individual towards anything that they might do especially in studying different disciplines particularly in Mathematics. This study aimed to: (1) Identify the Activity – Based Performance of Male and Female students in Mathematics in the Modern World in terms of problem based, practical, collaborative and oral reasoning performance; (2) Determine and analyze the Differences between the Activity – Based Performance of Male and Female students in Mathematics in the Modern World; (3) Create a proposed GAD Integrated Student's Worksheet based on the findings of the study. The researchers used descriptive type of research, stratified sampling technique, and survey questionnaire in this study. Three hundred and fifty (350) 1st year students were the respondents of the study and it was conducted at Pamantasan ng Lungsod ng Muntinlupa School Year 2018-2019. After collecting, tallying, and computing the whole data, it revealed that majority of the respondents belong to the group with ages 16-18 years old or teenagers.

Male and female students should have an equal opportunity and treatment by giving different activities that can develop their mathematical skills such as problem solving skills, critical thinking skills, social skills and reasoning skills. Based on the finding of the study, there is no significant difference between the Activity – Based Performance of Male and Female students in Mathematics in the Modern world at Pamantasan ng Lungsod ng Muntinlupa.

A GAD Integrated Student's Worksheet was produced and tested by selected 1st year students at Pamantasan ng Lungsod ng Muntinlupa as an actual output of the findings of the study.

Keyword: Gender Analysis, Problem-Based Performance, Practical Performance, Collaborative Performance, and Oral Reasoning Performance.

Summary of Findings

This research study was being proposed in the objective of determining the Gender Analysis of Activity – Based Performance in Mathematics in the Modern World of Freshmen students at Pamantasan ng Lungsod ng Muntinlupa. The researchers applied quantitative type of research to statistically analyze the data being gathered. In addition, the descriptive research design was also used by the researchers in order to describe and represent the general response of the given allocated respondents which consist of three hundred and fifty (350) freshmen students at Pamantasan ng Lungsod ng Muntinlupa. To get the major responses of the students on the given statements, researchers used weighted mean. t-Test is formulated to conclude if there is any significance difference between Activity – Based Performance of Male and Female students specifically in Problem Based Performance, Practical Performance, Collaborative Performance and Oral Reasoning Performance. The data were gathered through the use of survey questionnaire which is a self-made by the researchers with the help of related literature and studies and personal experiences. Upon administering the survey questionnaire, respondents are advised about the confidentiality of their answers and identities, and also the purpose and significance of the studies.

1. The conduct of the study requires the demographic profile of the respondents in terms of age, gender and college/department. The respondents' age ranges from sixteen to twenty-four years old. There are 179 or 51.14% of the total respondents is in the age bracket of 16-18 years old. When it comes to their gender, results indicated that there is an equal distribution of frequency with a total number of 175 or 50%. Same thing with the college/department, the results indicated that there is an equal distribution of frequency with a total number of 70 or 20%.

2. Based from the whole result of the study, researchers found out that the activity – based performance of male students does not differ from the performance of female students in Mathematics in the Modern World. Under the Problem Based Performance, male students agree on statement no. 5(I take the responsibility to solve the given problem on my own) while female students agree on

statement no. 1 (I have the initiative to answer the given problem.), in Practical Performance, male students agree on statement no. 4 (I easily solve the given problem if I know the operations or formulas that is needed.) while female students agree on statement no. 1 (I solve the problem if it is connected to my previous knowledge.), when it comes in Collaborative Performance male and female students agree on statement no. 5 (I improve my mathematical skills when doing group task or group activities), lastly under Oral Reasoning Performance male students disagree on statement on no. 4 (I easily state the logical way of solving the given problem) while female students agree on statement no. 1 (I easily state conclusion(s) about the given problems).

3. As a whole result of the study, based on the statistical data, there is no significant difference between the Activity – Based Performance of Male and Female students in Mathematics in the Modern world.

4. GAD Integrated Student's Worksheet to give an equal opportunity and help them solve different problems with different activities was produced.

Conclusion

The researchers came up to the conclusions based on the following findings being studied:

The demographic profile of the respondents according to age shows that the majority of the respondents fall under the age bracket of 16-18 years old.

The Activity – Based Performance of Male and Female students in Mathematics in the Modern World has no significant difference in terms of Problem Based Performance, Practical Performance, Collaborative Performance and Oral Reasoning Performance.

Based on the findings of the result, gender does not affect the performance of the students in Mathematics in the Modern World.

The proposed GAD Integrated Student's Worksheet collected an affirmative response/feedback from male and female students during pilot testing.

Recommendation

In accordance to the conclusion being created by the researchers, they formulated the following recommendations:

For the School Administrators. To be aware to the differences of every students and give them an equal opportunity to develop their own learning in Mathematics by giving them a reinforcement, conducive environments and fun activities.

For the Curriculum Planners. To revise and improve the school's curriculum towards student's differences in learning Mathematics.

For the Teachers. To determine the gender differences of every individual inside the classroom and provide a better method that can be used in learning process of both male and female students. Also the researchers recommended that teachers should give equal treatment and opportunity to every students and guide them to develop their mathematical skills in Mathematics.

For the Parents. To be aware of the differences and styles on how their child learns.

For the Students. To be aware of their own differences in learning Algebra and Statistics in Mathematics in the Modern World. They should know how to reinforce their selves using their differences as male and female in improving their problem solving skills, critical thinking skills, social skills and reasoning skills.

For the Future Researchers. To conduct a follow-up study entitled "Gender Analysis of Problem-Based Learning of Male and Female Students in Mathematics in the Modern World: Basis for a proposed GAD Integrated Seminar –Workshop".

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COMPUTATIONAL SKILLS AND LEARNING EXPERIENCES IN MATHEMATICS IN THE MODERN WORLD AT PAMANTASAN NG LUNGSOD NG MUNTINLUPA: BASIS FOR A PROPOSED MATHEMATICS ACTIVITY BOOKLET

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ABSTRACT

Mathematics is one of the hardest subjects for some students. Some people believe that although they may not be shining in the said field but if given proper guidance and training in their formative period of life, a great growth and knowledge can be achieved and they too, can excel greatly. A good curriculum of mathematics is helpful in effective and efficient teaching and learning of the subject. Experience says learning in mathematics can be made easier and enjoyable if our curriculum includes mathematical activities. This study aims to: (1) Identify the Students' Computational Skills; (2) Determined and analyzed the relationship between Computational Skills and Learning Experiences in Mathematics in the Modern World; (3) Create a proposed Mathematics Activity Booklet based on the findings. The researchers used descriptive type of research, random sampling technique, and survey questionnaire in this study. Three hundred and fifity (350) 1st year students were the respondents of the study and it was conducted at Pamantasan ng Lungsod ng Muntinlupa School Year 2018-2019. After collecting, tallying, and computing the whole data, it reveals that majority of the respondents belong to the group with ages 16-20 years old or teenagers.

There is need to address the mastery of the basic mathematics skills and learning activities in the subject mathematics in the modern world wherein the students will be engaged in activities and be rewarded and reinforced with praises for doing well. Based on the findings of the study there is significant relationship between computational skills and learning experiences in mathematics in the modern world at Pamantasan ng Lungsod ng Muntinlupa.

A MathSaya Activity Booklet was produced and tested by selected 1st year students at Pamantasan ng Lungsod ng Muntinlupa as an actual output of the findings of the study.

Keyword: Experience, Guidance, Training, Enjoyable, Growth, Knowledge

Summary of Findings

This research study was proposed in the objective of determining the Computational Skills and Learning Experiences in Mathematics in the Modern World at Pamantasan ng Lungsod ng Muntinlupa. The researchers applied quantitative type of research to statistically analyze the gathered data. In addition, the descriptive research design was also used by the researchers in order to describe and represent the general response of the given allocated respondents which consist of three hundred fifty (350) 1st year students at PLMun. To get the major responses of the students on the given statements, researchers used weighted mean. Pearson r and t-test value are formulated to conclude if there is any significant relationship between Computational skills and Learning Experiences in Mathematics in the Modern World. The data were gathered through the use of survey questionnaire which is a self-made by the researchers with the help of related literature and studies and personal experiences. Upon administering the survey questionnaire, student-respondents are advised about the confidentiality of their answers and identities, and also the purpose and significance of the studies.

1. **What is the demographic profile of the respondents in terms of: age, gender, and college/department?**

The demographic profile of the respondents shows that in the age bracket of 15 years old and below, there is only 1 respondent. Meanwhile, 16-20 year olds have a total of 273 respondents, 21-25 years old have 70 respondents and lastly, 26 year olds and above has no respondents. When it comes to gender, 187 respondents were female and 163 respondents were male and all of them are from CAS, CBA, CCJ, CITCS, and CTE.

2. **What are the students' computational skills in the subject Mathematics in the Modern World along with: arithmetic skill, strategic thinking, accuracy, and analysis?**

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Based from the whole result for computational skills, arithmetic skill got a categorical mean of 3.04, strategic thinking got a categorical mean of 2.96, and accuracy got a categorical mean of 2.98, while analysis got a categorical mean of 3.17.

3. What are the learning experiences of the students in the context of: attention, curiosity, interest, and passion?

According to the whole result for learning experiences, attention got a categorical mean of 3.14, curiosity got a categorical mean of 3.15, interest got a categorical mean of 3.15, and passion got a categorical mean of 3.15.

4. Is there any significant relationship between Computational Skills and Learning Experiences in Mathematics in the Modern World at Pamantasan ng Lungsod ng Muntinlupa?

Based on the statistical data, there is a slight correlation between Computational

Skills and Learning Experiences in Mathematics in the Modern World at Pamantasan ng Lungsod ng Muntinlupa.

5. Based on the findings of the study, what kind of Mathematics activity booklet maybe proposed?

A MathSaya Activity Booklet can be proposed.

Conclusion

The researchers came up to write the conclusions based on the findings being studied:

Most of the respondents are from age bracket of 16-20 years old, are mostly female and are from CAS, CBA, CCJ, CITCS, and CTE.

Under Computational Skills, Analysis got the highest weighted mean which implies that majority of the respondents can easily get the mode of a given grouped data or ungrouped data in central of tendency.

Under Learning Experiences, Passion with the highest result that the respondents can pay attention when the teacher is teaching got "Strongly Agree". Thus, there is a good learning experiences in the subject mathematics in the modern world.

Significant relationship between computational skills and learning experiences in mathematics in the modern world at Pamantasan ng Lungsod ng

Muntinlupa, hence, there is a need to produce a proposed MathSaya Activity Booklet.

Recommendation

In the light of the findings and conclusions drawn, the following were offered as recommendations for possible actions:

For the School Administrators. To improve the school curriculum of the students based on Computational Skills and Learning Experiences in learning Mathematics in the Modern World. To give an accurate curriculum that

corresponds to the needs of the students.

For the Teachers. To have an excellent and productive ways of teaching. **To the Students.** To help them connect their experiences in learning mathematics in the modern world.

To the Future Researchers. To conduct a study about "Level of Arithmetic Skills and Mathematics Classroom Engagement in Mathematics in the Modern World in College of Teacher Education: Basis for a Proposed Mathematics Activity Booklet".

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