Global Scientific JOURNALS

GSJ: Volume 11, Issue 5, May 2023, Online: ISSN 2320-9186
www.globalscientificjournal.com

LEARNING AND STUDYING SKILLS OF STUDENTS IN GENERAL MATHEMATICS DURING THE COVID-19 PANDEMIC

A Master's Thesis

Presented to the Faculty

of the Central Graduate School

ISABELA STATE UNIVERSITY

Echague, Isabela

In Partial Fulfillment

of the Requirements for the Degree

MASTER OF SCIENCE IN MATHEMATICS EDUCATION

by

CHRISTIAN BOY D. CACHO

December 2021

APPROVAL SHEET

The thesis attached hereto entitled **"LEARNING AND STUDYING SKILLS OF THE UNIVERSITY OF PERPETUAL HELP SYSTEM STUDENTS DURING THE COVID-19 PANDEMIC",** prepared and submitted by **CHRISTIAN BOY D. CACHO,** in partial fulfilment of the requirements for the degree **MASTER OF SCIENCE IN MATHEMATICS EDUCATION,** is hereby endorsed.

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ACKNOWLEDGEMENT

It is the author's pleasure to express his heartfelt gratitude and appreciation to the following people who, in one way or another helped in the realization and success of this study:

Ms. Marianne Antoinette D. Pua, his adviser, for devoting her time and effort, assistance and professional guidance during the course of the study;

Dr. Eliza P. Dela Cruz, his statistician, for her significant contribution to improve the study in terms of the needed variables and analysis of data;

Dr. Artemiom A. Martin Jr., the OIC Dean of the Central Graduate School, for his knowledge and understanding which led to the success of this endeavor;

Mrs. Ma. Corazon C. Medina, Mrs. Marie-Anne P. Barrera, Mrs. Michelle B. Estillore, Ms. Lailanie Quilang, and Ms. Neri P. Bustamante, for their kindness whenever there were things that the researcher needed for his study especially during these trying times;

To his loved one, his parents, Mr. Prudencio and Mrs. Luisa Cacho, for their unending support, love and encouragement, to his sister Febbie for her additional support and motivation which always guided him in his way to success.

Finally, to the Almighty God, for showering his special blessings and for giving him constant guidance that led to the successful fulfillment of his goals and ambitions. Without Him, this study would not have been realized;

To all of them, this piece of work is heartily and lovingly dedicated.

The Researcher

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ABSTRACT

This study ventured to determine the learning and studying skills of the 127 students of University of Perpetual Help System Senior High School Department amidst the COVID-19 pandemic. The main purpose of this study was to determine the profile of the students as to their sex, strand, and academic performance in general mathematics, internet availability, internet connectivity and type of internet used at home. This study determined the relationship between the learning and studying skills and the students' profile. This study utilized descriptive-correlational research design. An online survey was sent to Grade 11 students via Google form through university's LMS. Kendall's tau-b was used in order to further investigate the association between the salient variables of this study.

The findings showed that majority of the respondents were female, came from the STEM strand, had an academic performance in general mathematics of 85 to 89, had an available internet connection, had an average internet connectivity, and had used Wi-Fi in their online learning. The students agreed generally on the following learning skills' categories: collaboration, critical-thinking, creative-thinking and communication. In terms of studying skills, the students often read their e-modules, do note-taking, study, memorize, prepare for tests and manage their time. It was found out in this study that there was no significant relationship between the collaboration and critical thinking skills of the respondents as to their strand, academic performance, and type of internet connection but it showed significant relationship in the said skills as to their sex and internet connectivity. There was no significant relationship under creative thinking skills of the respondents when grouped according to their sex, strand academic performance, internet connectivity and type of internet connection while under communication internet connectivity showed significance but did not show significance with other students' profile. Under studying skills, there was significant relationship between: reading e-modules with students' sex, academic performance, and internet connectivity; taking notes as to respondents' sex; studying as to

respondents' sex and internet connectivity; preparation for tests as to sex, academic performance and internet connectivity; and managing their time to respondents' internet connectivity.

Keywords: *COVID-19 Pandemic, learning skills, studying skills*

THE PROBLEM AND ITS BACKGROUND

Introduction

The world faces a big challenge in terms of economics, social, and educational changes as the year 2020 deals with the global pandemic. In March 11, 2020, Tedros Adhanom, the Director General of World Health Organization, publicly announced the COVID-19 as pandemic which led international communities to worry. By this, many places shutdown including malls, churches, corporations, transportations, and even schools in all levels to discontinue their operations. To cope up with these complex, issues the Department of Education (DepEd) adopted the new normal paradigm to foster the educational needs of the students. However, the implemented action arrives with complications as regards to following the new system. This study aimed to address the different learning and studying skills of the students in this time of the pandemic's new normal way of learning. The Department of Education offered different learning methods so that students can still learn amidst the pandemic (Cruz,2020). The virtual or digital world has been paired with the real world due to the reason that the internet and the use of new media have rapidly increased and are currently in trend (Peters, 2013).

The use of gadgets like cellphones, tablets, and even radios and televisions are now considered vital in studying. This case brought different possibilities and strategies for students to use in managing the new normal way of learning. The elucidation of the environment is everything that is around us. It can be living or non-living things. Living things live and adapt to their environment. In like manner, students constantly interact with the environment and adapt themselves to the conditions within it. The situation

implies how students consider digitalized education in a new perspective of emerging opportunities and encourages them to rethink their traditional study skills that are appropriate in tackling the new normal.

This study focused on the learning and studying skills of the Senior High School students of the University of Perpetual Help System Laguna Isabela Campus. The researcher used an online survey to get the data and information needed for thisstudy.

Statement of the Problem

This study, generally, sought to determine the learners' learning and studying skills in this time of pandemic in the University of Perpetual Help System Laguna Isabela Campus in the school year 2020- 2021.

Specifically, this study sought to answer the following research questions:

1. What is profile of the respondents in terms of:
    1.1. Sex;
    1.2. Strand;
    1.3. Academic Performance in General Mathematics;
    1.4. Internet Availability;
    1.5. Internet Connectivity; and
    1.6 Type of Internet Connection?
2 What are the learning skills being exercised by the learners in this time of pandemic in terms of:
    2.1. Collaboration;

2.2. Critical Thinking;

2.3. Creativity; and

2.4. Communication?

3 What are the studying skills being utilized by the learners in this time of pandemic when it comes to:

3.1. Reading E-modules;

3.2. Taking Notes;

3.3 Studying;

3.4 Memorizing;

3.5 Preparing for Tests; and

3.6 Managing their Time?

4. What is the relationship between the learning skills and the respondents' profile?

5. What is the relationship between the studying skills and the respondents' profile?

Objectives of the Study

The purpose of this study was to determine the learning and studying skills of learnersof the University of Perpetual Help System Laguna Isabela Campus during the School Year 2020- 2021.

Specifically, this study sought to:

1. Determine the profile of the respondents in terms of:

1.1. Sex;

1.2. Strand;

1.3. Academic Performance in General Mathematics;

1.4. Internet Availability;

1.5. Internet Connectivity; and

1.6. Type of Internet Connection.

2. Determine the learning skills being exercised by the learners in this time of pandemic in terms of:

2.1. Collaboration Skills;

2.2. Critical Thinking Skills;

2.3. Creativity Skills; and

2.4. Communication Skills.

3. Determine the studying skills being utilized by the learners in this time of pandemic in terms of the following:

3.1. Reading E-modules;

3.2. Taking Notes;

3.3. Studying;

3.4. Memorizing;

3.5. Preparing for Tests; and

3.6 Managing their Time.

4. Determine the relationship between the learning skills and the respondents' profile; and

5. Determine the relationship between the studying skills and the respondents' profile.

Significance of the Study

This study entitled "Learning and Studying Skills of Learners in this Time of Pandemic in University of Perpetual Help System in Relation to their Academic Performance in General Mathematics" sees the following beneficial contributions to these several individual or groups:

Students. This may help the students to keep on track on the different learning and studying skills that will be helpful to their academic performance.

Parents. This study will also be beneficial to the parents of the students to provide them information and understanding that learning and studying of students can be on differentways so that they could guide their students in their education in terms of learning and studying.

Schools. This study will also be significant to the school so that they would be aware on the different learning and studying skills of the students in relation to their academic performance.

Scope and Delimitation of the Study

This study focused on the learning and studying skills of the learners in this time of pandemic. The respondents of the study were the Grade 11 Senior High School students who have enrolled in General Mathematics for the Academic Year 2020-2021.

Definition of Terms

The following term/s were used in this study. These terms are hereby operationally defined.

Academic Performance. This refers to the performance of the learners in terms of their grades in General Mathematics during the First Semester of the Academic Year 2020-2021.

Internet Availability. This term determines the availability of internet connection of which the students used in their online classes.

Internet Connectivity. This term refers on how strong the internet connection is of the students which they used in their online classes. This can be described as poor, average, or good.

Learning Skills. This is a term that describes the tasks involved in learning, including time management, note-taking, reading effectively, study skills, and writing tests. But for the purpose of this study, this term is defined as habits that can be used throughout the students' life in terms of collaboration, critical thinking, creative, and communication skills.

Pandemic. This terms refers to the present situation in our country pertaining to the global health crisis which is caused by COVID-19.

Strand. This refers to the different courses offered in University of Perpetual Help System in the Senior High School Department namely: Accountancy and Business Mathematics, Humanities and Social Sciences, Technical Vocational Livelihood, and Science, Technology, Engineering and Mathematics.

Studying Skills. These are an array of skills or habits which tackle the process of organizing and taking new information, retaining information, or dealing with assessments. These include reading text books, taking notes, studying, memorizing, preparing for tests, and managing time.

Type of Internet Connection. This term is used in the study to determine the mode howthe students connect through the internet whether they connect through mobile data or Wi-Fi.

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter reviews the related literature which will substantiate and supports the details of this comprehensive study.

Related Literature

According to Royal State Universities, "learning skills" is a term that describes the tasks involved in learning, including time management, note-taking, reading effectively, study skills, and writing tests. In a study conducted by Griffin et.al (2013) entitled “Learning Skills and Motivation: Correlates to Superior Academic Performance”, the researchers showed in their results that the single most influential learningand study skill promoting positive academic performance was level of intrinsic motivation.

Meanwhile, in a separate study authored by Davis et al. (2014), the researchers evaluated the degree to which a range of social emotional learning skills—academic self-efficacy, academic motivation, social connections, importance of school, and managing psychological and emotional distress and academic stress— could be used as an indicator of future academic outcomes.

Collaborative learning includes a wide range of approaches that differ with regard to the amount of in-class and out-of-class time devoted to group work. Numerous studies on collaborative learning have focused on its implementation in the classroom (Ning, 2011; Vazquez, 2011; Wiersema, 2000), on how online technologies facilitate collaborative blended learning or on how to enhance collaboration in distanceeducation

courses which may help students to still learn amidst the pandemic.

According to Johnson (2007), critical thinking is a focused and clear process used in mental activities such as solving problems, making decisions, persuade and analyze assumptions, and conduct scientific research. Similarly, Ennis who quoted Lipman (2003) argues that the aspects of critical thinking are the focus (focus), good (reason), inference (conclusion), situation, and clarity and overview (reviewing).

According to a set of skills, creative thinking is distinct from analytical and practical thinking. Choices and critical evaluations, however, are made by participants and observers as a part of the creativity process. In addition, according to Newbill and Baum (2012) for today'stechnology-driven, problem-riddled world, creative and critical thinking skills are vital for students who are faced with situations. In this purpose, idea generation, reflective judgment, self-regulation and attitude-disposition, which are both intuitive and teachable, are needed.

An investigation of self-directed learning skills of undergraduate students was studied by Tekkol and Demirel (2018), where they revealed students' self-directed learning skills and determined whether these skills vary based on university type, gender, field of study, year of study, academic success, and type of university entrance score, income level, and the desire to pursue a graduate degree. Also, they explored the relationship between university students' self- directed learning skills and their lifelong learning tendencies. The same study was also conducted by Kan'an and Osman (2015) wherein they suggested that self-directed learning is essential for students to be academically successful to their fullest potential.

According to Hassanbeigi et al. (2011) in their study "The Relationship between Study Skills and Academic Performance of University Students", teaching of study skills to university students can play an important role in the improvement of students' academic performance.

Universities and colleges are very interested in understanding the factors that influence their students' academic performance. A study that was conducted at a mid-sized public university in the mid-south, USA examined this issue. In the study of Griffin et al. (2012), the 10-scale Learning and Study Strategies Inventory (LASSI) (Weinstein et al., 2002) assessment device was administered to 107 students to measurereceptivity to several skills and strategies that purportedly enhance a student's ability to learn and successfully perform in an academic setting. The results of this study showed that the LASSI scales dealing with attitude, concentration, information processing skill, motivation, self-testing and review techniques, use of study support techniques, time management, and effective test-taking strategies all correlated positively (with statistical significance) to student GPA. There were also statistically significant differences between males and females in their mean scores for several of the above mentioned LASSI scales. Every LASSI subscale, where females significantly outscored males, positively correlated with superior academic performance (i.e., GPA). However, after controlling for variance explained by the LASSI scores, there were no statistically significant correlations between gender and academic performance. The primary conclusion from this study is that contrary to prior research that suggests that females predominantly outperform males in academics, such differences can be better explained

by mediating variables such as learning and study strategies. This debunking of the

female stereotype of superior academic performance merely because of gender has pedagogical implications.

In determining success or failure in one's academic life, study habits are an important variable. All the learner's strategies and activities that aid the learning process and improve the learner's results directly or indirectly can be referred to as "study habits". Research is a tool for acquiring, understanding and learning. Thus, the activities or deeds in this regard are purposefully carried out by students for improving their learning skills under the umbrella of study habits. According to Crede and Kuncel (2008), study habits can be termed as study routines or as standard procedure which an individual consistently follows in one's academic journey. In such a study routine, various activitiesmay come like frequency of studying sessions, review of subject matter, self-testing, thepractice of learned material and learning in an appropriate environment.

Hence, study habits are those techniques that students employ for their studies on a regular basis even without thinking about it as these techniques have become stereotyped because of their long use or practice. It has been observed that many students fail to maintain expected academic records despite having the required intelligence. For this, one of the main affecting factors is that students do not spend much time in their study as it was argued that study habits play a significant role in students' performance in the academic field (Verma & Kumar, 1999).Therefore, it is a very important variable in determining one's academic success and failure.

The progress of every individual is assured by good study habits as it inspires students to continue their attempts to study and strive to their goals. Among the most

important factors that may affect the proper production of research habits are: attention, inspiration, acute evaluation, change, affirmation, and networking in school and among peers.

The current research was conducted to examine the impact of study patterns on test anxiety and academic performance of undergraduate students. In a study by Numan and Hasan (2017), a purposeful sample was taken from a public university consisting of 180 undergraduate students, 84 boys, and 96 girls. Multivariate variance research demonstrated that study patterns have an important influence on test anxiety and academic success.

The results indicated that students with successful study habits exhibit low levels of test anxiety and perform academically better than students with unsuccessful study habits. It has also been found that, relative to boys, girls display higher levels of test anxiety. The result has stressed that girls show stronger learning patterns and succeed more academically than boys. These results demonstrated the need for undergraduate students to change research patterns to conquer exam anxiety and improve their academic performance.

Related Studies

Many problems were faced by the Philippines' private basic education institutions as a result of the COVID-19 pandemic, especially as the government declared and orderednot to open face- to-face classes for Academic Year 2020-2021. Before there were COVID-19 vaccine, this pandemic has brought a dilemma to educational institutions. In response to this directive, the Department of Education

(DepEd) issued Department Orders No. 007, 12, 1, 3, and 14 of the 2020 series instructing all basic education establishments toimprove their continuity plan of learning and health and safety policies in the current standard of pandemic education.

The findings of Woolley et al. (2010) are consistent with related research on the effects of gender diversity on group collaboration which is greatly improved by the presence of women in the group. Also in the study of Srinivasan, et al. (2005), in terms of viewing information, female participants have been more precise in questioning the credibility of the author and the source of the article that they read than the male participants.

The literature cited here developed a basis for the appropriate steps to be taken by all private institutions of basic education to re-open schools. Since there are researches of the same type, the authors proposed a detailed analysis of the different aspects of online learning affecting children from private basic education institutions (Ancheta, 2020).

In the study of Stoltzfus et al. (2011), the relationship between gender role and creativity was clearly influenced by gender where males have the highest level of creativity than females.

The study of Logan et al. (2010) investigated gender differences in reading and found that there is a difference in reading favoring males while in the study of Reddington et al. (2015), they indicated that females recorded significantly more information in notes and written recall than males.

In the study of Kimbrough et al. (2013) where they studied to take a

contemporary look between gender and communication, findings showed that women, compared to men, are generally more frequent mediated communication users.Also, women prefer and more frequently use text messaging, social media, and online video calls which means that women connect more than do men.

This calls for a 'rapid adoption' reaction to the current standard in the middle of the pandemic of teaching and learning (Tuanheco-Tumapon, 2020). In the study of Vierra (2014) where the author determined the relationship between critical thinking and academic achievement, the result showed significance indicating a strong relationship between the variables.

According to PopcornFurniture, the move to online learning was too abrupt at very brief notice, but modern ways of teaching pedagogy must be strategized and accelerated by academic institutions. The question of how equipped the schools are is also left unanswered in terms of technological facilities. It is very pricey to reopen the schools at this point.

For academic excellence, study skills are fundamental. Efficient study abilities are related to positive results in several areas of academic content and for different learners (Gettinger and Seibert, 2019).

The growth of a nation depends primarily on the level of education among the population. Humankind may have existed without schooling but as another animal specie, education is a step towards development. The word research habit may be formal, productive, or ineffective as the student's method of learning. Academic

achievement refers to what, after a time of instruction given, a person has learned

qualitatively and quantitatively.

A habit is something that is practiced on a scheduled, normal, planned basis and that is not relegated in one's life to a second-place or optional place. It is finished, without reservations, without explanations, and without hopes. Study activities hold the learner flawless in acquiring understanding and cultivating attitude towards things required for progress in various fields of human endeavor. The ability to effectively complete their assignments and to master the content they are learning is improved by students who develop positive study habits at school (Verma, 2016).

Conceptual Framework

This study mainly focused on the learning and studying skills of the learners in University of Perpetual Help System in relation to their academic performance. The dependent variables of this study are divided into two major categories which are learning skills and studying skills. The learning skills comprised of different subscales. These are collaboration, critical thinking, creativity, and communication skills. On the other hand, the students' skill survey is divided into 6 sub-categories namely: reading text book, taking notes, studying, memorizing, preparing for tests, and managing time. The independent variables are divided into six (6) categories. These are sex, strand, academic performance, internet availability, internet connectivity, and type of internet connection of the learners. The concept of this study mainly relied on how the learners' academic performance is affected by their learning and studying skills. The figure below summarizes the conceptual framework of the salient variables.

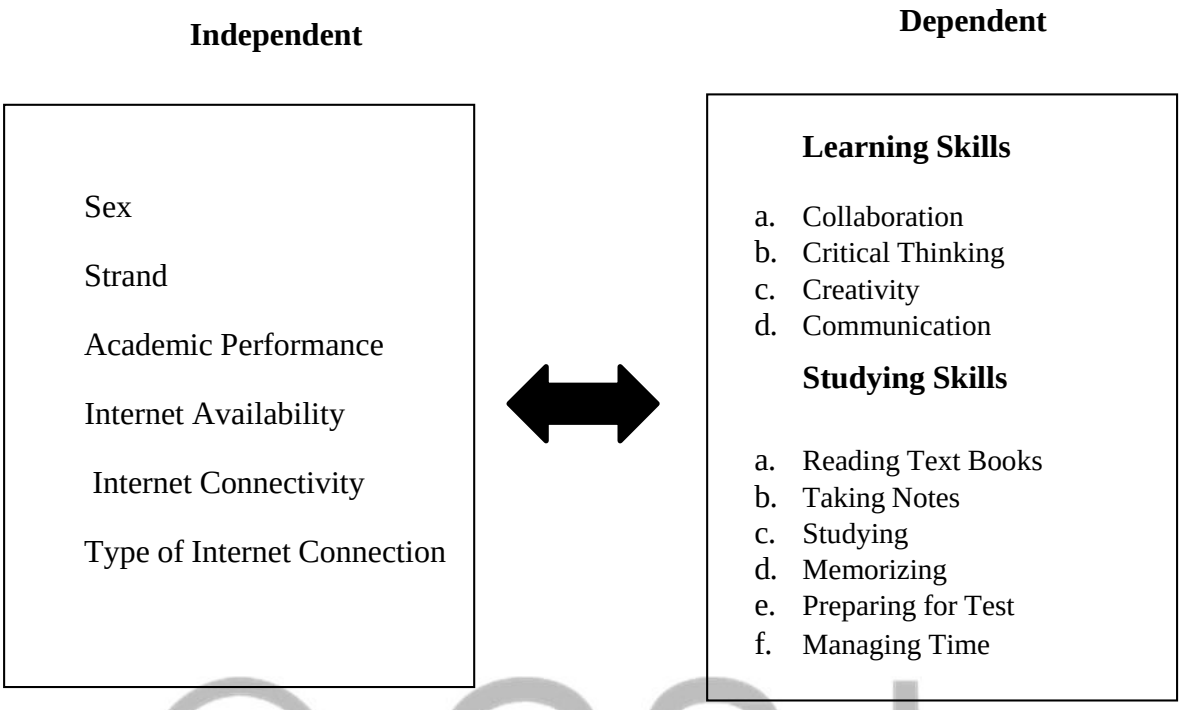

Figure 1. The Independent Variables and the Dependent Variables.

Hypotheses of the Study

The study tested the following null hypotheses:

1. There is no significant relationship in the learners' learning skills and their profile.
2. There is no significant relationship in the learners' studying and their profile.

RESEARCH METHODOLOGY

This chapter summarizes the research design, locale of the study, respondents of the study,data gathering instrument, collection of data, and statistical treatment of data.

Research Design

The descriptive correlational research design was used by the researcher as a method for knowing and describing the learning and studying skills. This design was appropriate because the researcher collected information and data on the study habits of the students through the use of a survey and associated the variables in it.

Locale of the Study

This study was conducted in Cauayan City, Isabela particularly in the University of Perpetual Help System Laguna Isabela Campus. The University of Perpetual Help System - Isabela Campus or simply Perpetual Isabela is the second youngest satellite of the university system within the University of Perpetual Help System. It aims to provide the northern part of the country an avenue to bring out and nurture the seeds of excellence through Perpetualite education.

Figure 2. The University of Perpetual Help System Isabela Campus.

Respondents of the Study

The respondents of this study were the Grade 11 Senior High School students enrolled in General Mathematics during the School Year 2020-2021 which was computed using the formula popularized by Krejcie and Morgan (1970) formula with 95% confidence level and 5% margin of error. The table below summarizes the population and sample of the study:

Table 1. Respondents of the Study by Strand.

STRAND	Population (N)	Sample(n)	Percentage
STEM	107	70	55.12
ABM	31	21	16.54
HUMSS	42	28	22.05
TVL	13	8	6.30
TOTAL	**190**	**127**	**100**

Collection of Data

In gathering data, the researcher utilized a closed-ended questionnaire in whichthe respondents can select their answers to the statements. The researcher adopted a survey questionnaire developed by Kelley et al. (2019) in their study "Creating a 21stCentury Skills Survey Instrument for High School Students" to evaluate students' learning skills. The questionnaire with a total number of 29 items has 4 subscales namely:collaboration (9-item; alpha = 0.826), communication (5-item; alpha = 0.749), creativity (4-item; alpha=0.751), and critical thinking (11-item; alpha=0.876). The learning skills questionnaire comprised of 29-item statements.

To evaluate students' study skills, the researcher adopted a questionnaire from the University of Central Florida's Student Academic Resource Center. This 30- item

questionnaire is subdivided into 6 subscales: reading e-modules (5-item), taking notes (5-item), studying (5- item), memorizing (5-item), preparing for tests (5-item), and managing time (5-item).

The adopted questionnaires were pilot tested via Google form on April 29, 2021to 20 students of Sta. Isabel National High School upon the approval of the principal of the said school. The data were collected and analyzed by the use of Cronbach's alpha and the results are summarized as follows: Students' Learning SkillsSurvey: Reliability Statistics Result: Cronbach's alpha = .919; Interpretation: Excellent (Konting et al., 2009): Students' Studying Skills Survey: Reliability Statistics Result: Cronbach's Alpha = .913; Interpretation: Excellent (Konting et al., 2009).

Data Gathering Procedure

The researcher asked for the approval from the Office of the School Director through the Office of the Senior High School Coordinator to allow the researcher to conduct the study with the help of the advisers and teachers of the respondents. The questionnaires were sent using the Google form so that the respondents can easily receive the said survey. The data that were gathered were organized, tallied, and subjected for statistical analysis.

Statistical Treatment of Data

The following tools were used to analyze the data gathered in this study: to describe the respondents' profile in terms of sex, strand, and academic performance, internet availability, internet connectivity and type of internet connection, frequency and percentage distribution were used. To describe the respondents' responses on learning

and studying skills, the weighted mean were used in terms of their categories. Lastly, to determine if there are existing relationship between the learning and studying skills of the respondents to their sex, strand, and academic performance, the Kendall's tau-b was used.

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter includes the tabular presentation, interpretation, and analysis of numerical results of the data gathered.

Profile of the Respondents

Table 2 shows the profile of the students in terms of sex, strand, academic performance, internet availability, internet connectivity, and type of internet connection. In terms of sex, 93 or 73.2 percent of the respondents are female and 34 or 26.8 percent are male. For strand, 70 or 55.2 percent of the respondents belong to the STEM, 28 or 22 percent belong to HUMSS, 21 or 16.5 percent belong to ABM and 8 or 6.3 percent belong to TVL.

In terms of the respondents' academic performance in general mathematics, there are 64 or 50.4 with a grade range from 85 to 89, 51 or 40.1 percent have a grade range from 90 to 100, 11 or 8.7 percent have a grade range from 80 to 84, and 1 or 0.8 percent has a grade range from 75 to 79.

In terms of internet availability, 127 or 100 percent of the respondents have an available internet connection at home. In terms of internet connectivity, 76 or 59.8 percent of the respondents have average internet connection, 37 or 29.2 percent have good internet connection, and 14 or 11 percent have poor internet connection. In terms of type of internet connection, there are 111 or 87.4 percent of the respondents who connect through Wi-Fi and 16or 12.6 of the respondents connect through mobile data.

Table 2. Profile of the Respondents in terms of Sex, Strand, Academic Performance, Internet Availability, Internet Connectivity, and Type of Internet Connection.

Profile	Frequency n = 127	Percent 100
Sex		
Female	93	73.23
Male	34	26.77
Strand		
STEM	70	55.12
ABM	21	16.54
HUMSS	28	22.05
TVL	8	6.3
Academic Performance		
90 to 100	51	40.16
85 to 89	64	50.39
80 to 84	11	8.66
75 to 79	1	0.79
below 75	0	0
Internet Availability		
Yes	127	100
No	0	0
Internet Connectivity		
Poor	14	11.02
Average	76	59.84
Good	37	29.13
Type of Internet Connection		
Wi-Fi	111	87.4
Mobile Data	16	12.6

Learning Skills of the Respondents

Table 3 shows the learning skills of the respondents in terms of collaboration and critical-thinking.

In terms of collaboration, it can be gleaned from the table that the statement “I am

confident in my ability to follow rules for team decision making" obtained a mean of 4.51 with a descriptive rating of strongly agree. It is followed by the statement "I am confident in my ability to be polite and kind to teammates" with a mean 4.46 with a descriptive equivalence of strongly agree. On the other hand, the statements "I am confident in my ability to come physically and mentally prepared each day" and "I am confident in my ability to use appropriate body language when presenting" got the lowest means of 3.79 and 3.48, respectively both obtaining a descriptive rating of strongly agree. To sum it up, the figures imply that students in general mathematics do really collaborate in order for them to help their groups in general by following rules in decision making, being polite and kind with each other, following rules, respecting others' perspectives, being compliant to feedbacks, and offering assistance in their team which is shown in their very satisfactory to outstanding performance in the subject.

In terms of critical-thinking skills, it can be gleaned from the table that students agreed withthe statement "I am confident in my ability to develop follow-up questions to gain understanding of the wants and needs of client or product users" which got the highest mean of 3.96. Also, the students agreed with the statement "I am confident in my ability to evaluate reasoning and evidence that support an argument" that got the second highest mean of 3.90. Meanwhile, the statements "I am confident in my ability to identify in detailwhat needs to be known to answer a science inquiry question" and "I am confident in my ability to combine different elements into a complete product" got the lowest means of 3.71and 3.64, respectively wherein the students still rated them as agree.

In summation, studentsagreed with all the statements under critical-thinking skills

which means that they do follow-up questions for understanding, do evaluate evidences for support, do gather complete information, do justify choices of evaluation criteria, do revisions with an evidence, do create new products, do identify what is needed to answer an inquiry, and do combine different elements into a complete product.

This implies that even though students are facing this pandemic, their learning skills are still are still evident because the result showed positive feedback when it comes to their level of agreement to all statements under collaboration and critical-thinking.

Table 3. Learning Skills of the Respondents such as Collaboration and Critical-Thinking.

		Mean	Descriptive Rating
	Collaboration		
	I am confident in my ability to:		
1	follow rules for team decision-making	4.51	Strongly Agree
2	be polite and kind to teammates	4.46	Strongly Agree
3	follow rules for team meetings	4.46	Strongly Agree
4	acknowledge and respect other perspectives	4.39	Strongly Agree
5	improve my own work when given feedback	4.39	Strongly Agree
6	make sure all team members' ideas are equally valued	4.36	Strongly Agree
7	offer assistance to others in their work when needed	4.22	Strongly Agree
8	come physically and mentally prepared each day	3.79	Agree
9	use appropriate body language when presenting	3.48	Agree
	Critical-Thinking		
	I am confident in my ability to:		
1	develop follow-up questions to gain understanding of the wants and needs of client or product users	3.96	Agree
2	evaluate reasoning and evidence that support an argument	3.9	Agree
3	gather relevant and sufficient information from different sources	3.9	Agree
4	justify choices of evaluation criteria	3.85	Agree
5	understand questions that lead to critical thinking	3.83	Agree
6	develop follow-up questions that focus or broaden inquiry	3.76	Agree

7	revise drafts and justify revisions with evidence	3.76	Agree
8	create new, unique, surprising products	3.74	Agree
9	create ideas geared to the intended client or user	3.72	Agree
10	identify in detail what needs to be known to answer a science inquiry question	3.71	Agree
11	combine different elements into a complete product	3.64	Agree

Table 4 shows the learning skills of the respondents in terms of creative thinking and communication skills. In terms of creative thinking, the students agreed that they are able to help their team solve problems and manage conflicts (M = 4.04), elaborate and improveideas (M = 4.02), find sources of information and inspiration when others do not (M = 3.93), and understand how knowledge or insights might transfer to other contexts (M = 3.90). In summation, students' creative thinking skills got a grand mean of 3.97 which is interpreted as agree.

Lastly, in terms of communication, the statements "I am confident in my ability to: track our team's progress towards goals and deadlines and complete tasks without having to be reminded" obtained the highest mean of 4.09 with a descriptive rating of agree. In like manner, though obtaining the lowest mean of 3.79 still the statement "I am confident in my ability to present all information clearly, concisely, and logically" was interpreted as agree by the students. Overall, the students are confident in their ability to communicate within their team well.

This implies that even though students are facing this pandemic, their learning skills are still evident because the results showed positive feedback when it comes to their level of agreement to all statements under creativity and communication.

Table 4. Learning Skills of the Respondents such as Creative Thinking and Communication Skills.

		Mean	Descriptive Rating
	Creative Thinking		
	I am confident in my ability to:		
1	help the team solve problems and manage conflicts	4.04	Agree
2	elaborate and improve on ideas	4.02	Agree
3	find sources of information and inspiration when others do not	3.93	Agree
4	understand how knowledge or insights might transfer to other situations or contexts	3.9	Agree
	Communication		
	I am confident in my ability to:		
1	track our team's progress toward goals and deadlines	4.09	Agree
2	complete tasks without having to be reminded	4.09	Agree
3	organize information well	4.08	Agree
4	use time, and run meetings, efficiently	3.99	Agree
5	present all information clearly, concisely, and logically	3.79	Agree

Studying Skills of the Respondents

Table 5 shows the studying skills of the students in terms of reading e-modules, taking notes and studying. In terms of reading e-modules, the statement “I try to get the meaning of new words as I see them for the first time” got the highest mean of 4.25 which is rated as always. It is followed by the statement “I look for the main ideas as I read” with a mean of 4.12 which is interpreted as often. On the other hand, the statement “I make questions from a chapter before, during, and after reading it” got the lowest mean of 3.32 which is interpreted as sometimes. But overall, the students often read their e-modules in order for them to get the meaning of words, be familiarized with concepts, look for main ideas,and browse the modules’ headings, pictures, and questions before reading a chapter.

In terms of taking notes, the statement “I take notes during class lectures” got the

highest mean of 4.11 which is interpreted as often. Also, the statements “I try to organize main ideas and details into a meaningful method”, “I take notes as I read my e-modules”, and “I rewrite or type up my notes” got the means of 3.85, 3.84, and 3.76, respectively which are interpreted as often. On the other hand, the statement “I compare my notes with a classmate” got the lowest mean of 2.76 which is interpreted as sometimes. In summation, the students do take notes in order for them to study their lessons.

In terms of studying, the statements “I study where it is quiet and has few distractions” and “I have all my supplies handy when I study, such as pens, paper, calculator, etc.” garnered the highest means of 4.38 and 4.27, respectively, both are interpreted as always. The rest of the statements like setting of goals, studying for a length of time and taking a break, and studying at least two hours for every hour in class each week obtained a descriptive rating of often. Overall, the results imply that students often study in their own way as long as they are away from distractions.

Students’ studying skills when it comes to reading e-modules, taking notes and studying are high since the level of how frequent they manifest the categories mainly fall between often to always which means that they often to always read their modules, take notes and study in their general mathematics subject.

Table 5. Studying Skills of the Respondents such as Reading E-modules, Taking Notes and Studying.

	Statements	Mean	Descriptive Rating
	Reading E-Modules		
1	I try to get the meaning of new words as I see them forthe first time.	4.25	Always
2	I look for the main ideas as I read.	4.12	Often
3	I look for familiar concepts as well as ideas that sparkmy interest as I read.	3.97	Often
4	I browse the headings, pictures, chapter questions andsummaries before I start reading a chapter.	3.68	Often
5	I make questions from a chapter before, during, andafter reading it.	3.32	Sometimes
	Taking Notes		
1	I take notes during class lectures.	4.11	Often
2	I try to organize main ideas and details into ameaningful method.	3.85	Often
3	I take notes as I read my e-modules.	3.84	Often
4	I rewrite or type up my notes.	3.76	Often
5	I compare my notes with a classmate.	2.76	Sometimes
	Studying		
1	I study where it is quiet and has few distractions.	4.38	Always
2	I have all my supplies handy when I study, such aspens, paper, calculator, etc.	4.27	Always
3	I set study goals, such as the number of problems I willdo or pages I will read.	3.86	Often
4	I study for a length of time then take a short breakbefore returning to studying.	3.81	Often
5	I study at least two hours for every hour I am in class each week.	3.57	Often

Table 6 shows the studying skills of the students in terms of memorizing, preparing for tests, and managing time. In terms of memorizing, the statements “I try to study during my personal peak time of energy to increase my concentration level” and “I change my notes

into my own words, for better understanding" got the highest means of 3.88 and 3.86, respectively which are interpreted as often. The rest of the statements like "I try to create associations between new material I am trying to learn and information I already know", "I quiz myself over material that could appear on future exams and quizzes" and "I say difficult concepts out loud in order to understand them better" are also interpreted as often. This means that, given the grand mean of 3.80, students often do well in memorizing their notes by studying in their peak time, changing notes to own words, createassociations between the old and new information, taking a quiz over a material, and sayingthe difficult terms out loud to understand them better.

In terms of preparing for tests, the statement "I do all homework assignments and turn them in on time" with a mean of 4.08 is interpreted as often. Also, the statement "Ican easily identify what I have learned and what I have not yet learned before I take a test" garnered a mean of 3.98 and is interpreted as often. Meanwhile, the statement "I study with a classmate or group" got the lowest mean of 2.94 is interpreted as sometimes. This implies that students do often prepare for tests by doing all assignments and submitting themin on time, identify the learned things to what they do not know, anticipate possible questions in their tests, and ask help from others to understand something.

Lastly, in terms of managing the students' time, the statement "I have enough time for school and fun" got the highest mean of 4.09, followed by "I use a 'to do' list to keep track of completing my academic and personal activities" (M = 3.91), "I start papers and projects as soon as they are assigned" (M = 3.90), and "I start studying for quizzes and testsat least several days before I take them" (M = 3.63) were also interpreted as often. But the

statement “I use a calendar book to write down upcoming academic and personal activities” got the lowest mean of 3.33 which is interpreted as sometimes. Overall, the results showsthat students often manage their time well by separating time for studies and for fun. Also,

they create and utilize a “to-do list” to keep them on track with their academics.

Table 6. Studying Skills of the Respondents such as Memorizing, Preparing For Tests and Managing their Time.

	Statements	Mean	Descriptive Rating
	Memorizing		
1	I try to study during my personal peak time of energy toincrease my concentration level.	3.88	Often
2	I change my notes into my own words, for better understanding.	3.86	Often
3	I try to create associations between new material I amtrying to learn and information I already know.	3.76	Often
4	I quiz myself over material that could appear on future exams and quizzes.	3.74	Often
5	I say difficult concepts out loud in order to understand them better.	3.74	Often
	Preparing for Tests		
1	I do all homework assignments and turn them in on time.	4.08	Often
2	I can easily identify what I have learned and what I havenot yet learned before I take a test.	3.98	Often
3	I anticipate what possible questions may be asked on mytests and make sure I know the answers.	3.81	Often
4	When I don't understand something, I get help fromtutors, classmates, and my instructors.	3.77	Often
5	I study with a classmate or group.	2.94	Sometimes
	Managing Your Time		
1	I have enough time for school and fun.	4.09	Often
2	I use a "to do" list to keep track of completing myacademic and personal activities.	3.91	Often
3	I start papers and projects as soon as they are assigned.	3.9	Often
4	I start studying for quizzes and tests at least several daysbefore I take them.	3.63	Often

5	I use a calendar book to write down upcoming academicand personal activities.	3.33	Sometimes

Relationship between Collaboration, Critical thinking and the Respondents' Profile

The table below shows the relationship between the students' learning skills in terms of collaboration and critical-thinking when grouped according to their profile variables.

In terms of the relationship of collaboration and the respondents' sex, it was found out that it is not statistically significant at 5% level of significance between the female and male when they use appropriate body language when presenting, acknowledge and respect others' perspectives and team members' ideas are equally valued. Also, it is notstatistically significant (5%) between the female and male respondents in terms of their preparedness of coming to school physically and mentally and so with offering assistancein their work when needed ($p > 0.05$). On the other hand, it was found out that it is statistically significant at 5% level of significance between female and male when they collaborate. The results tell that females have the likelihood to agree to the statements under this category which means they are likely to be polite and kind to teammates($\text{Corr.} = -.212; p = 0.014$), improve their own work when given feedback ($\text{Corr.} = -.178; p = 0.038$), and follow rules for team meetings ($\text{Corr.} = -.212; p = 0.014$) compared to males. Meanwhile, it is not statistically significant between the students' learning skills in terms of collaboration and their strand, academic performance,and type of internet connection as evident in their p-values greater than 0.05.

In terms of collaboration and the students' internet connectivity, it was not statistically significant whether the students have poor, average, and good internet

connection when they acknowledge and respect others' perspectives, showing politeness and kindness to their teammates, follow rules for team decision making and for team meetings, and offering of assistance to others in their work when needed given by their p-values greater than 0.05. But, it was highly significant, favoring the students with average to good internet connections, more likely, when they use appropriate body language while presenting (Corr. $=.269; p = 0.001$) and when they improve their work when given feedback (Corr. $=.217; p = 0.009$). Also, it was statistically significant when the students value their team members' ideas (Corr. $= .192; p = 0.02$) and come each day with their body and mind ready (Corr. $= .194; p = 0.016$) compared to students with poor internet connection.

In relation to the study of Woolley et al. (2010), the findings are consistent with related research on the effects of gender diversity on group collaboration which is greatly improved by the presence of women in the group.

In terms of the relationship between the students' critical-thinking skills and their sex, it was found out that it is not statistically significant between male and female when creating new and unique products, create ideas, evaluate reasoning and evidence that support an argument, identify what needs to be known, revise and justify revisions and gathering of relevant information from different sources given by their p-value greater than 0.05.

In contrast with the study of Srinivasan et al. (2005), in terms of viewing information, female participants have been more precise in questioning the credibility of the author and the source of the article that they read than the male participants.

On the other hand, it was found to be statistically significant where females are more likely to agree to the statement "justify choices of evaluation criteria" (Corr. $= -.192$; $p = 0.026$) than males. Meanwhile, the students' critical-thinking skills were not statistically significant as to their strand, academic performance, type of internet connection and some statements in the internet connectivitycategory given by their p-values greater than 0.05.

In contrary, in the study of Vierra (2014) where the author determined the relationship between critical thinking and academic achievement, the result showed statistical significance indicating a strong relationship between the variables. Only the statement "revise drafts and justify revisions with evidence" was statistically significant at 5% margin of error where students with average to good internet connectivity are more likely to agree to the statement which means they are likely to revise and justify drafts supported by evidence (Corr. $=.179; p = 0.026$). The result above implies that females are more likely to think critically than males in general mathematics.

In accordance with the result of the study of Mawaddah, et.al (2018) entitled "Gender Differences of Mathematical Critical Thinking Skills of Secondary school students", the critical thinking of female students were slightly better than males.

Table 7. Relationship between Respondents' Learning Skills in Terms of Collaboration and Critical Thinking and their Profile.

LEARNING SKILLS	Sex		Strand		Academic Performance		Internet Connectivity		Internet Connection	
	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.
Collaboration Skills										
I am confident in my ability to:										
1. use appropriate body language when presenting	-0.11 ns	0.19	-0.04 ns	0.58	0.05 ns	0.46	0.27*	0.00	-0.04 ns	0.60
2. acknowledge and respect other perspectives	0.05 ns	0.58	0.07 ns	0.4	-0.06 ns	0.43	0.14 ns	0.1	-0.06 ns	0.47
3. make sure all team members' ideas are equally valued	-0.04 ns	0.66	0.02 ns	0.77	-0.04 ns	0.62	0.19*	0.02	-0.04 ns	0.65
4. be polite and kind to teammates	-0.21*	0.01	-0.12 ns	0.15	0.10 ns	0.18	0.04 ns	0.6	-0.10 ns	0.26
5. follow rules for team decision-making	-0.12 ns	0.15	-0.05 ns	0.50	0.06 ns	0.44	0.06 ns	0.47	-0.02 ns	0.86
6. come physically and mentally prepared each day	0.12 ns	0.14	0.02 ns	0.81	0.01 ns	0.93	0.19*	0.02	-0.07 ns	0.40
7. offer assistance to others in their work when needed	-0.02 ns	0.80	-0.01 ns	0.86	0.02 ns	0.77	0.07 ns	0.38	-0.03 ns	0.71
8. improve my own work when given feedback	-0.18*	0.04	0.01 ns	0.95	0.03 ns	0.64	0.22*	0.01	-0.06 ns	0.50
9. follow rules for team meetings	-0.19*	0.03	-0.08 ns	0.31	0.11 ns	0.12	0.16 ns	0.06	-0.04 ns	0.63
Critical Thinking Skills										
I am confident in my ability to:										
1. create new, unique, surprising products	-0.03 ns	0.69	0.03 ns	0.71	0.01 ns	0.85	0.15 ns	0.06	-0.01 ns	0.95
2. create ideas geared to the intended client or user	-0.06 ns	0.50	0.00 ns	0.97	0.06 ns	0.4	0.04 ns	0.62	0.02 ns	0.83
3. evaluate reasoning and evidence that support an argument	-0.11 ns	0.20	-0.04 ns	0.59	0.03 ns	0.64	0.14 ns	0.08	-0.04 ns	0.64
4. identify in detail what needs to be known to answer a science inquiry question	0.05 ns	0.57	-0.03 ns	0.72	-0.05 ns	0.51	0.05 ns	0.54	-0.04 ns	0.64
5. develop follow-up questions that focus or broaden inquiry	-0.05 ns	0.54	-0.04 ns	0.62	0.07 ns	0.36	0.08 ns	0.32	-0.01 ns	0.93
6. revise drafts and justify revisions with evidence	-0.07 ns	0.40	-0.04 ns	0.59	0.10 ns	0.18	0.18*	0.03	0.02 ns	0.83
7. develop follow-up questions to gain understanding of the wants and needs of client or product users	-0.05 ns	0.52	-0.03 ns	0.71	0.06 ns	0.37	0.08 ns	0.32	0.06 ns	0.5
8. combine different elements into a complete product	-0.02 ns	0.85	-0.06 ns	0.48	-0.01 ns	0.90	0.14 ns	0.09	0.03 ns	0.74
9. understand questions that lead to critical thinking	-0.12 ns	0.14	0.03 ns	0.7	0.03 ns	0.71	0.16*	0.05	0.01 ns	0.92
10. gather relevant and sufficient information from different sources	-0.09 ns	0.30	-0.05 ns	0.52	0.11 ns	0.12	0.07 ns	0.38	-0.03 ns	0.72
11. justify choices of evaluation criteria	-0.07 ns	0.41	-0.02 ns	0.80	0.16*	0.03	0.11 ns	0.17	0.06 ns	0.46

*Significant ns Not Significant

Relationship between Creativity, Communication and the Respondents' Profile

The table below shows the relationship between the students' learning skills in terms of creativity and communication when grouped according to their profile variables.

In terms of creative thinking skills, it was found out that there is no significant relationship between the students' creative thinking and their sex, strand, academic performance, internet connectivity, and type of internet connection given by their p-value greater than 0.05. In the study of Stoltzfus et al. (2011), the relationship between gender role and creativity was clearly influenced by gender where males have the highest level of creativity than females.

Meanwhile, there is no significant relationship in the students' communication skills when grouped according to their sex, strand, academic performance, and type of internet connection ($p > 0.05$). Meanwhile, it was highly significant in the statement "I am confident in my ability to organize information well" ($\text{Corr.} = .262; p < 0.01$) and was found to be significant in the statements "I am confident in my ability to: present all information, clearly, concisely, and logically ($\text{Corr.} = .194; p = 0.016$); complete tasks without having to be reminded ($\text{Corr.} = .197; p = 0.014$); use time, and run meetings, efficiently ($\text{Corr.} = .205; p = 0.011$)" favoring students with good internet connection.

In contrast with the study of Kimbrough et al. (2013) where they studied to take a contemporary look between gender and communication, their findings showed that women, compared to men, are generally more frequent mediated communication users. Also women prefer and more frequently use text messaging, social media, and online video calls which means that women connect more than do men.

Table 8. Relationship between Respondents' Learning Skills in Terms of Creativity and Communication and their Profile.

LEARNING SKILLS	Sex		Strand		Academic Performance		Internet Connectivity		Internet Connection	
	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.
Creativity Skills										
I am confident in my ability to:										
1. elaborate and improve on ideas	-0.03 ns	0.71	0.10 ns	0.22	-0.13 ns	0.08	0.10 ns	0.2	0.03 ns	0.71
2. understand how knowledge or insights might transfer to other situations or contexts	-0.05 ns	0.52	0.13 ns	0.11	-0.02 ns	0.74	0.02 ns	0.84	0.10 ns	0.22
3. find sources of information and inspiration when others do not	-0.13 ns	0.12	0.04 ns	0.65	0.04 ns	0.59	0.05 ns	0.57	-0.03 ns	0.76
4. help the team solve problems and manage conflicts	-0.15 ns	0.08	-0.03 ns	0.71	-0.02 ns	0.83	0.12 ns	0.14	0.02 ns	0.83
Communication Skills										
I am confident in my ability to:										
1. present all information clearly, concisely, and logically	-0.02 ns	0.81	0.04 ns	0.61	0.00 ns	0.96	0.19*	0.02	0.12 ns	0.14
2. track our team's progress toward goals and deadlines	0.07 ns	0.42	0.03 ns	0.69	-0.03 ns	0.65	0.16*	0.05	0.08 ns	0.35
3. organize information well	-0.02 ns	0.80	0.07 ns	0.41	0.03 ns	0.72	0.26*	0	0.02 ns	0.8
4. complete tasks without having to be reminded	-0.14 ns	0.08	0.03 ns	0.67	0.07 ns	0.36	0.20*	0.01	0.04 ns	0.62
5. use time, and run meetings, efficiently	-0.10 ns	0.24	0.06 ns	0.44	0.00 ns	0.98	0.21*	0.01	0.02 ns	0.79

*Significant ns Not Significant

Relationship between the Respondents' Studying Skills in Terms of Reading E-Modules, Taking Notes and Studying and their Profile

The table below shows the relationship on the students' studying skills in terms of reading e-modules, taking notes, studying, and their profile variables.

In terms of the relationship between students' studying skills in reading their e-modules and their sex, it was found out that it is not statistically significant between females and males in the statements "I browse the headings, pictures, chapter questions and summaries before start reading a chapter", "I try to get the meaning of new words as I see them for the first time", "I look for the main ideas as I read", and "I make questionsfrom a chapter before, during, and after reading it" as evident in their p-values greater than 0.05. But it was found out that there was significance between females and males in the statement "I look for familiar concepts as well as ideas that spark my interest as I read"($\text{Corr.} = .186$; $p = 0.025$). This implies that females are more likely to scrutinize what they are reading by looking for familiar concepts and ideas of their interest than males. This is in contrast in the study of Logan et al. (2010) where they investigated gender differences inreading and found that there is a difference in reading favoring males. On the other hand, it was found out that there is no significant relationship between students' studying skillsin reading text books as to their strand and internet connectivity given by their p-value greater than 0.05. But it was found out to have a significant relationship when the students make questions from a chapter before, during and after reading e-modules ($\text{Corr.} = -.212$; $p = 0.002$) which implies that students who do not perform well in academics are more likely to make questions from a chapter before, during, and after reading e-modules compared to students with high grades. Meanwhile, other statements like browsing of the

heading before reading, trying to get meaning of new words, looking for familiar concepts, and looking for the main ideas did not show significance as to the students' academic performance. Moreover, there was a significant relationship of the statement "I try to get the meaning of new words as I see them for the first time" and the students internet connectivity (Corr. $= .203$; $p = 0.012$) which implies that those students who have good internet connection somehow browse the meaning of the unfamiliar words as they see it for the first time than students who have poor internet connections.

In terms of the relationship between the students' studying skills in taking notes as to their sex, it was found out that it is not statistically significant between females and males when they compare their notes with their classmates and organizing main ideas and details into a meaningful method ($p > 0.05$). On the other hand, it was found to be highly significant as the students take notes as they read their e-modules (Corr. $= -.299$; $p = 0.000$), take notes during class lectures (Corr. $= -.314$; $p = 0.000$), and rewrite or type up their notes (Corr. $= -.251$; $p = 0.002$). Generally, these results imply that females are more likely to do taking notes than males. This result is supported with the study of Reddington et al. (2015) indicated that females recorded significantly more information in notes and written recall than males. On the other hand, it was found out to be not statistically significant between the students' studying skills in taking notes with their strand, academic performance, internet connectivity, and internet connection as evident in their p-values greater than 0.05.

In terms of the students' skills in studying skill and their profile, it was found out that there is no significant relationship as to their strand, academic performance, and typeof internet connection ($p > 0.05$). But it was found out that students' skills in studying have

significance to some statements between their sex and internet connectivity. The statements "I have all my supplies handy when I study, such as pens, paper, calculator, etc." (Corr. $=-.214$; $p = 0.011$) and "I set study goals, such as the number of problems I will do or pages I will read" (Corr. $= -.169$; $p = 0.04$) showed significance between females and males which implies generally that females are more likely to study than males. On the other hand, it was found out that statement "I have all my supplies handy when I study, such as pens, paper, calculator, etc." (Corr. $= .162$; $p = 0.046$) showed significance to the students' internet connectivity.

This implies that students who have stronger internet connection are more likely to prepare their supply such as pens, paper, calculator and the likes when study than those students who have poor internet connections.

Table 9. Relationship between Respondents' Studying Skills in Terms of Reading E-Modules, Taking Notes and Studying and their Profile

LEARNING SKILLS	Sex		Strand		Academic Performance		Internet Connectivity		Type of Internet Connection	
	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.
Reading E-modules										
1. I browse the headings, pictures, chapter questions and summaries before I start reading a chapter.	-0.06 ns	0.44	0.10 ns	0.21	0.08 ns	0.24	0.11 ns	0.16	-0.10 ns	0.20
2. I make questions from a chapter before, during, and after reading it.	-0.08 ns	0.37	-0.02 ns	0.82	-0.01 ns	0.86	0.20*	0.01	-0.04 ns	0.62
3. I try to get the meaning of new words as I see them for the first time.	-0.19 ns	0.03	0.15 ns	0.06	-0.06 ns	0.38	0.02 ns	0.82	0.01 ns	0.94
4. I look for familiar concepts as well as ideas that spark my interest as I read.	-0.10 ns	0.22	0.11 ns	0.17	-0.13 ns	0.08	0.03 ns	0.7	0.02 ns	0.79
5. I look for the main ideas as I read.	-0.04 ns	0.59	-0.03 ns	0.73	-0.21 ns	0.00	0.03 ns	0.68	-0.08 ns	0.30
Taking Notes										
1. I take notes as I read my e-modules.	-0.30*	0	0.07 ns	0.35	-0.01 ns	0.93	0.12 ns	0.14	-0.07 ns	0.42
2. I take notes during class lectures.	-0.31*	0	0.07 ns	0.39	-0.01 ns	0.88	0.10 ns	0.23	-0.04 ns	0.66
3. I rewrite or type up my notes.	-0.25*	0	0.03 ns	0.67	-0.01 ns	0.87	0.04 ns	0.63	0.06 ns	0.5
4. I compare my notes with a classmate.	0.06 ns	0.43	0.01 ns	0.92	0.01 ns	0.89	0.11 ns	0.16	-0.01 ns	0.94
5. I try to organize main ideas and details into a meaningful method.	-0.14 ns	0.09	0.01 ns	0.88	0.00 ns	0.96	0.15 ns	0.06	-0.05 ns	0.54
Studying										
1. I study where it is quiet and has few distractions.	-0.14 ns	0.09	-0.01 ns	0.93	0.01 ns	0.94	0.06 ns	0.46	-0.09 ns	0.27
2. I study for a length of time then take a short break before returning to studying.	-0.14 ns	0.10	0.01 ns	0.86	-0.05 ns	0.51	0.12 ns	0.13	-0.15 ns	0.06
3. I have all my supplies handy when I study, such as pens, paper, calculator, etc.	-0.21*	0.01	-0.07 ns	0.41	0.08 ns	0.29	0.16*	0.05	-0.15 ns	0.08
4. I set study goals, such as the number of problems I will do or pages I will read.	-0.17*	0.04	0.05 ns	0.5	-0.11 ns	0.11	0.15 ns	0.06	0.01 ns	0.95
5. I study at least two hours for every hour I am in class each week.	-0.10 ns	0.23	0.08 ns	0.33	0.00 ns	0.96	0.12 ns	0.13	0.06 ns	0.44

*Significant ns Not Significant

Table 9. Relationship between Respondents' Studying Skills in Terms of Reading E-Modules, Taking Notes and Studying and their Profile

LEARNING SKILLS	Sex		Strand		Academic Performance		Internet Connectivity		Type of Internet Connection	
	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.
Reading E-modules										
1. I browse the headings, pictures, chapter questions and summaries before I start reading a chapter.	-0.06 ns	0.44	0.10 ns	0.21	0.08 ns	0.24	0.11 ns	0.16	-0.10 ns	0.20
2. I make questions from a chapter before, during, and after reading it.	-0.08 ns	0.37	-0.02 ns	0.82	-0.01 ns	0.86	0.20*	0.01	-0.04 ns	0.62
3. I try to get the meaning of new words as I see them for the first time.	-0.19 ns	0.03	0.15 ns	0.06	-0.06 ns	0.38	0.02 ns	0.82	0.01 ns	0.94
4. I look for familiar concepts as well as ideas that spark my interest as I read.	-0.10 ns	0.22	0.11 ns	0.17	-0.13 ns	0.08	0.03 ns	0.7	0.02 ns	0.79
5. I look for the main ideas as I read.	-0.04 ns	0.59	-0.03 ns	0.73	-0.21 ns	0.00	0.03 ns	0.68	-0.08 ns	0.30
Taking Notes										
1. I take notes as I read my e-modules.	-0.30*	0	0.07 ns	0.35	-0.01 ns	0.93	0.12 ns	0.14	-0.07 ns	0.42
2. I take notes during class lectures.	-0.31*	0	0.07 ns	0.39	-0.01 ns	0.88	0.10 ns	0.23	-0.04 ns	0.66
3. I rewrite or type up my notes.	-0.25*	0	0.03 ns	0.67	-0.01 ns	0.87	0.04 ns	0.63	0.06 ns	0.5
4. I compare my notes with a classmate.	0.06 ns	0.43	0.01 ns	0.92	0.01 ns	0.89	0.11 ns	0.16	-0.01 ns	0.94
5. I try to organize main ideas and details into a meaningful method.	-0.14 ns	0.09	0.01 ns	0.88	0.00 ns	0.96	0.15 ns	0.06	-0.05 ns	0.54
Studying										
1. I study where it is quiet and has few distractions.	-0.14 ns	0.09	-0.01 ns	0.93	0.01 ns	0.94	0.06 ns	0.46	-0.09 ns	0.27
2. I study for a length of time then take a short break before returning to studying.	-0.14 ns	0.10	0.01 ns	0.86	-0.05 ns	0.51	0.12 ns	0.13	-0.15 ns	0.06
3. I have all my supplies handy when I study, such as pens, paper, calculator, etc.	-0.21*	0.01	-0.07 ns	0.41	0.08 ns	0.29	0.16*	0.05	-0.15 ns	0.08

4. I set study goals, such as the number of problems I will do or pages I will read.	-0.17*	0.04	0.05 ns	0.5	-0.11 ns	0.11	0.15 ns	0.06	0.01 ns	0.95
5. I study at least two hours for every hour I am in class each week.	-0.10 ns	0.23	0.08 ns	0.33	0.00 ns	0.96	0.12 ns	0.13	0.06 ns	0.44

Relationship between the Respondents' Studying Skills in terms of Memorizing, Preparing for Tests, Managing their time and their Profile

The table below shows the relationship of the students' studying skills in terms of memorizing, preparing for tests and managing their time and their profile variables.

In terms of memorizing, it was found out to have no significant relationship in the students' skills in memorizing as to their sex, strand, academic performance, and type of internet connectivity. But, it was statistically significant as to their internet connectivity in the statements "I try to study during my personal peak time of energy to increase my concentration level" and "I have all my supplies handy when I study, such as pens, paper, calculator, etc." (Corr. $= .175; p = 0.028$) favoring students with good internet connection. This implies that students with good internet connection are likely to study during personal peak time and have their supplies handy when they study than students with poor internet connection.

In terms of the relationship between students' studying skills in preparing for their tests, the result showed no significance with their strand and type of internet connection given by their p-values greater than 0.05. Meanwhile, the statements "I do all homework assignments and turn them in on time" (Corr. $= -.199; p = 0.017$) and "I anticipate what possible questions may be asked on my tests and make sure I know the answers" (Corr. $= -.165; p = 0.046$) was found to have significant relationship as to their sex. This result tells that females are more likely to do all the homework and anticipate possible questionsin any given tests compared to males. It was also found out that there is a significant relationship when the students prepare for tests as to their academic performance as shown in the statement "I do all my homework assignments and turn them in on time" (Corr.

$=.226; p = 0.002$) which favors students with good academic performance. Lastly, under preparing for tests, it was found out that the statements "I study with a classmate or group" ($\text{Corr.} = .193$; $p = 0.013$), "When I don't understand something, I get help from tutors, classmates, and my instructors." ($\text{Corr.} = .183$; $p = 0.02$) and "I do all homework assignments and turn them in on time." ($\text{Corr.} = .184$; $p = 0.022$) were statistically significant in terms of their type of internet connection.

In terms of the relationship between the students' studying skills in managing their time as to their profile, it was found out that there was no significant relationship as to their sex, strand, academic performance, and type of internet connection given by their p-values greater than 0.05. But in terms of their internet connectivity, it showed high significance in the statement "I have enough time for school and fun" ($\text{Corr.} = .211$; $p = 0.006$) and significant in the statement "I start papers and projects as soon as they are assigned" ($\text{Corr.} = .162; p = 0.043$). This implies that students who have good internet connection are more likely to manage their time by doing their projects as soon as they areassigned and balance between school and fun compared to the students with poor internetconnections.

Table 10. Relationship between Respondents' Studying Skills in Terms of Memorizing, Preparing for tests and Managing Time and their Profile.

Table 10. Relationship between Respondents' Studying Skills in Terms of Memorizing, Preparing for tests and Managing Time and their Profile

LEARNING SKILLS	Sex		Strand		Academic Performance		Internet Connectivity		Type of Internet Connection	
	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.	Corr.	Sig.
Memorizing										
1. I try to study during my personal peak time of energy to increase my concentration level.	-0.13 ns	0.12	-0.01 ns	0.91	-0.04 ns	0.53	0.18*	0.03	-0.10 ns	0.24
2. I quiz myself over material that could appear on future exams and quizzes.	-0.03 ns	0.72	0.04 ns	0.6	-0.05 ns	0.44	0.12 ns	0.12	0.00 ns	0.96
3. I say difficult concepts out loud in order to understand them better.	-0.11 ns	0.17	0.02 ns	0.84	0.01 ns	0.94	0.14 ns	0.07	0.06 ns	0.47
4. I change my notes into my own words, for better understanding.	-0.03 ns	0.67	0.07 ns	0.35	-0.02 ns	0.75	0.10 ns	0.21	0.05 ns	0.54
5. I try to create associations between new material I am trying to learn and information I already know.	-0.16 ns	0.06	0.04 ns	0.61	-0.03 ns	0.65	0.09 ns	0.28	-0.07 ns	0.39
Preparing for Tests										
1. I study with a classmate or group.	0.05 ns	0.51	-0.13 ns	0.10	-0.06 ns	0.40	0.19*	0.01	-0.05 ns	0.57
2. When I don't understand something, I get help from tutors, classmates, and my instructors.	-0.02 ns	0.84	0.08 ns	0.28	-0.08 ns	0.28	0.18*	0.02	0.00 ns	0.96
3. I do all homework assignments and turn them in on time.	-0.20*	0.02	-0.05 ns	0.50	0.23*	0	0.18*	0.02	-0.10 ns	0.21
4. I can easily identify what I have learned and what I have not yet learned before I take a test.	-0.08 ns	0.31	-0.01 ns	0.94	0.10 ns	0.18	0.11 ns	0.16	-0.14 ns	0.09
5. I anticipate what possible questions may be asked on my tests and make sure I know the answers.	-0.17*	0.05	-0.04 ns	0.58	0.09 ns	0.19	0.08 ns	0.29	-0.06 ns	0.45
Managing Time										
1. I use a calendar book to write down upcoming academic and personal activities.	-0.09 ns	0.28	0.00 ns	0.97	-0.06 ns	0.41	0.15*	0.05	0.01 ns	0.85
2. I use a "to do" list to keep track of completing my academic and personal activities.	0.00 ns	0.98	0.08 ns	0.29	-0.06 ns	0.39	0.01 ns	0.85	0.02 ns	0.82
3. I start studying for quizzes and tests at least several days before I take them.	0.00 ns	1	0.14 ns	0.07	-0.03 ns	0.63	0.02 ns	0.79	0.02 ns	0.81

4. I start papers and projects as soon as they are assigned.	-0.13 ns	0.11	0.02 ns	0.82	-0.06 ns	0.42	0.16*	0.04	-0.07 ns	0.37
5. I have enough time for school and fun.	-0.08 ns	0.33	-0.07 ns	0.37	0.09 ns	0.23	0.22*	0.01	-0.05 ns	0.52

*Significant ns Not Significant

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter contains the summary of findings, conclusions, and as well as recommendation pertaining to the learning and studying skills of University of PerpetualHelp System Students during the COVID-19 pandemic.

Summary

The data gathered were computer-processed using the Statistical Package for Social Sciences (SPSS).

From the data gathered, the findings are summarized as follows:

The majority of the respondents were females and rest of them were males. In terms of strand, STEM got the highest number of respondents followed by HUMSS and ABM while the least number was from TVL. In terms of their academic performance in General Mathematics, majority of them were outstanding followed by very satisfactory, satisfactory, and fairly satisfactory. Also, all respondents have available internet connection at home. Most of these available connections had an average performance, some had good connections and the least had poor internet connections. Most of these connections were accessed via mobile data and the rest were by the use of Wi-Fi.

As to the degree of agreement under the learning skills, the results revealed that the respondents described most of the statements as “strongly agree” under the category “collaboration” and “agree” under the categories namely: critical-thinking, creative thinking, and communication skills.

As to the frequency of how the respondents do on the six components under

studying skills category, the results revealed that the respondents generally described most of the statements as “often”. These components were: reading e-modules, taking notes, studying, memorizing, preparing for tests, and managing their time.

In terms of the relationship between the students’ learning skills and their profile, the collaboration skills of the respondents and their strand, academic performance, and typeof internet connection got a p-value greater than the significance level which shows no significant relationship among them. But some statements under collaboration when related to sex such as“I am confident in my ability to be polite and kind to teammates”, “improve my own workwhen given feedback” and “follow rules for team meetings” show significant relationship with each other. Also, it showed significance in the statements “I am confident in my ability to: use appropriate body language when presenting, makesure all team members’ ideas are equally valued, come physically and mentally preparedeach day and improve my own work when given feedback” when related to the respondents’ internet connectivity.

The critical-thinking skills of the students when grouped according to the respondents’ strand, academic performance, and type of internet connection yielded statistically insignificant results since all the statements under this category got p-values greaterthan 0.05. On the other hand, the statement “I am confident in my ability to justify choicesof evaluation criteria” showed significance as to their sex. In like manner, the statement “I am confident in my ability to revise drafts and justify revisions with evidence” showed significance as to their internet connectivity.

The students’ learning skills in terms of creative thinking and their sex, strand, academic performance, internet connectivity, and type of internet connection showed

no relationship.

The students' learning skills in terms of communication and their sex, strand, academic performance, and type of internet connection showed no relationship. On the other hand, the statements "I am confident in my ability to: present all information clearly, concisely, and logically; organize information well; complete tasks without havingto be reminded; and use time, and run meetings, efficiently" are statistically significant as to the respondents' internet connectivity.

When it comes to the relationship between studying skills and their profile, all statementsunder the category reading e-modules showed no relationship when grouped according tothe respondents' strand and type of internet connection. Meanwhile, the statement "I look for familiar concepts as well as ideas that spark my interests as I read" showedsignificant relationship as to the respondents' sex. In like manner, the statement "Imake questions from a chapter before, during, and after reading it" showed significant relationship as to the respondents' academic performance and the statement "I try to getthe meaning of new words as I see them for the first time" showed significant relationship as to the respondents' internet connectivity.In terms of taking notes, all statements under this category showed no relationship when grouped according to the respondents' strand, academic performance, internet connectivity, and type of internet connection. On the other hand, the statements "I take notes as I read my e-modules", "I take notes during class lectures", and "I rewrite or type up my notes" showed significant relationship as to the respondents' sex.

In terms of studying, all statements under this category showed no relationship as to respondents' strand, academic performance, and type of internet connection. But

the statements “I have all my supplies handy when I study, such as pens, paper, calculator, etc.” and “I set study goals, such as the number of problems I will do or pages I will read” showed significant relationship as to the respondents’ sex. In like manner, the statement “I have all my supplies handy when I study,such as pens, paper, calculator, etc.” also showed significant relationship as to the respondents’ internet connectivity.

In terms of memorizing, under this category, all statements showed no relationship as to the respondents’ sex, strand, academic performance, and type of internetconnection. Meanwhile, only the statement “Itry to study during my personal peak time of energy to increase my concentration level” showed significant relationship when grouped according to the respondents’ internet connectivity.

In terms of preparing for tests, no significant relationship was shown when grouped according to the respondents’ strand and type of internet connections. Meanwhile, there are some statements such as “I do all homework assignments and turn them in on time” and “I anticipate what possible questions may be asked on my tests and make sure I know the answers” that showed significant relationship as to their sex. In like manner, the statement “I do all homework assignments and turn themin on time” also showed significant relationship as to the respondents’ academic performance and the statements “I study with a classmate or group”, “When I don’t understand something, I get help from tutors, classmates, and my instructors”, and “I do all homework assignments and turn them in on time” showed significant relationship in terms of their internet connectivity.

In terms of managing time, under this category, all statements showed no

significant relationship when grouped according to the respondents' sex, strand, academic performance and type of internet connection. On the other hand, the statements "I start papers and projects as soon as they are assigned" and"I have enough time for school and fun" showed significant relationship as to the respondents' internet connectivity.

Conclusion

Based on the findings of the probe, the following conclusions were made:

In terms of learning skills, the respondents do really collaborate in their respective teams. They are also confident in their ability to think critically and creatively. Also, the respondents are confident in their ability to communicate.

In terms of studying skills, the respondents often read their e-modules, take notes, study, memorize, prepare for tests andmanage their time.

There was no significant relationship under collaboration when the respondents are grouped according to their strand, academic performance, and type of internet connection but showed significant relationship as to sex and internet connectivity.

There was no significant relationship under critical-thinking when grouped according to the respondents' strand, academic performance, and their type of internet connection. Meanwhile, it showed significant relationship as to sex and internet connectivity.

There was no significant relationship between the category creative thinking as to the respondents' sex, strand, academic performance, internet connectivity, and type

of internetconnection.

There was no significant relationship between the category communication asto the respondents' sex, strand, academic performance, and type of internet connection and showed significant relationship as to the respondents' internet connectivity.

There was no significant relationship between the category "reading e-modules" as to the respondents' strand and type of internet connectivity but showed significance in their sex, academic performance, and internet connectivity.

There was no significant relationship between the category "taking notes" as to the respondents' strand, academic performance, internet connectivity, and type of internet connection. On the other hand, taking notes showed significant relationship as to the respondents' sex.

There was no significant relationship under the category "studying" as to the respondents' strand, academic performance, and type of internet connection but showed significance as to the respondents' sex and internet connectivity.

There was no significant relationship between the category "memorizing" and the respondents' sex, strand, academic performance, internet connectivity, and type of internet connection.

There was no significant relationship between the category "preparation for tests" as to the respondents' strand and type of internet connection. On the other hand, this variable showed significant relationship as to their sex, academic performance and internet connectivity.

There was no significant relationship between the category "managing your time" as tothe respondents' sex, strand, academic performance, and type of internet

connection. Meanwhile, it showed significance as to the respondents' internet connectivity.

Recommendation

Based on the result of this probe, the researcher recommends the following:

1. Students are encouraged to make questions from a chapter before, during, and after they read their e-modules for deeper understanding and meaning of the text.

2. Students are suggested to compare their notes with their classmates to check their own accuracy and understanding.

3. Students are encouraged to study with a classmate or group to increase learning and retention. There is a need for students to use a calendar book to keep track of events like upcoming academic and personal activities.

4. Since it was found out that female students have a greater likelihood to improve and exercise learning and studying skills components, male students are encouraged to increase their confidence in their ability to collaborate and think critically for them to improve their skills in learning and studying skills.

5. Parents or guardians are suggested to increase their internet strength at home for their children to increase their learning and studying skills.

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Appendices

Appendix A

Questionnaire

Dear Respondents,

The researcher is conducting a study entitled "Learning and Study Skills of the University of Perpetual Help System Students During the COVID 19 Pandemic" in partial fulfillment of the course Master of Science in Mathematics Education.

In this connection, may I request your utmost cooperation to answer each item of this questionnaire to the best of your ability upon consideration of truth and honesty. Rest assured that whatever responses you made will be dealt with high confidentiality.

Thank you very much for your usual cooperation.

Yours Truly,
The Researcher

Name of the Respondent (Optional): _____
Sex:_____ Strand:_____ General Weighted Average:_____

Q1. Do you have an available internet connection? _____Yes _____No

Q2. How can you describe your internet connection?_____Poor _____Average _____Good

Q3. How do you connect to the internet most of the time?_____Mobile Data _____Wi-Fi

Students' Learning Skills Survey
Directions: Below are statements to measure the learning skills of the students. Kindly put a check mark (/) in the column corresponding your choice base on your level of agreement in each statement.

Numerical Rating	**Categorical Response**
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

	Collaboration Skills	1	2	3	4	5
	I am confident in my ability to:					
1	use appropriate body language when presenting					
2	acknowledge and respect other perspectives					
3	make sure all team members' ideas are equally valued					
4	be polite and kind to teammates					
5	follow rules for team decision-making					
6	come physically and mentally prepared each day					
7	offer assistance to others in their work when needed					
8	improve my own work when given feedback					

9	follow rules for team meetings					

	Critical Thinking Skills	1	2	3	4	5
	I am confident in my ability to:					
1	create new, unique, surprising products					
2	create ideas geared to the intended client or user					
3	evaluate reasoning and evidence that support an argument					
4	identify in detail what needs to be known to answer a science inquiry question					
5	develop follow-up questions that focus or broaden inquiry					
6	revise drafts and justify revisions with evidence					
7	develop follow-up questions to gain understanding of the wants and needs of client or product users					
8	combine different elements into a complete product					
9	understand questions that lead to critical thinking					
10	gather relevant and sufficient information from different sources					
11	justify choices of evaluation criteria					

	Creativity Skills	1	2	3	4	5
	I am confident in my ability to:					
1	elaborate and improve on ideas					
2	understand how knowledge or insights might transfer to other situations or contexts					
3	find sources of information and inspiration when others do not					
4	help the team solve problems and manage conflicts					

	Communication Skills	1	2	3	4	5
	I am confident in my ability to:					
1	present all information clearly, concisely, and logically					
2	track our team's progress toward goals and deadlines					
3	organize information well					
4	complete tasks without having to be reminded					
5	use time, and run meetings, efficiently					

Students' Study Skills Survey

To gain a better understanding of yourself as a learner, it is helpful to identify the study skills you use. You can determine if your study skills need a boost or if they are fine just the way there are now. This informal inventory is a short and quick tool for assessing your study skills.

This is not a test, so please ask for assistance when/where you feel you need it. Answer each question as honestly as you can. There are 30 questions.

Directions:

1. Read each statement and think about it.
2. Place a check mark (/) in the column that best describes your current level as it relates to the study statement.

Please rate the following statements according to how frequent you are engage as describe in each statement.

Numerical Rating	**Categorical Response**
1	Never
2	Rarely
3	Sometimes
4	Often
5	Always

Reading Text Books

Statements	**1**	**2**	**3**	**4**	**5**
1. I browse the headings, pictures, chapter questions and summaries before I start reading a chapter.					
2. I make questions from a chapter before, during, and after reading it.					
3. I try to get the meaning of new words as I see them for the first time.					
4. I look for familiar concepts as well as ideas that spark my interest as I read.					
5. I look for the main ideas as I read.					

Taking Notes

Statements	**1**	**2**	**3**	**4**	**5**
6. I take notes as I read my text books.					
7. I take notes during class lectures.					
8. I rewrite or type up my notes.					
9. I compare my notes with a classmate.					
10. I try to organize main ideas and details into a meaningful method.					

Studying

Statements	1	2	3	4	5
11. I study where it is quiet and has few distractions.					
12. I study for a length of time then take a short break before returning to studying.					
13. I have all my supplies handy when I study, such as pens, paper, calculator, etc.					
14. I set study goals, such as the number of problems I will do or pages I will read.					
15. I study at least two hours for every hour I am in class each week.					

Memorizing

Statements	1	2	3	4	5
16. I try to study during my personal peak time of energy to increase my concentration level.					
17. I quiz myself over material that could appear on future exams and quizzes.					
18. I say difficult concepts out loud in order to understand them better.					
19. I change my notes into my own words, for better understanding.					
20. I try to create associations between new material I am trying to learn and information I already know.					

Preparing for Tests

Statements	1	2	3	4	5
21. I study with a classmate or group.					
22. When I don't understand something, I get help from tutors, classmates, and my instructors.					
23. I do all homework assignments and turn them in on time.					
24. I can easily identify what I have learned and what I have not yet learned before I take a test.					
25. I anticipate what possible questions may be asked on my tests and make sure I know the answers.					

Managing Your Time

Statements	1	2	3	4	5
26. I use a calendar book to write down upcoming academic and personal activities.					
27. I use a "to do" list to keep track of completing my academic and personal activities.					
28. I start studying for quizzes and tests at least several days before I take them.					

29. I start papers and projects as soon as they are assigned.					
30. I have enough time for school and fun.					

Appendix B

Request Letter for Validation of Instrument/Questionnaire

April 28, 2021

To: **Marie-Anne P. Barrera**
Assistant School Principal II

Dear Sir:

Perpetualite greetings!

I, Christian Boy D. Cacho, a student of Master of Science in Mathematics Education, conducting my study entitled "Learning and Studying Skills of the University Of Perpetual Help System During The Covid-19 Pandemic".

In line with this, I would like to ask your good office's permission to conduct a pre-survey on April 29, 2021 to 20 Senior High School Grade 11 to further provide answer to the objectives of this study.

With this regards, I would like to assure you that the respondents' identity as well as the pieces of information they will provide will be treated with strictest confidentiality. Rest assured that there will be no potential harmful impact and risk of the study to the respondents and the school. If you would be interested to receive a copy of the executive summary or the electronic copy (e.g. PDF) of the entire thesis, this can be made available for you.

I am looking forward to your affirmative response. Thank you very much and may our Lord bless you more.

Sincerely yours,

(sgd)
CHRISTIAN BOY D. CACHO
Researcher

Pilot Test Result

To: **ARTEMIO A. MARTIN, JR., PhD**
Dean, Central Graduate School

Cc :**MS. MARIANNE JANE ANTOINETTE D. PUA**
Thesis Adviser

RE :A Letter of Information about the Reliability Statistics Result of Learning and Studying Skills Survey Conducted to 20 Grade 11 Students

Date :April 30, 2021

Dear Ma'am,

I, Christian Boy D. Cacho, a student of Master of Science in Mathematics Education, recently floated my tools to 20 selected students of Sta. Isabel National High School, City of Ilagan, Isabela to test the **reliability and validity of the instruments.** The questionnaires were floated on April 29, 2021 upon the approval of the Dean of the Graduate School and the Principal of the Senior High School. The data were collected, summarized, and then analyzed by the use of Statistical Package for Social Sciences (SPSS) via Cronbach's alpha.

Below is the summary of the said test.

Students' Studying Skills Survey
Reliability Statistics Result: **Cronbach's Alpha = .913**
Interpretation: **Excellent** (Konting et.al., 2009)

Students' Learning Skills Survey
Reliability Statistics Result: **Cronbach's alpha = .919**
Interpretation: **Excellent** (Konting et.al., 2009)

Based on the information stated above, the questionnaires are excellent given by their high-valued alpha. With this regards, may I ask your good office to allow the researcher to proceed to final survey to **127 samples** of the study entitled **"Learning and Study Skills of the University of Perpetual Help System Students during the COVID 19 Pandemic"**.

Attached here is the letter asking permission to conduct addressed to the principal of Sta. IsabelNational

High School's Principal, the link for the google form during the pilot study, and the

reliability statistics result of the survey.

Thank you for your usual support.

Yours Truly,

(sgd)

CHRISTIAN BOY D. CACHO
Student

Appendix C

Survey Letter

May 05, 2020

To: **DR. WARREN L. CALILUNG**
School Director

Thru:
MICHELLE B. ESTILLORE, RN, MAN, MAEd
SHS Coordinator

Dear Sir:

Perpetualite greetings!

I, Christian Boy D. Cacho, a student of Master of Science in Mathematics Education, conducting my study entitled "Learning and Studying Skills of the University Of Perpetual Help System During The Covid-19 Pandemic".

In line with this, I would like to ask your good office's permission to conduct a survey on May 06, 2021 to 127 Senior High School Grade 11 to further provide answer to the objectives of this study. Also, I would like to ask your permission to allow me use the General Weighted Average of the students in General Mathematics during the First Semester of the Academic Year 2020-2021.

With this regards, I would like to assure you that the respondents' identity as well as the pieces of information they will provide will be treated with strictest confidentiality. Rest assured that there will be no potential harmful impact and risk of the study to the respondents and the school. If you would be interested to receive a copy of the executive summary or the electronic copy (e.g. PDF) of the entire thesis, this can be made available for you.

I am looking forward to your affirmative response. Thank you very much and may our Lord bless you more.

Sincerely yours,

(sgd)
CHRISTIAN BOY D. CACHO
Researcher, Master of Science in Mathematics Education

May 05, 2020

To: **CLARICEL P. ORATA, MBA, LPT**
University Registrar

Thru:
MICHELLE B. ESTILLORE, RN, MAN, MAEd
SHS Coordinator

Dear Sir:

Perpetualite greetings!

I, Christian Boy D. Cacho, a student of Master of Science in Mathematics Education, conducting my study entitled "Learning and Studying Skills of the University Of Perpetual Help System During The Covid-19 Pandemic".

In line with this, I would like to ask your good office's permission to obtain the grades of 127 Senior High School Grade 11 in General Mathematics during the First Semester of the Academic Year 2020-2021 to further provide answer to the objectives of this study.

With this regards, I would like to assure you that the respondents' identity as well as the pieces of information they will provide will be treated with strictest confidentiality. Rest assured that there will be no potential harmful impact and risk of the study to the respondents and the school. If you would be interested to receive a copy of the executive summary or the electronic copy (e.g. PDF) of the entire thesis, this can be made available for you.

I am looking forward to your affirmative response. Thank you very much and may our Lord bless you more.

Sincerely yours,

(sgd)
CHRISTIAN BOY D. CACHO
Researcher, Master of Science in Mathematics Education

Appendix D

Republic of the Philippines

Region 02

ISABELA STATE UNIVERSITY

Echague, Isabela

CERTIFICATION

This is to certify that the thesis entitled **"LEARNING AND STUDYING SKILLS OF STUDENTS IN GENERAL MATHEMATICS DURING THE COVID-19 PANDEMIC"** of **CHRISTIAN BOY D. CACHO** was edited as to its format, mechanics, and organization for its improvement.

This certification is issued this 24th day of December 2021 at Isabela State University, Echague, Isabela.

ROBIN V. GUILLERMO, MAEd
English Critic

Appendix E

Sample Result of Survey in Google Form

	Name of the Respondent	Sex	Do you have an available internet connection?	If yes, how can you describe it? (If no, please do not	How do you connect to the internet most of the time?	I am confident in my ability to use appropriate body	I am confident in my ability to acknowledge and respect	I am confident in my ability to make sure all team	I am confident in my ability to be polite and kind to	I am confident in my ability to follow rules for team	I am confident in my ability to come physically and	I am confident in my ability to offer assistance to	I am confident in my ability to improve my own work	I am confident in my ability to follow rules for team	I am confident in my ability to create new, unique,	I am confident in my ability to create ideas geared to	I am confident in my ability to evaluate reasoning and	I am confident in my ability to identify in detail what
1	Sharmaine Villanueva	Female	Yes	Good	Mobile Data	2	3	3	2	3	3	3	3	3	3	2	3	2
2	Marck Julius Garduque	Male	Yes	Average	Wi-Fi	3	3	4	4	5	4	5	5	5	4	4	4	3
3	Klein Janine	Female	Yes	Good	Wi-Fi	3	5	5	5	5	5	5	5	5	3	3	4	3
4	Ashley Nichole Julian	Female	Yes	Average	Wi-Fi	4	4	4	4	4	2	4	4	4	3	3	4	3
5	Joshua Prud Acorda	Male	Yes	Average	Wi-Fi	4	4	4	4	4	4	4	4	4	4	4	4	4
6	Ginalyn T. Tolentino	Female	Yes	Good	Wi-Fi	2	4	5	4	5	5	5	5	5	4	5	5	4
7	Tyron Jamil R. Tarrobago	Male	Yes	Average	Wi-Fi	3	5	4	5	4	4	4	4	4	3	3	3	3
8	Darlene P. Dela Cruz	Female	Yes	Average	Wi-Fi	3	5	4	5	5	4	4	4	5	4	4	4	4
9	Anna	Female	Yes	Good	Wi-Fi	5	4	4	3	4	4	4	5	5	5	4	4	4
10	Geomerren Enipto	Female	Yes	Average	Wi-Fi	3	4	5	5	5	4	4	5	5	4	4	4	4
11	Taguba Camille	Female	Yes	Average	Wi-Fi	3	4	4	4	5	5	4	5	4	3	4	4	5
12	Arwen Alexandra Sinon	Female	Yes	Average	Wi-Fi	3	5	5	5	5	4	5	4	5	3	4	5	3
13	Cynthien Graze T. Alabado	Female	Yes	Average	Wi-Fi	2	5	5	4	5	4	4	5	5	4	3	4	4
14	Desiree A. Lucquiao	Female	Yes	Poor	Wi-Fi	4	4	5	5	5	5	5	4	5	4	4	5	5
15	Justine P. Salazar	Male	Yes	Average	Wi-Fi	3	5	5	5	5	5	5	5	5	5	5	5	5
16	Kyla Isabel Lugto	Female	Yes	Average	Wi-Fi	3	3	3	3	3	3	3	3	3	3	3	3	3
17	April Joy Pascual	Female	Yes	Average	Wi-Fi	4	5	5	5	4	5	5	5	5	5	5	5	5
18	Sherielou Mercado	Female	Yes	Good	Wi-Fi	4	4	5	5	4	4	5	5	5	4	4	4	4
19	Kristine Seroma	Female	Yes	Good	Wi-Fi	4	5	5	5	5	4	4	5	5	4	4	5	5
20	Frence joshua Domingo	Male	Yes	Good	Wi-Fi	3	4	3	4	4	5	4	5	4	3	3	3	3
21	Angelica Manahan	Female	Yes	Average	Wi-Fi	3	5	4	5	5	2	5	4	5	4	4	5	4
22	Michaella Bugaoisan	Female	Yes	Good	Wi-Fi	5	5	5	5	5	4	5	5	5	4	5	5	5
23	Kyla Magmanlac	Female	Yes	Good	Wi-Fi	4	5	5	5	5	4	5	4	5	5	4	3	4
24	Daphne Juan	Female	Yes	Average	Wi-Fi	3	4	4	5	5	4	5	4	4	3	3	4	3
25	Kathlene opiana	Female	Yes	Average	Wi-Fi	3	3	4	5	4	3	3	4	5	3	3	4	3
26	Cristine Jecel Monterubio Die	Female	Yes	Good	Wi-Fi	4	4	4	4	4	4	4	5	4	4	4	4	3
27	Keziah Denise D. Jacinto	Female	Yes	Average	Wi-Fi	4	4	3	4	4	3	4	4	4	3	3	3	3
28	Nemia Lamug	Female	Yes	Average	Wi-Fi	4	5	5	5	5	5	4	5	5	4	4	5	4
29	Rosario Lagmay	Female	Yes	Poor	Mobile Data	3	4	4	3	4	3	3	5	4	4	4	4	3
30	Precious G. Respicio	Female	Yes	Average	Wi-Fi	3	4	4	5	5	4	4	4	5	4	5	4	4
31	Danielbert Duran	Male	Yes	Average	Wi-Fi	3	4	4	4	3	3	4	3	4	2	2	3	2
32	Bernadeth Diego	Female	Yes	Average	Wi-Fi	4	4	5	4	4	3	3	4	4	4	4	4	4
33	Robert Louis Gabuat	Male	Yes	Average	Wi-Fi	2	4	4	5	4	3	3	4	4	4	2	2	3

34	Dahziel G. Mapago	Female	Yes	Good	Mobile Data	5	5	5	5	5	5	5	5	5	3	3	3	5
35	Risha Leanna Parado	Female	Yes	Average	Wi-Fi	3	4	4	5	3	4	4	5	5	4	4	4	4
36	JANZEN REIGN D. REYES	Female	Yes	Good	Wi-Fi	3	1	2	1	1	2	2	3	1	2	2	2	3
37	Lorzsacxel Montenegro	Male	Yes	Poor	Mobile Data	4	5	5	5	5	5	5	4	5	5	5	4	4

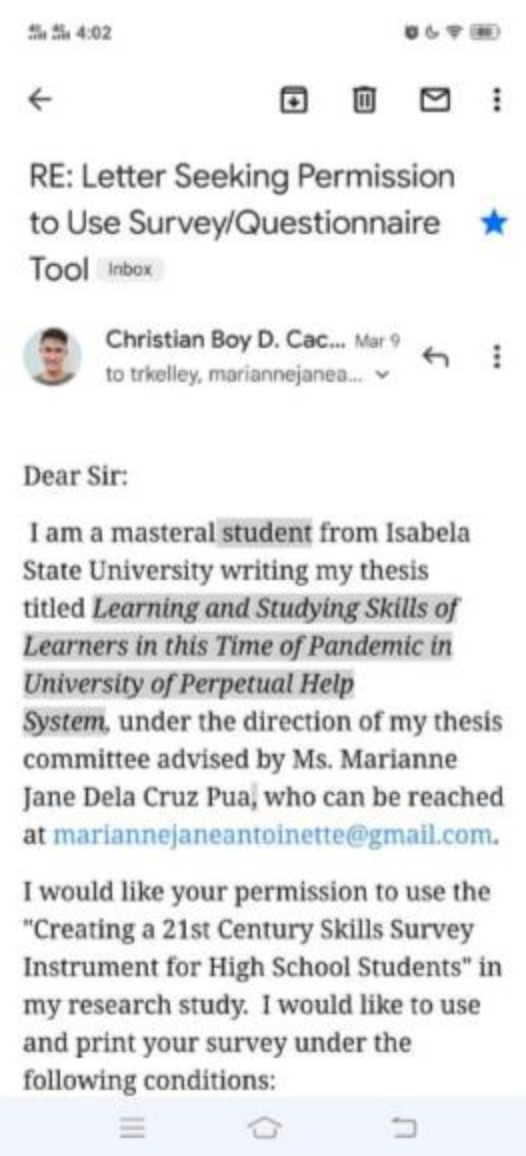
38	Leah Marie G. Balgos	Female	Yes	Average	Wi-Fi	5	4	3	5	5	4	5	5	5	5	4	5	5
39	Gem Cabalbal	Female	Yes	Average	Mobile Data	3	4	4	4	4	4	4	4	4	4	3	4	3
40	Pagaduan, Nicole I.	Female	Yes	Good	Wi-Fi	3	5	5	5	5	3	3	5	5	5	4	4	4
41	Crypton Jeric Jasmin	Male	Yes	Good	Wi-Fi	4	5	5	4	4	4	5	4	4	3	3	4	4
42	Ian Agustin	Male	Yes	Poor	Wi-Fi	4	5	4	5	5	4	4	4	5	3	3	4	4
43	Trista Taylan	Female	Yes	Good	Wi-Fi	4	5	4	5	5	5	4	5	5	5	4	4	5
44	Yeasha Liporada	Female	Yes	Average	Wi-Fi	5	5	5	5	5	4	5	5	5	5	4	5	4
45	Kate Anchola	Female	Yes	Average	Wi-Fi	3	4	4	3	4	4	4	3	4	4	3	3	4
46	Princess Morera Orbillo	Female	Yes	Average	Wi-Fi	5	5	5	5	5	3	5	5	5	5	5	5	5
47	Nicole Joy Eder	Female	Yes	Average	Wi-Fi	5	5	5	5	5	4	4	5	5	5	5	4	4
48	Crizelle	Female	Yes	Average	Wi-Fi	4	5	5	5	5	4	5	5	5	4	4	5	4
49	Arlyn	Female	Yes	Average	Wi-Fi	3	5	5	5	5	2	4	5	5	3	3	3	4
50	Eu Anne Esponilla	Female	Yes	Average	Wi-Fi	4	3	3	4	4	3	3	4	4	3	3	4	3
51	Aubrey Claire Gragasin	Female	Yes	Good	Wi-Fi	3	4	4	4	5	4	4	4	4	3	3	4	4
52	Aaron Joseph J. Domingo	Male	Yes	Poor	Wi-Fi	2	5	4	4	3	4	3	3	3	3	4	4	3
53	Cyrine Joy Angco	Female	Yes	Average	Wi-Fi	4	5	5	5	5	5	5	5	5	4	4	5	5
54	Justine Marc Ely	Male	Yes	Good	Wi-Fi	3	5	4	4	5	4	4	4	5	4	3	4	4
55	Meekyla Bernardino	Female	Yes	Average	Wi-Fi	4	4	4	5	5	5	5	5	5	4	4	4	4
56	Karel Grace Colot	Female	Yes	Good	Wi-Fi	4	5	5	5	5	3	5	5	5	4	4	4	5
57	Amaina Kathleen Suril	Female	Yes	Average	Mobile Data	4	4	4	4	4	4	4	4	4	4	4	4	4
58	Richard Kim J. Mendoza	Male	Yes	Average	Wi-Fi	3	5	5	5	5	4	5	5	5	4	4	4	4
59	Kiarra Manuel	Female	Yes	Average	Wi-Fi	3	4	5	5	5	3	4	4	5	3	3	3	3
60	Ralph Justine Gauiran	Male	Yes	Average	Wi-Fi	4	4	4	4	5	5	4	5	5	4	4	3	5
61	Adrienne Faith N. Mondala	Female	Yes	Average	Wi-Fi	3	5	5	5	5	3	4	4	5	3	3	3	3
62	Gwy Bales	Female	Yes	Good	Wi-Fi	4	5	5	4	4	4	3	3	4	4	3	3	3
63	JANELA NICOLE A. CALZADA	Female	Yes	Average	Wi-Fi	4	5	4	5	5	4	5	5	5	4	4	4	4
64	Jaezel Garcia	Female	Yes	Good	Wi-Fi	3	4	4	5	4	4	4	5	4	3	4	3	3
65	Danice Saura	Female	Yes	Good	Wi-Fi	4	5	5	5	5	5	5	5	5	5	5	5	5
66	Angelica Dela Cruz	Female	Yes	Good	Wi-Fi	4	4	5	5	5	4	4	5	5	3	4	5	4
67	Thessea Zysa Zarate	Female	Yes	Average	Wi-Fi	3	4	4	4	5	3	3	4	4	3	3	4	4
68	Rosette Nicole Ancheta	Female	Yes	Average	Wi-Fi	4	5	4	5	5	4	4	5	5	4	4	3	3
69	Kisses May Flores	Female	Yes	Good	Wi-Fi	4	5	5	5	5	4	5	5	5	4	4	5	4
70	Lea Marie Duton	Female	Yes	Average	Mobile Data	3	4	4	5	5	3	5	5	5	5	5	5	3
71	Samuel R. Magmanlac	Male	Yes	Good	Wi-Fi	3	5	5	5	5	5	5	5	5	4	4	4	4
72	Jesabelle Bad-ang	Female	Yes	Good	Wi-Fi	3	5	5	4	3	3	5	5	4	3	3	4	3
73	Aileen D. Ibana	Female	Yes	Average	Wi-Fi	3	5	4	5	5	4	4	5	4	4	3	3	4
74	Carlo James Butalid	Male	Yes	Poor	Mobile Data	2	2	3	2	3	2	2	3	2	3	2	2	3
75	Mike Dwayne A. Ballesteros	Male	Yes	Average	Wi-Fi	2	4	5	4	4	2	4	5	4	4	4	4	3
76	Yra Lei Garcia	Female	Yes	Good	Wi-Fi	5	5	5	5	5	5	4	5	5	4	4	4	4
77	Keezya Alec Angeles	Female	Yes	Average	Wi-Fi	3	4	4	5	5	3	4	4	4	4	4	4	3
78	Amiah Gumpal	Female	Yes	Good	Wi-Fi	4	5	5	5	5	4	5	5	5	4	4	4	3
79	Ashley Nicole E Velasco	Female	Yes	Average	Wi-Fi	3	5	5	5	5	3	5	5	5	3	4	5	5
80	Lheana Valiente	Female	Yes	Good	Wi-Fi	4	5	4	4	5	5	5	5	5	4	5	5	3
81	Jaja	Female	Yes	Good	Wi-Fi	5	5	5	5	5	4	5	5	5	5	4	4	3
82	Shei Dacanay	Female	Yes	Average	Wi-Fi	3	5	5	5	4	2	5	5	5	3	3	4	3

83	Hazelbeth D. Ramones	Female	Yes	Average	Wi-Fi	3	4	5	5	4	4	4	5	4	3	3	3	3
84	Jhiel Iringan	Female	Yes	Average	Wi-Fi	5	5	5	5	5	5	5	5	5	5	5	5	5
85	Molika Pangantihon	Female	Yes	Average	Wi-Fi	3	3	3	3	3	3	3	4	4	3	3	4	3
86	Pitchie frades	Female	Yes	Average	Mobile Data	3	4	5	4	4	2	4	5	5	5	5	5	5

87	Diane Eugenio	Female	Yes	Average	Wi-Fi	3	5	5	5	5	3	5	5	5	5	5	5	4
88	LUIS ALLAUIGAN	Male	Yes	Average	Wi-Fi	4	5	5	5	5	5	5	5	5	4	4	4	4
89	Zenita Faith C. Natividad	Female	Yes	Average	Wi-Fi	2	4	4	4	5	3	3	4	4	5	4	4	3
90	Jelou	Female	Yes	Poor	Wi-Fi	2	4	3	4	3	3	4	3	3	3	3	3	3
91	Jhessa Lendle Miguel	Female	Yes	Average	Wi-Fi	3	5	4	5	5	3	4	5	5	4	4	5	4
92	Delson Galban	Male	Yes	Average	Wi-Fi	3	4	4	4	4	4	4	4	3	3	2	2	3
93	Rey Juan	Male	Yes	Good	Mobile Data	3	5	5	5	5	4	4	4	5	4	4	4	3
94	Thomas Adriatico	Male	Yes	Good	Wi-Fi	5	5	5	5	4	4	5	4	5	5	5	5	5
95	Charie Kate Mintar	Female	Yes	Average	Mobile Data	4	5	5	4	5	5	5	5	5	5	5	5	5
96	Brian Liaban	Male	Yes	Poor	Wi-Fi	3	3	4	2	3	3	4	1	3	4	2	3	4
97	Christian Corpuz	Male	Yes	Average	Wi-Fi	4	5	5	5	5	4	4	4	4	4	4	4	4
98	Carla May L. Balanay	Female	Yes	Average	Wi-Fi	3	4	4	4	5	4	4	5	4	4	3	3	3
99	Miko Karl A. Ty	Male	Yes	Good	Wi-Fi	3	4	5	4	4	4	4	4	4	4	3	4	4
100	Neslyn Jade Dolores	Female	Yes	Average	Wi-Fi	4	4	4	4	4	4	4	4	4	3	3	3	3
101	Espiritu, Jenny Dimarucut	Female	Yes	Average	Wi-Fi	3	4	4	5	5	3	4	4	5	3	4	3	3
102	Aaron	Male	Yes	Average	Wi-Fi	5	5	5	5	5	4	5	5	5	5	5	4	4
103	Rocky Maniago	Male	Yes	Good	Wi-Fi	4	4	4	4	4	4	4	4	4	4	4	4	4
104	Fidelis Velasco	Female	Yes	Average	Wi-Fi	2	4	4	5	4	3	4	4	4	3	4	4	3
105	Shane Baysa	Female	Yes	Average	Wi-Fi	3	5	5	5	5	5	4	4	4	4	4	4	4
106	Marie Jasen Manzano	Female	Yes	Good	Wi-Fi	4	5	5	4	5	4	3	4	5	4	3	4	3
107	Keesha Jamaica E. Acosta	Female	Yes	Average	Wi-Fi	4	5	4	4	5	4	3	5	4	3	4	4	2
108	John Eleazar Cabasal	Male	Yes	Poor	Mobile Data	2	5	4	3	5	3	3	4	4	3	4	3	3
109	Nadine Desoyo	Female	Yes	Good	Mobile Data	5	4	4	5	5	3	4	5	3	1	3	5	1
110	Lhearnie Kaye Rubis	Female	Yes	Average	Mobile Data	5	5	5	5	5	5	5	5	5	4	4	4	5
111	ValJohn Parallag	Male	Yes	Average	Wi-Fi	3	4	4	4	5	5	5	5	5	4	5	5	5
112	Tori Villanueva	Female	Yes	Average	Wi-Fi	2	4	4	4	4	4	4	4	4	3	3	3	3
113	Lennie May Redada	Female	Yes	Average	Wi-Fi	3	4	4	4	4	4	4	4	4	4	4	4	4
114	Alynna Baysa	Female	Yes	Average	Wi-Fi	3	3	3	5	5	3	5	5	5	4	4	3	3
115	Mark Cesar Tubera	Male	Yes	Average	Wi-Fi	5	5	5	5	5	4	5	4	5	3	4	4	4
116	Meighdelyn Del Rosario	Female	Yes	Average	Wi-Fi	4	4	5	5	5	4	4	5	5	4	5	5	4
117	Jared Galisim	Male	Yes	Poor	Wi-Fi	3	5	4	4	5	5	4	4	4	4	3	4	4
118	Joshua Foronda	Male	Yes	Poor	Wi-Fi	3	5	5	5	5	3	5	5	4	3	4	4	4
119	Beyonce Cadiz	Female	Yes	Average	Wi-Fi	3	4	5	5	5	4	5	4	5	4	3	3	3
120	Aliyah Reotutar	Female	Yes	Poor	Mobile Data	2	5	5	5	5	3	5	4	5	3	4	3	4
121	KC Clair Pedro	Female	Yes	Good	Wi-Fi	3	5	4	5	5	4	4	3	5	4	4	4	4
122	Kimberly Casco	Female	Yes	Poor	Wi-Fi	3	1	1	1	1	1	1	1	1	1	1	1	3
123	Florez Grace R. Cabalfin	Female	Yes	Poor	Wi-Fi	3	5	5	5	5	3	5	5	5	3	4	4	2
124	Ann Amor Jillian B. Aglugub	Female	Yes	Average	Wi-Fi	3	4	4	5	5	4	4	3	4	3	4	4	4
125	John Carl Rimbiosa	Male	Yes	Poor	Mobile Data	3	4	4	4	4	4	4	4	4	3	4	4	4
126	Trisha Cabiles	Female	Yes	Average	Mobile Data	4	4	4	5	5	3	4	5	5	4	3	3	3
127	Henrich Lomboy	Male	Yes	Good	Wi-Fi	5	5	5	4	5	4	4	4	4	4	4	4	4

Appendix F

Letter of Asking Permission to Use Questionnaire sent through E-mail



4:02

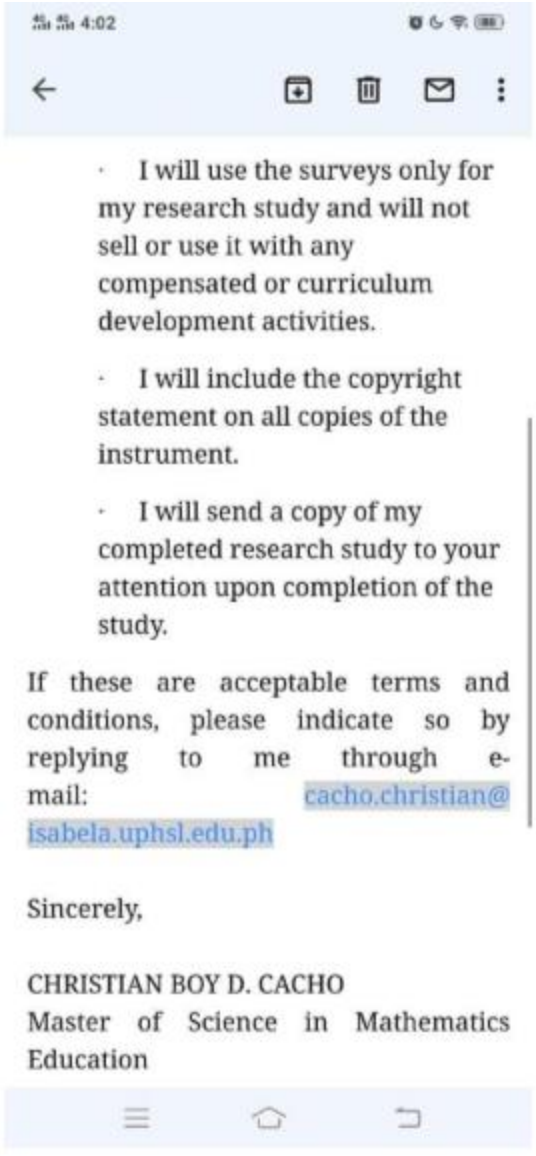
RE: Letter Seeking Permission to Use Survey/Questionnaire Tool Inbox

Christian Boy D. Cac... Mar 9
to trkelley, mariannejanea...

Dear Sir:

I am a masteral student from Isabela State University writing my thesis titled *Learning and Studying Skills of Learners in this Time of Pandemic in University of Perpetual Help System*, under the direction of my thesis committee advised by Ms. Marianne Jane Dela Cruz Pua, who can be reached at mariannejaneantoinette@gmail.com.

I would like your permission to use the "Creating a 21st Century Skills Survey Instrument for High School Students" in my research study. I would like to use and print your survey under the following conditions:



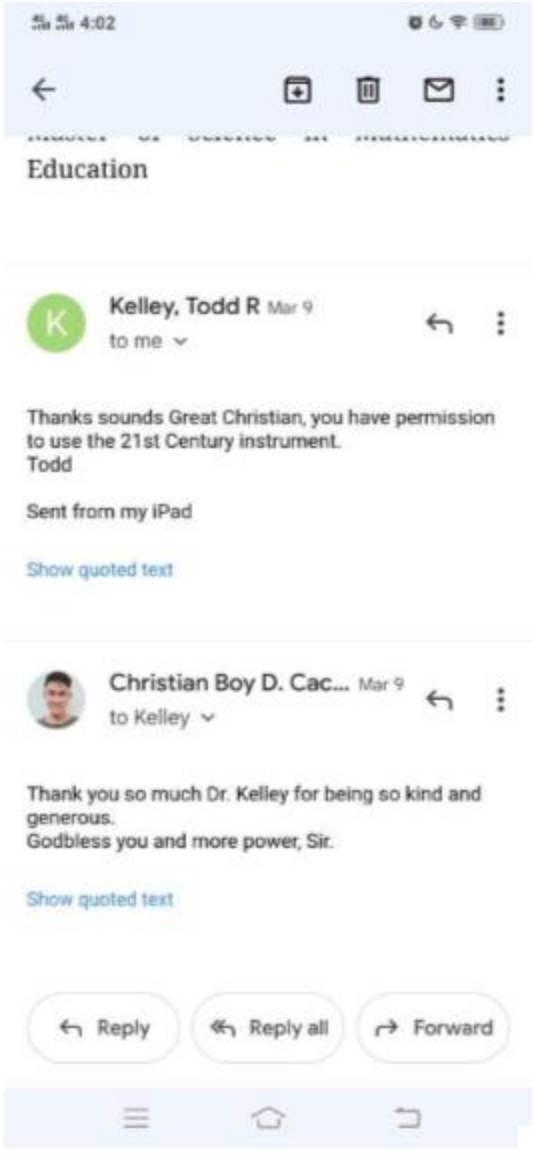
4:02

- I will use the surveys only for my research study and will not sell or use it with any compensated or curriculum development activities.
- I will include the copyright statement on all copies of the instrument.
- I will send a copy of my completed research study to your attention upon completion of the study.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail: cacho.christian@isabela.uphsl.edu.ph

Sincerely,

CHRISTIAN BOY D. CACHO
Master of Science in Mathematics Education



4:02

Education

Kelley, Todd R Mar 9
to me

Thanks sounds Great Christian, you have permission to use the 21st Century instrument.
Todd

Sent from my iPad

Show quoted text

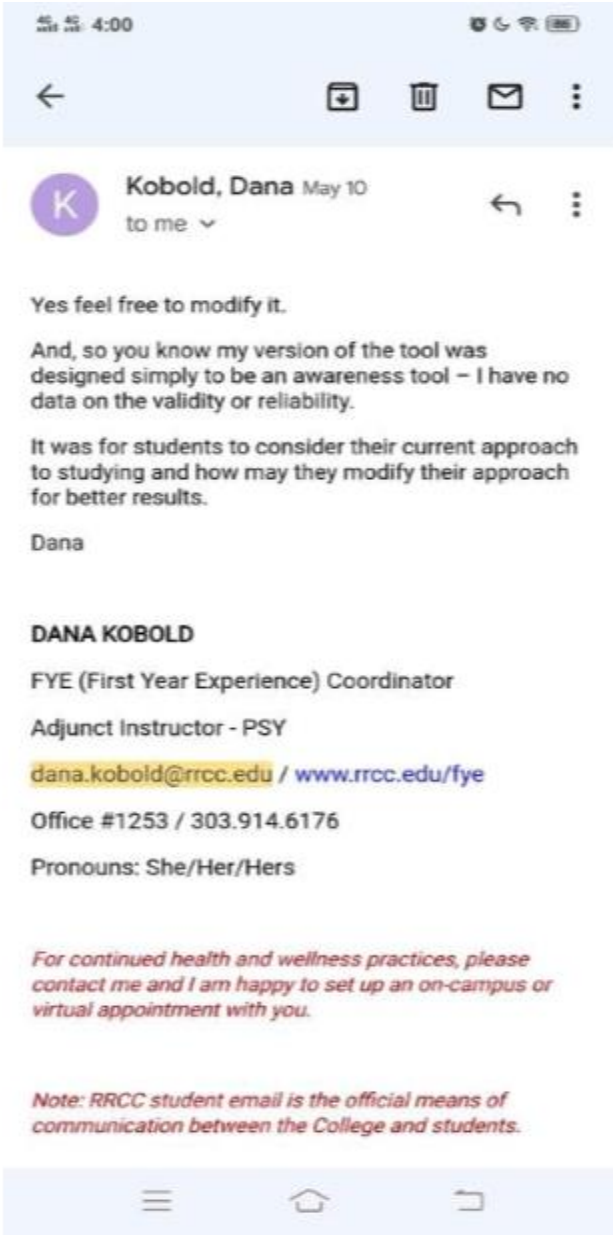
Christian Boy D. Cac... Mar 9
to Kelley

Thank you so much Dr. Kelley for being so kind and generous.
Godbless you and more power, Sir.

Show quoted text

Reply Reply all Forward


3:59
Request to Alter Text Book to E-module of Your Questionnaire
External
Inbox
Christian Boy D. Ca... May 9
to dana.kobold, mariannej...
Dear Sir/Ma'am,
May I humbly ask for your permission to allow me the researcher alter the words 'text books' to 'e-modules' to make the instrument I requested in your behalf more suitable to the purpose of my study and to the context of Philippine Education in this current time.
Thank you so much.
Yours Truly,
Christian Boy D. Cacho
Student
Master of Science in Mathematics Education
Kobold, Dana May 10
Yes feel free to modify it. And, so you know my version of the tool was designed
Christian Boy D. Ca... May 11
to Kobold


4:00
Kobold, Dana May 10
to me
Yes feel free to modify it.
And, so you know my version of the tool was designed simply to be an awareness tool – I have no data on the validity or reliability.
It was for students to consider their current approach to studying and how may they modify their approach for better results.
Dana
DANA KOBOLD
FYE (First Year Experience) Coordinator
Adjunct Instructor - PSY
dana.kobold@rrcc.edu / www.rrcc.edu/fye
Office #1253 / 303.914.6176
Pronouns: She/Her/Hers
For continued health and wellness practices, please contact me and I am happy to set up an on-campus or virtual appointment with you.
Note: RRCC student email is the official means of communication between the College and students.

CURRICULUM VITAE

Christian Boy D. Cacho

Purok 7, Sta. Isabel Sur
City of Ilagan, Isabela, 3300

09982873251

christianboycacho@gmail.com

FB: Chrisean Cacho

Experience

June 2017 to Present
Teaching• SHS Faculty • University of Perpetual Help System Isabela

December 2019 to Present
E-learning Assistant• SHS Faculty • University of Perpetual Help System Isabela

August 2015 to March 2017
Math Instructor• Instructor 1 • Isabela State University-Echague

Objective: Seeking a challenging opportunities where I will be able to utilize my strong organizational skills, educational background and ability to work well with people which will allow me to grow personally and professionally.

Education

Masters of Science in Mathematics Education
Isabela State University, Echague Campus
Echague, Isabela
[2019 – 2022]

Tertiary:
Bachelor of Secondary Education
Major in Mathematics
Isabela State University, Echague Campus
Echague, Isabela
[2010-2014]

Secondary:
Salutatorian
Sta. Isabel National High School
City of Ilagan, Isabela
[2006 – 2010]

Elementary:
With Honors
Sta. Isabel Sur Elementary School
City of Ilagan, Isabela
[2000 – 2006]

Skills

-Singing
-Playing Instruments
-Able to use SPSS for data analysis
-Computer Literate

References

Michelle B. Estillore, RN, MAN, MAEd
School Principal – Basic Education Department
University of Perpetual Help System Isabela Campus
Email: estillore.michelle@isabela.uphsl.edu.ph

Marianne Jane Antoinette D. Pua, MSME
Thesis Adviser
Email: mariannejaneanoinettepua@gmail.com