International Journal of Science and Research (IJSR)
ISSN: 2319-7064
ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

The Relationship of Teachers' Perception on E-Learning to the Grade 12 Students' Learning Motivation in Philippine International School - Qatar

Almero, Rosanna A. MAEd[1], Ganitano, Phil Angelo T[2], Baunsit, Lara Caitlin Y.[3], Rentoria, Germaine Armielle C.[4], Ilagan, Sophia A.[5], Tenorio, Danielle Angelika S.[6]

[1, 2, 3, 4, 5, 6]The Senior High School Department of the Philippine International School, Qatar

Running Title: The relationship of teachers' perception on e-learning to the students' learning motivation

Printed in Qatar
Philippine International School – Qatar
P.O. Box 9875, Ain Khalid, State of Qatar, Doha, Qatar

Abstract: ***E-learning is a fusion of modern and traditional learning that allows student-teacher interaction through the Internet. It is a contemporary idea that is still in its introductory stage. This study was undertaken to discover the relationship of teachers' perception on e-learning to the students' learning motivation. Two questionnaires were disseminated to both students and teachers to collect data on the said topic. Simple linear regression analysis was used to analyze data gathered from 88 students and 7 teachers from the Grade 12 level in Philippine International School – Qatar. With the acceptance of the null hypothesis, both teachers' perception and students' motivation reflected neutral levels. Results show that there was no significant linear relationship between teachers' perception to students' learning motivation, in which the R-value 0.0558 showed a negligible to no linear correlation between the study's two variables. Some recommendations have been prepared subsequently after data gathering and in-depth data analysis.***

Keywords: Teachers' Perception, E-learning, students' learning motivation, factors affecting motivation, Edmodo, online learning, distance learning, COVID-19, traditional learning, satisfaction, 2020, pandemic

1. Introduction

1.1 Background of the Study

A word often heard yet sometimes not valued and understood is the concept of the word 'education'. Education is not just about gaining new important knowledge, rather it goes far deeper for the lives of every individual. It is the key to success in life and many opportunities in the future. Additionally, education allows an individual to have a good career, have a good status in the society, and to improve self-confidence (Al-Shuaibi, 2014). It teaches the youth how to be a holistic individual ready to take on obstacles and challenges which would prepare them for the real world. Thus, education is deemed as the main factor behind successful people and the merit of well-developed countries.

With this, the importance of education cannot just be ignored. However, many problems are being faced by it nowadays. The problems and challenges faced by traditional learning include the following: access to quality teachers and education, the one-size-fit-all approach, is driven by fear of exams, the teacher-student ratio in the classroom (Soulunni, 2019). The issue with traditional learning is that it is not personalized and the children cannot initiate learning on their own. Thus, a fun learning experience is not provided to the students. Stephen Soulunni also goes as far as to say that traditional education is driven by fear of exams and tests, not for the love of learning. The ideal teacher-student ratio is 1:10 but the Philippines exceeds this by reaching a ratio of 1:45 prior to the School Year 2017-2018 (DepEd, 2018).

Due to this, the Philippine Government's Department of Education had been working for ways in order to decrease this ratio and to increase the quality of education in the Philippines. One solution is to shift to online learning as it is all about making children love learning and to understand the lessons in their own style and pace (Soulunni, 2019).

Online learning, also known as E-Learning, is the online delivery of instructional content and support services to students (Dela Pena-Bandalaria, 2009). The rapid progression of information and technology (ICT) helped bring changes and developments in the field of education as it empowered new ways for people to learn and to work together. The E-Learning environment is still in its early stages in the Philippines and is spearheaded by the UP Open University (UPOU), University of Santo Tomas' e-Learning Access Program (e-LeAP), and De La Salle University's Sakai Educational Software (Garcia, 2017).

With the gradually gaining prominence of E-Learning, the questions to ask now are these: How do teachers perceive e-

learning as a learning platform? What is the level of motivation of students towards e-learning? Is there a significant relationship between teachers' perception of e-learning and students' motivation to learn? Questions like these are what the researchers would like to answer.

The researchers conducted this study as they are Science Technology Engineering & Mathematics (STEM) students, and would like to learn if technology is actually helping the advancement of education or not. They are also deeply involved in the topic as they too have experienced online classes due to the COVID-19 suspension, which led to many schools and universities to resort to using distance learning. Additionally, many colleges and universities utilize online classes, and as incoming college freshmen, the researchers believe this study will help them be equipped for the future.

2. Literature Review

2.1 Local Literature

2.1.1 Problems of Traditional Education in the Philippines

Jesus Mateo, the Undersecretary for Planning and Field Operations of the Department of Education (DedpEd) once quoted in an interview by the Philippine News Agency (PNA) last March 2018 the House Bill 473. This House Bill, also known as the Act Regulating Class Size in All Public Schools and Appointing Funds states that one teacher shall handle a class size of 35 learners with a maximum of no more than 50 students. This however, is not implemented in some schools. "Kung titingnannatin, yung teacher-pupil ratio dating nasa 1:45. For School Year 2017-2018, the teacher-student ratio is 1:31 for the elementary level, 1:36 for Junior High School level, and 1:31 for Senior High School level," Mateo further states in his interview.

Thus, this interview states that a major problem in traditional education in the Philippines is the unproportioned student-teacher ratio. Other foreign sources state that a solution to this is to implement distance learning. This is relevant to the study as it provides a reason as to why E-Learning is being implemented in the Philippine by various universities and institutions.

2.1.2 Edmodo used in the Philippines

Long before the announcements of enhanced community quarantines and lockdowns because of the COVID-19, several academic institutions in the Philippines are already using online platforms as a mode for teaching, including: University of the Philippines Open University (UPOU), De La Salle University (DLSU), Ateneo De Manila University (ADMU), University of Sto. Tomas (UST), and the Asian Institute of Management (AIM). Social media applications are the simplest and easiest platforms to use for online learning in the Philippines.

As a long-term professor in the Philippines, Mr. Centeno says that learning management systems such as Edmodo will be able to provide us with the appropriate environment for learning. An LMS or a learning management system such as Edmodo serves as a substitute for a classroom for virtual students enrolled in a subject. Edmodo engages students in online discussions and activities such as timed quizzes and recitations. Additionally, teachers can easily monitor a learner's progress through this platform (Tabios, 2020).

This is relevant to the study as it defines what a Learning Management System (LMS) is and specifies on the application or website called Edmodo. Edmodo is the primary E-Learning system used by the Philippine International School – Qatar (PISQ) and thus will be the only form of E-Learning considered in this study.

2.2 Local Studies

2.2.1 Motivations of Filipino Students

Reyes and Galang (2009) stated in their study from the Philippine Journal of Psychology entitled "Motivational and Social Aspects of the Filipino College Experience", that there are various motives that drive Filipinos student to study; these motives correspond to the reasons they give in valuing education. Some students internalized the importance of education itself as a motivator. For others, it is the desire to have higher grades and the fear of failing that drives them to strive harder. Aside from performance-related motivations, students also embrace the thought of the opportunity of being able to attend college despite financial difficulties coupled with the thought of their parents working to fund their schooling. They desire to succeed and to make their families proud.

This study is used by the researchers as a form of related literature as it provides a clear definition of the concept behind the term 'student motivation'. This is the independent variable that the researchers are trying to measure, which is why it is important to clearly define it. Will E-Learning affect student motivation? If yes, how will it affect it?

2.2.2 E-learning in Philippine Schools

According to Arimbuyutan, Kim, Song and So (2007), in their study entitled "A Study on E-learning for Philippines", E-learning in the Philippines can be considered a fairly recent idea, and is still in its embryonic stage. Past documentations have shown evidence of the introduction of open and distance learning in the Philippines way back in 1952 in Iloilo, the development of e-learning in the country lags behind industrialized nations due to the lack of investments and establishments.

They also further state that the reason why E-learning lags behind in the Philippines is because of the cost it takes to implement it effectively. It is also due to the underdeveloped infrastructure and the propensity of the Filipinos to focus on developing traditional learning and not trying and risking new things (i.e. E-learning).

This study is highly relevant as it deals with how ready the Philippines is to truly implement effective distance learning for the students and the youth. It considers many factors such as the cost and the mindset of many Filipinos regarding the concept of E-learning.

2.2.3 Effects of e-learning to students

The E-learning system is meant to aid the students build their understanding towards their academic subjects to make

their learning experience more engaging. A study conducted by Mobo and Sabado (2019) examined the acceptance of AMA students towards the change in the innovation game. The said study deemed successful in defining what helps the students most in their education as well as the improvement it can do in terms of student competency. Analysis of gathered data revealed that the e-learning system promotes high productivity and learner effectivity in learning despite needing improvements.

The system of E-Learning in the Philippines may not be perfect and is lagging behind some countries, one cannot deny its effectiveness as stated in this study. This study is relevant to this research as it talks about the effectiveness of E-Learning to students in the Philippines nowadays, making way for a basis of what to expect from the results of this study. Will the researchers achieve a similar result from this study or will they not?

2.3 Foreign Literature

2.3.1 Student Motivation on Learning

According to the Ministry of Education in Guyana (2016) in their website, student attitude towards learning is important. Attitude can alter every aspect of a person's life, and this affects education as well. Student perspectives on learning, good or bad, influence their outlook toward learning throughout life. Their attitude towards learning influenced their amount of education as well as their desire for education. They further state that "when children lack motivation to learn, they fail to grasp the material (i.e. lessons, topics, subjects)." Thus, the motivation to learn is the deciding factor on whether the students will have a good outlook towards education or not, which will directly affect their future life.

This article shows how important students' learning motivation is to the future of the youth. It also defines what student attitude is which is almost synonymous to student motivation. The researchers used this related article to provide a cleared yet deeper understanding towards the term 'students' learning motivation'.

2.3.2 Effects of E-Learning on Student Motivation

According to the results of the study conducted by SafiyehHarandi (2015) entitled "Effects of E-Learning on Students' Motivation", students are more likely to be more motivated when applying E-learning. In the event that students are progressively propelled to learn, at that point they are bound to be engaged; and if that they are engaged successfully, they are bound to accomplish the learning objectives. (Kim & W. Frick, 2011). Thus, it would be intriguing to use e-learning as a standard device in the instruction of students.

Safiyed (2015) also mentions that there are two types of motivation: intrinsic and extrinsic motivation. Intrinsically motivated students prefer working with hard problems to develop themselves while extrinsically motivated people tend to prefer working with things that require the least amount of effort as they do not want to stress themselves.

Thus, this study serves as a springboard for this research as it shows how there is a positive relationship between E-Learning and Students' Learning Motivation. The same question is asked by the researchers but using a different environment which in this case is PISQ's E-Learning Environment. This study also further explains the concept of what motivation is which will provide a deeper understanding of what the researchers are trying to measure.

2.4 Foreign Studies

2.4.1 Teachers' Perception on Edmodo/E-learning

The findings of Yanti et al.'s study revealed that teachers perceive e-learning/Edmodo as a useful and easy-to-use technology. According to this study's statistics, 65% of teachers stated positive perception and only 15% of them stated negative perception for Perceived Effects on Motivation. Also, 55% of teachers reported positive perception about Perceived Ease of Use while only 35% of them reported negative perception.

Additionally, it was highlighted that teachers should play the 'main role' in adapting and integrating technology in a teacher-learner environment. If the teachers' attitudes and perceptions towards educational technology are positive, they can easily provide useful insight and feedback in cohesively blending it into the learning process. Ultimately, teachers' attitude towards technology influences their acceptance of technology's efficiency and its integration into teaching and learning.

2.4.2 Blended Learning

In "A Study of Student Satisfaction in a Blended E-Learning System Environment" Wu, Tennyson & Hsia (2010) states that student satisfaction in a blended-learning system has a lot of determinants. Some of which include computerself-efficacy, performance expectations, system functionality, content feature, interaction, and learning climate. However, the learning climate is also affected by interaction and performance expectations. The interaction of students to teachers and fellow students play a big role in their learning styles and strategies. The grading system also determines the students' enthusiasm and learning satisfaction when it comes to a blended e-learning system. This study is relevant as it provides what the students may consider when perceiving E-learning. The answers they will provide in the researchers' questionnaire will be based on how they view the specifics mentioned above by Wu et. al. Although blended learning is defined as the mixture of distance and traditional learning, the factors that affect student satisfaction towards it may also be deemed as factors they may consider in rating their motivation towards E-Learning.

2.4.3 Advantage of E-Learning

E-learning is not limited by time and space as it can take place at home, at work, or anywhere via computers or mobile devices connected to the Internet and the university's e-learning system (Bhuasiri et al., 2012; Kilburn, Kilburn, & Cates, 2014). This is particularly convenient for students who are learning and working at the same time (Wisloski, 2011). Finally, with e-learning, students can completely control the pace and rhythm of their studies as they are not required to attend physical classes on campus (Bhuasiri et

al., 2012). Considered as the primary advantage of E-learning over traditional learning is how convenient it is for the students to access. According to the studies conducted by the professionals stated above, E-learning is definitely advantageous to a certain group of people who cannot manage well in a traditional classroom setting. These advantages are what the Philippines acknowledge; which explains why they are considering and working on the development and implementation of distance learning amongst Filipino students.

2.4.4 Online Schoolers and Traditional Schoolers

Recent studies show that university students who have been enrolled in E-learning courses outperform those being educated on traditional courses. A case of this can be found at Carnegie Mellon University (CMU) in America where student test results have indicated improvement because of e-learning methods. It is along these lines imperative that an education system is made which is equipped for quick adaptation to its technological, social, cultural and political environment (El Seoud, 2014).

2.4.5 Transition to Online School during COVID-19 Pandemic

The sudden change from traditional face-to-face schooling has been compromised due to the latest COVID-19 pandemic outbreak. It is undoubtedly surprising that schools have to aid to online or distance learning. The objective was to proceed with instruction in any stage without having a lot of thought on the nature of the classes itself (Basilaia and Kvavadze, 2020). As indicated by them, further examinations should at present be led viewing on the web classes as it is still too early to tell and measure the level and proficiency of it.

2.4.6 Students toward Traditional and E-learning

Students have different preferences when it comes to their strategies and ways to study a specific course. Face-to-face or traditional system of learning is preferred by the students when it comes to subjects requiring calculations and conceptual knowledge while sometimes children also prefer online or e-learning in courses that self-learning is applicable (Paechter and Maier, 2010). The e-learning and traditional learning may both be considered by the students, depending on the requirement of skills and knowledge of the course or subject. The results of this study greatly affect the importance and relevance of the topic of the researchers as it states how E-learning has positive effects on the development of students compared to traditional learning students. Will it be the same for students in PISQ undergoing the E-learning management system PiSQ uses (i.e. Edmodo)? With E-learning directly affecting the development of students, one cannot therefore deny its importance.

3. Conceptual Framework

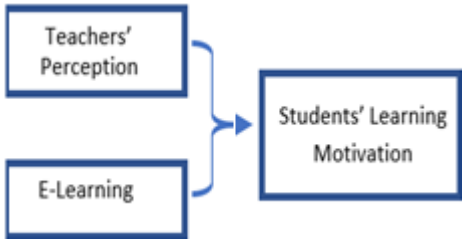

Figure 1: Research Paradigm for the Relationship Teachers' Perception on E-Learning to the Grade 12 Students' Learning Motivation

Figure 1. The figure above provides a visual framework for the relationship between teachers' perception of e-learning and student motivation. Many studies have stated that a relationship exists between these variables, thus, the researchers conducted this study to verify if a relationship does exist within the said variables. The teachers' perception and e-learning is considered to be both independent variables as they are not affected by its environment by any means while the student motivation is a dependent variable as it may change depending on the other variable. Both of these variables will be used to determine if the teachers' perception on e-learning has relationship to the students' learning motivation or not. The students' learning motivation is considered to be dependent as it may be affected by the changes in e-learning and the teacher's perception on it.

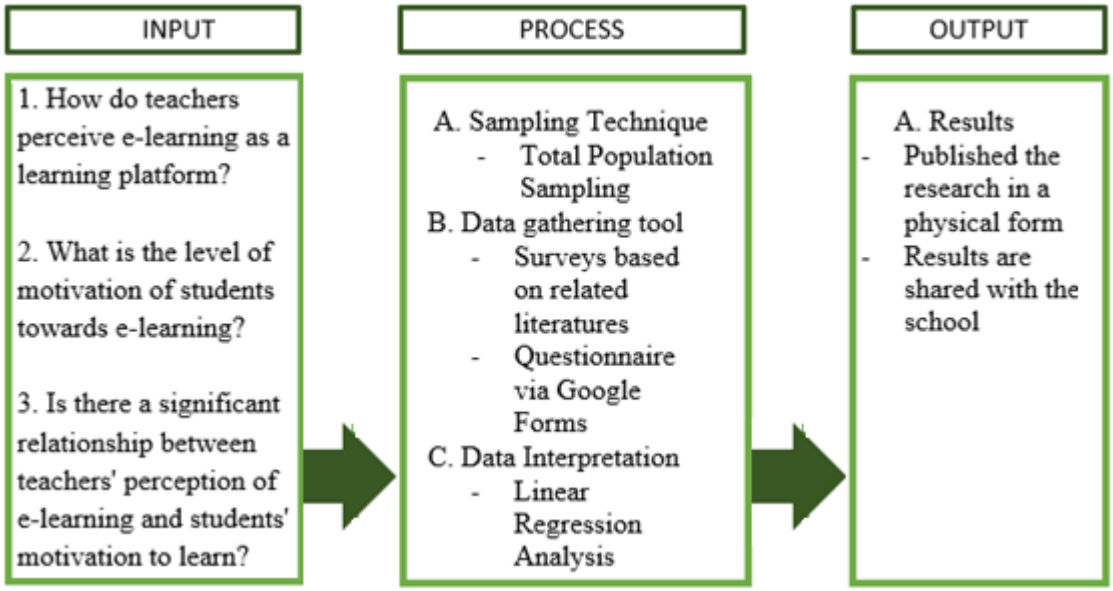

Figure 2: Research Paradigm for the Relationship of Teachers' Perception on E-Learning to the Grade 12 Students' Learning Motivation

Figure 2. The figure above displays the research paradigm that the researchersutilized to determine the relationship of teachers' perception of e-learning and student motivation. The research is formed by the main questions from the Statement of the Problem that was answered at the end of the study. Data was gathered from the respondents (Grade 12 subject teachers and Grade 12 students) and are the main basis of the study. In order to gather the information, the researchers chose a total population sampling for the sample size and used surveys online through Google Forms. To analyze the acquired data from the survey questionnaires given to the teachers and students, the researchers computed the data with the Linear Regression Analysis. The answers then provided further understanding and knowledge to contribute to the topic. The results of this undertaking will be shared as reference for the school library.

Statement of the Problem

This study aimed to identify The Relationship of Teachers' Perception on E-Learning totheGrade 12 Students' Learning Motivation in Philippine International School - Qatar A.Y. 2019-2020. Consequently, this study aims to answer the following questions:

1) How do teachers perceive e-learning as a learning platform?
2) What is the level of motivation of students towards e-learning?
3) Is there a significant relationship between teachers' perception of e-learning and students' motivation to learn?

Hypotheses

The researchers formulated the following hypotheses to identify The Relationship of Teachers' Perception on E-Learning to the Grade 12 Students' Learning Motivation at the Philippine International School - Qatar A.Y. 2019-2020.

Ho - There is no significant relationship between the Teachers' Perception of E-Learning to the Grade 12 Students' Learning Motivation.

H_1 - There is a significant relationship between the Teachers' Perception of E-Learning to the Grade 12 Students' Learning Motivation.

Significance of the Study

The findings of this study will help in determining TheRelationshipof Teachers' Perception onE-Learning to the Grade 12 Students' Learning Motivation at the Philippine International School - Qatar A.Y. 2019-2020. The results of this undertaking will prove to be beneficial to the following:

Students: They will identify whether e-learning affects them in terms of their attitude and motivation towards studying. This will give them an understanding towards what they feel and prefer is the better method for learning (i.e. traditional or distance). This knowledge and understanding can be used in their future decision-making and education preference.

Teachers: They will determine whether e-learning will be effective in aiding their lesson plans and in supplying the students with the information and knowledge relevant to their course or subject depending on their perception towards it. Teachers will understand their perceptions about e-learning itself, and how they can use this study for their future lesson plans and for the development of their teaching methods.

Parents: They will acquire knowledge on whether e-learning is helpful to their children or not. This will help them determine on which educational system would be better for their children and decide whether to pursue e-learning or not.

School Administrators: They will find out whether distance or e-learning will be helpful in heightening the quality of education offered by their school. In addition to this, they may also employ new strategies to address any other issue in relation to the traditional classroom offered by many schools and institutions nowadays.

Government Officials: They will be able to implement new programs, platforms and curriculums that would be in accordance with the preferred learning method of the students. This will potentially heighten the quality of education and solve many problems such as teacher-student ratio and lack of enthusiasm of the students.

Information and Technology Specialists: They will identify what is missing and needed by the current state of technology in the Philippines to be used in e-learning. This study will help them develop new applications, features and innovations that will help in the development of distance learning in the Philippines.

Researchers: They will gain new experiences in skills in conducting a quantitative study and incorporating the use of the internet and technology in their data gathering procedure. It will also provide them with a much deeper understanding and first-hand knowledge towards the use of e-learning in many schools nowadays.

Future Researchers: They may use this research to support their own study as a form of related literature or may be used as a source of inspiration for their new studies.

4. Scope & Delimitation of the Study

This study aimed to determine the relationship between Teachers' Perception on E-Learning and Students' Learning Motivation. The researchers did not focus on the respondents' grades nor the relationship of their performance to their motivation. They only focused on the motivation of the students to learn using e-learning. Additionally, the researchers obtained data from teachers. Data from the teachers is essential in data analysis as it is what quantified the variable of e-learning. Edmodo is contextualized as the relevant platform used for e-learning in this study. Thus, the E-learning mentioned in this study refers only to the use of Edmodo as the primary Learning Management System of PISQ.

The locale of this study was in Philippine International School - Qatar only. The researchers only utilized two questionnaires in gathering data, and analyzed it through the appropriate statistical treatment. Furthermore, due to the various restrictions brought about by the COVID-19 pandemic during the process of this study, the researchers conducted this research exclusively through the Internet by using Google Forms. As for the sampling size or the number of respondents, the researchers conducted a census and collected data from every Grade 12 student in PISQ (except for the researchers themselves) and all of Grade 12 subject teachers. Every result taken from the respondents was treated with utmost respect and confidentiality.

Definition of Terms

Throughout the course of this study, words and jargons may have been used. Thus, for the further understanding of this study, the researchers defined important terms using the contextual definition to allow further apprehension and to preclude confusion. Written below are the following terms defined by the researchers:

Advancement - the development and evolution of something for the purpose of common benefit

Blended learning - a mixture of e-learning and traditional learning wherein in some universities, the professors and students decide whether they would prefer a student-teacher interaction in personal or learning through the internet

E-learning - also known as distance learning. The process of learning through student and teacher interacting through the use of the internet. E-Learning, as mentioned in the title, only refers to the use of Edmodo as a form of distance learning,

Edmodo - an application or website used by Philippine International School - Qatar as the medium of education for the continuation of the second semester due to the COVID-19 pandemic

Education - a systematic way of giving and receiving information which is the main purpose of schools and universities

Learning attitude - the behavior and mindset of a student when it comes to learning

Learning climate - the environment of the student while he or she is studying which also affects the performance of the student

Learning motivation - the perseverance and willingness of a student to learn whether through the internet or through traditional learning

Motivators - factors that affect the willingness of someone to do or continue something

Online learning - process of learning anything through the internet, regardless if it is for educational purposes or personal choice

Quality education - the ideal education wherein the standards of education are all met by the institution

Student satisfaction - state of a student wherein he or she is satisfied in the education and system of learning they are receiving

Traditional learning - learning through a teacher-student interaction in a classroom with a series of paper-based exams, projects and assessments with also the interaction of student-student

5. Methodology

Research Design

This study employed the concept of a correlational study to collect the related information needed to answer the research questions. A correlational research design measures a relationship between two variables without the researcher controlling either of them. This study used the survey research type of study as it will involve asking questions to the respondents. The researchers believe that this research

design was the most effective to answer the research problem as it clearly showed the relationship of the two variables (namely, the students' learning motivation and teachers' perception on e-learning). The researchers conducted a survey through online questionnaires to acquire the needed data for this study.

Sample & Sampling Techniques

The chosen respondents by the researchers were the Grade 12 Subject Teachers and Grade 12 Students of the A. Y. 2019-2020. This is because Grade 12 students are the ones who are intended to advance to college in the next upcoming academic year and the people who are involved in their educational attainment are their Grade 12 Subject teachers. According to related literature, many colleges employ E-learning which makes Grade 12 students the preferred population for this study. The total population sampling or a census was utilized wherein the whole population of Grade 12 students and Grade 12 subject teachers served as the respondents for the study. It is practical as the whole population of the batch is a manageable size and it avoids bias in choosing the respondents. Furthermore, the whole population of Grade 12 students and subject teachers have experienced E-Learning due to class suspensions brought about by the COVID-19 pandemic. The whole population of Grade 12 consists of 88 students containing 53 boys and 35 girls and they are the students who were given the questionnaire. Meanwhile, the whole population of Senior High School Teachers consist of 8, however one of the teachers is not a subject teacher for Grade 12 and thus, that teacher was not included; the population is thenreduced to 7. The breakdown of Grade 12 students per section are as follows:

Table 1: Students Population Breakdown

Section	Total
12 STEM A	30
12 STEM B	25
12 STEM C	26
12 HUMSS A	7
TOTAL	**88**

The breakdown of Grade 12 Subject Teachers per section are as follows. It is important to note however, that a single teacher is a teacher to many sections. Even then, the overall population for Grade 12 subject teachers is 7.

Table 2: Teachers Population Breakdown

Strand	Number of Subject Teachers
12 STEM A	6
12 STEM B	6
12 STEM C	6
12 HUMSS A	6

Research Instrument

The research instrument utilized by the researchers is a modified version of a questionnaire from a published study entitled: "E-Learning and Students' Motivation: A Research Study on the Effect of E-Learning on Higher Education" by El Seoud et al. The researchers adjusted the questions in such a way that it will deem fit to the topic. Instead of specifying 'English modules' in e-learning, they generalized it into 'subjects'. The source of the utilized questionnaire is similar for both teachers and students. This research instrument is a Likert Scale with 13 items wherein the students were asked to choose one option (Strongly Agree=5 points, Agree =4 points, Neither Agree or Disagree=3 points, Disagree=2 points, Strongly Disagree=1 points) for each question. A copy of the questionnaire for administered for both the teachers and the students is attached at the appendices.

Validation of Questionnaire

The questionnaire attached at the appendix of this research paper and the questionnaire used by the researchers administered using Google Forms are all adapted from El-Seoud etal.'s research study entitled "E-Learning and Students' Motivation: A Research Study on the Effect of E-Learning on Higher Education". The group of researchers are professors in the British University in Egypt (BUE) and the Helwan University that can both be located in Cairo, Egypt. Thus, they were all credible enough to make and come up with the research questionnaire.

Additionally, the researchers also asked Ms. Rosanna Almero, their Research Adviser; Ms. AikkoPelayo, their Research Instructor; to check and review the questionnaire already modified by the researchers. This further strengthened and validated the questionnaire that was used in this study.

Data Gathering Procedure

The researchers communicated with the presidents of the four classrooms in Grade 12 (i.e. STEM A, STEM B, STEM C & HUMSS A) to collect their class lists and class numbers that was used as a tally sheet on who will be given the questionnaires. They asked the presidents to disseminate and share the Google Form links to all the students in the class. The links contained instructions and permission for the respondents to honestly answer the questionnaire. After disseminating it to the students, the researchers then disseminated a modified parallel questionnaire to the Grade 12 subject teachers.

When all the respondents have answered, the researchers proceeded to data analysis and statistical treatment to find the answer to the three questions aforementioned in the Statement of the Problem. All the data gathering procedures were done online using Google Forms in accordance to the recent developments regarding class suspension due to the COVID-19 pandemic.

Statistical Treatment of Data

This study employed the use of a correlational research design which is a bivariate analysis that measures the strength of association between two variables (i.e. Perception of Teachers' on E-learning & students' learning motivation).

Thus, for this study, the researchers used the Simple Linear Regression Analysis to understand and analyze the data. A simple linear regression is used to determine predictions in the dependent variable using the independent variable and it uses interval or ratio variables. This was used instead of the Pearson Analysis because this study has a different population for the two variables.

To determine the level of the respondents' answers, the researchers used a range of values scale. The first table is for research questions 1 and 2 while the second table is for research question 3.

Table 3: Range of Values Scale for Questions 1 & 2

Range of Values	Scale	
	Teacher Perception on E-Learning	Students' Learning Motivation
4.20 – 5.00	Highly Important	Highly Motivated
3.40 – 4.19	Important	Motivated
2.60 – 3.39	Neutral	Neutral
1.80 – 2.59	Less Important	Less Motivated
1.00 – 1.79	Not Important	Not Motivated

Table 3.1: R-Value Indicator for Question 3

R – Value	*Indication*
± 0.90 to ± 1.00	High Correlation
± 0.70 to ± 0.89	Moderately High Correlation
± 0.50 to ± 0.69	Moderate Correlation
± 0.30 to ± 0.49	Low Correlation
± 0.00 to ± 0.29	Negligible Correlation

6. Results & Discussions

This chapter presents the results of the data gathering conducted during the 3rd week of April 2020 by the researchers through Google Forms. On the latter part of this chapter, the researchers showed their analysis of the results and provided some related literatures in accordance with the results.

6.1 Results

The results from the data gathering conducted for both the teachers and the students can be found in the tables provided below.

Table 4: Tally of Teachers' Response
Frequency of Responses (Teachers)

Question	Responses		Teacher
1	1	Strongly Disagree	0
	2	Disagree	0
	3	Neutral (Neither Agree or Disagree)	5
	4	Agree	2
	5	Strongly Agree	0
2	1	Strongly Disagree	0
	2	Disagree	1
	3	Neutral (Neither Agree or Disagree)	2
	4	Agree	4
	5	Strongly Agree	0
3	1	Strongly Disagree	2
	2	Disagree	3
	3	Neutral (Neither Agree or Disagree)	2
	4	Agree	0
	5	Strongly Agree	0
4	1	Strongly Disagree	0
	2	Disagree	1
	3	Neutral (Neither Agree or Disagree)	1
	4	Agree	4
	5	Strongly Agree	1
5	1	Strongly Disagree	0
	2	Disagree	0
	3	Neutral (Neither Agree or Disagree)	5
	4	Agree	1
	5	Strongly Agree	1
6	1	Strongly Disagree	0
	2	Disagree	2
	3	Neutral (Neither Agree or Disagree)	4
	4	Agree	0
	5	Strongly Agree	1
7	1	Strongly Disagree	0
	2	Disagree	3
	3	Neutral (Neither Agree or Disagree)	1
	4	Agree	3
	5	Strongly Agree	0
8	1	Strongly Disagree	1
	2	Disagree	1
	3	Neutral (Neither Agree or Disagree)	3
	4	Agree	2
	5	Strongly Agree	0
9	1	Strongly Disagree	2
	2	Disagree	1
	3	Neutral (Neither Agree or Disagree)	3
	4	Agree	1
	5	Strongly Agree	0
10	1	Strongly Disagree	2
	2	Disagree	3
	3	Neutral (Neither Agree or Disagree)	1
	4	Agree	1
	5	Strongly Agree	0
11	1	Strongly Disagree	0
	2	Disagree	0
	3	Neutral (Neither Agree or Disagree)	4
	4	Agree	3
	5	Strongly Agree	0
12	1	Strongly Disagree	0
	2	Disagree	3
	3	Neutral (Neither Agree or Disagree)	4
	4	Agree	0
	5	Strongly Agree	0
13	1	Strongly Disagree	1
	2	Disagree	1
	3	Neutral (Neither Agree or Disagree)	4
	4	Agree	1
	5	Strongly Agree	0

Table 4. The first column of the table shows the question number or item number. The second column states the response which ranges from strongly disagree to strongly agree. The last and third column shows the frequency of that response being answered by the teachers. The third column is also the score or the tallied number of responses of the teachers. The total number for each item is seven as there are only seven teachers who responded to the survey.

Table 5: Tally of Students' Response
Frequency of Responses (Students)

Question	Responses		Student Score
1	1	Strongly Disagree	2
	2	Disagree	10
	3	Neutral (Neither Agree or Disagree)	32
	4	Agree	33
	5	Strongly Agree	11
2	1	Strongly Disagree	1
	2	Disagree	14
	3	Neutral (Neither Agree or Disagree)	40
	4	Agree	24
	5	Strongly Agree	9
3	1	Strongly Disagree	6
	2	Disagree	23
	3	Neutral (Neither Agree or Disagree)	49
	4	Agree	9
	5	Strongly Agree	1
4	1	Strongly Disagree	1

	2	Disagree	14
	3	Neutral (Neither Agree or Disagree)	38
	4	Agree	25
	5	Strongly Agree	10
5	1	Strongly Disagree	5
	2	Disagree	17
	3	Neutral (Neither Agree or Disagree)	31
	4	Agree	28
	5	Strongly Agree	7
6	1	Strongly Disagree	6
	2	Disagree	16
	3	Neutral (Neither Agree or Disagree)	30
	4	Agree	29
	5	Strongly Agree	7
7	1	Strongly Disagree	7
	2	Disagree	18
	3	Neutral (Neither Agree or Disagree)	28
	4	Agree	26
	5	Strongly Agree	9
8	1	Strongly Disagree	5
	2	Disagree	15
	3	Neutral (Neither Agree or Disagree)	34
	4	Agree	25
	5	Strongly Agree	9
9	1	Strongly Disagree	14
	2	Disagree	23
	3	Neutral (Neither Agree or Disagree)	27
	4	Agree	19
	5	Strongly Agree	5
10	1	Strongly Disagree	13
	2	Disagree	26
	3	Neutral (Neither Agree or Disagree)	28
	4	Agree	16
	5	Strongly Agree	5
11	1	Strongly Disagree	4
	2	Disagree	8
	3	Neutral (Neither Agree or Disagree)	22
	4	Agree	41
	5	Strongly Agree	13
12	1	Strongly Disagree	9
	2	Disagree	20
	3	Neutral (Neither Agree or Disagree)	39
	4	Agree	17
	5	Strongly Agree	3
13	1	Strongly Disagree	8
	2	Disagree	26
	3	Neutral (Neither Agree or Disagree)	26
	4	Agree	20
	5	Strongly Agree	8

Table 5. As with Table 4, which showed the frequency of the teachers' response, the table for the students' response has the same format. The first column shows the item number, the second column states the choices they have (i.e. from strongly disagree to strongly agree), and the third column shows the frequency of their responses per choice. Per item number, the total number of responses is 88 as that is also the sample size for the Grade 12 students.

6.2 Discussions

The results from above show the similarities and differences in the teachers' perception of E-learning and the students' learning motivation. First off, majority of the students' response is neutral except for items number 11 and 13. This means that some are undecided and are so-so in their learning motivation for both traditional learning and e-learning. Item number 11, which asked about how students are more prone to using internet sources for studying in e-learning received 19 votes more than neutral. Item number 13, on the other hand, asked if the students prefer e-learning over the traditional classroom. The answer was tied between disagree and neutral with 26 points each.

The teachers on the other hand, had 8 items they mostly found neutral in terms of their e-learning perception, which is more than half of the total number of items. The greatest score is for item number 1 and 5 for the neutral choice with 5 points, which asked about how the teachers think the students have fun with classes using e-learning and how the teachers think the students find the subjects easier with e-learning, respectively. There were also various choices for different items that received no score from the teachers.

The study by El-Seoud et al. (2014), entitled E-Learning and Students' Motivation: A Research Study on the Effect of E-Learning on Higher Education, had generally positive results far different from the many neutral results gathered by the researchers. Although both researches used almost the same research instrument, the results are far different. According to this study of Egyptian undergraduate students, the use of e-learning increasesthe motivation of the students for the learning process. This is not the case for the Grade 12 Students of PISQ, who leaned more towards being neutral and unsure about their level of motivation towards learning in an online environment.

7. Summary of Findings, Conclusion & Recommendations

7.1 Summary of Findings

The following presentations are the summary of the results from thorough and careful data gathering and analysis from the 88 student respondents and 7 teacher respondents from the Philippine International School – Qatar who participated in the study. This chapter provided the answers to the three question in the statement of the problem, stated the conclusion and inferences derived from the gathered data and analysis, and provided recommendations as to what should be done in accordance with the found results.

Research Question 1: How do teachers perceive e-learning as a learning platform?

Table 6: Summary of Weighted Means of Teachers' Perception on E-Learning

Summary of Weighted Means of Teachers' Perception on E-Learning	
Question	Weighted Mean
1	3.29
2	3.43
3	2
4	3.71
5	3.43
6	3.00
7	3.00
8	2.86
9	2.43
10	2.14
11	3.43
12	2.57

13	2.71
General Average	2.92

Table 6. The table above reveals the summary of the weighted means of the teachers' perception of learning. The lowest weighted average out of all is for item number 3 with a value of 2 while the highest weighted average is 3.71 for item number 4. This means that they found the items number 3 and 4, respectively, less important and important. The general average for the teachers' perception on e-learning is 2.92 which falls under the neutral scale in Table 3. Thus, the teachers do not find e-learning not important nor very important.

Research Question 2: What is the level of motivation of students towards e-learning?

Table 7: Summary of Weighted Means of Students' Learning Motivation

Summary of Weighted Means of Students' Learning Motivation	
Question	Weighted Mean
1	3.47
2	3.3
3	2.73
4	3.33
5	3.17
6	3.17
7	3.14
8	3.2
9	2.75
10	2.7
11	3.58
12	2.83
13	2.93
General Average	3.10

Table 7. The table above shows the Students' Learning Motivation. Based on the data, the lowest weighted mean is 2.58 for item number 10 and the highest weighted mean is for number 11 with 3.58. Based on Table 3 above, the students are neutrally motivated for item number 10 and are motivated for item number 11. The general average for the students' learning motivation is 3.10 and it falls under the neutral scale. Thus, the students' learning motivation through e-learning is neutrally motivated.

Research Question 3: Is there a significant relationship between teachers' perception of e-learning and students' motivation to learn?

Summary Output	
Regression Statistics	
Multiple R	0.055825
R Square	0.003116
Adjusted R Square	-0.00848
Standard Error	0.615001
Observations	88

ANOVA					
	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.1016864	0.1016864	0.268851	0.6054351
Residual	86	32.527415	0.3782258		
Total	87	32.629102			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	2.1773958	1.779876	1.2233413	0.2245423	-1.3608806	5.7156722	-1.3608806	5.7156722
TEACHERS (X)	0.3195858	0.6163559	0.5185085	0.6054351	-0.9056893	1.5448608	-0.9056893	1.5448608

Figure 3: Summary Output of Regression Analysis

The R-value 0.0558 shows a negligible correlation or no linear correlation at all between the two variables in the study according to Table 3.1. Furthermore, the p- value or the significance F is 0.605 and is greater than the level of significance, 0.05. Thus, there is no significant relationship between the Teachers' Perception of E-Learning to the Grade 12 Students' Learning Motivation.

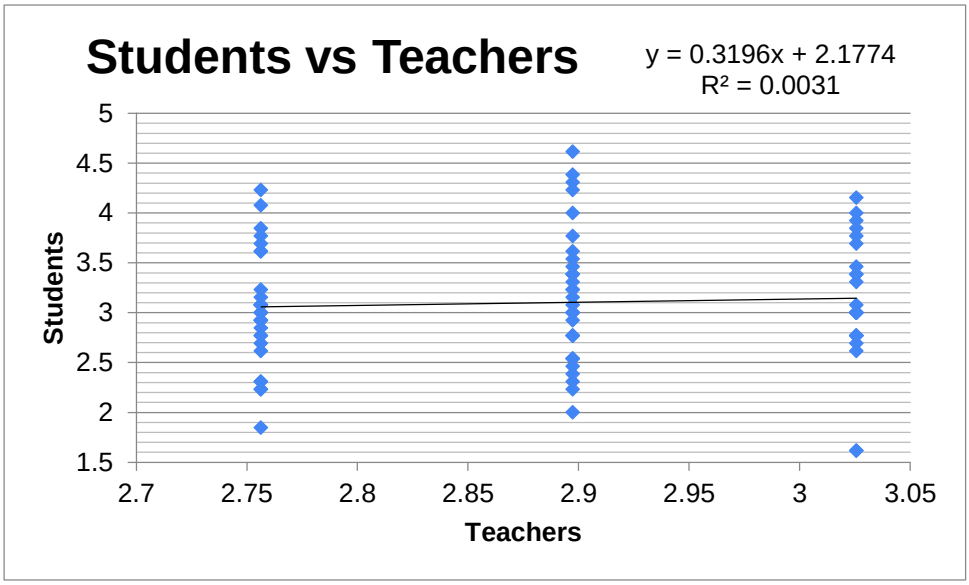

Figure 4: Scatterplot of the Results

The figure above is the scatterplot for the values wherein the values in the x axis correspond to the teacher's perception and the values in the y axis are for the students' motivation. When the 88 sample size is plotted into the graph, this is what is shown. From here, one can see that there is almost no linear relationship between the variables. This further proves that the null hypothesis should be accepted and the r value is accurate.

7.2 Conclusion

Using the linear regression approach, it can be concluded that there is no significant relationship between the teachers' perception of E-learning and students'learning motivation. E-learning as a platform is neutrally important as perceived by the Grade 12 teachers of Philippine International School Qatar A.Y. 2019-2020. Additionally, the students of Grade 12 have a neutral level of motivation in E-learning. The relationship between the neutral perception of the teachers and the neutral motivation of the students is not significant between each other.One can say that students' motivation is not accounted for the E-learning that the teachers perceive.

A possible reason for this is because the transition to online classes was sudden and unexpected. The goal was to continue education in any platform without having much consideration on the quality of the classes itself (Basilaia&Kvavadze, 2020). According to them, further studies must still be conducted regarding online classes as it is still too soon to tell and gauge the level and efficiency of it. Further studies from Wittmann and Paulus (2008) state that "time is an important dimension when individuals make decisions." Since the students are suddenly exposed to e-learning and it has only been a month since they have started with it, the duration is not yet considered long and thus, thedecision on their level of motivation and the teachers' decision on their perception of e-learning may not be so accurate. This inaccuracy causes indecision and the occurrences of many neutral answers.

Another possible cause for the results could be the students' different opinions on e-learning based on the type of subject. When conceptual knowledge in the subject is needed, or when the application of the knowledge is required, students prefer face-to-face learning. When skills in self-regulated learning are required, students prefer online learning (Paechter& Maier, 2010). Thus, the choice whether they are motivated to learn using e-learning may depend on the subjects they are learning. This explains why some students prefer e-learning for certain subjects while some subjects are only effective with traditional learning.

The two reasons stated above explain the results this study had received from the respondents. It explains why both the teachers and students find e-learning neutral and why the teachers' perception has no relationship between the students' learning motivation.

7.3 Recommendation

This research study aimed at examining the Relationship of the Teachers' Perception of E-Learning towards the Grade 12Students' Learning Motivation. The survey findings indicated that the students' learning motivation in e-learning is neutral which matches the results from the survey given to the teachers which is designed to find their perception of e-learning. Thus, it signifies that e-learning is neither an advantage nor disadvantage to the learning motivation of the students.

Stated below are the some actions that can be taken according to the results of the study. The results of this undertaking are recommended to the following:

Students: Since the Grade 12 students have only experienced only more than a month of online learning, this shall be an opportunity to engage more in online learning for the purpose of getting to know better of the essence and implications whether this motivates the students more to study or not.

Teachers: As for the teachers who conduct lessons through e-learning, they shall try and seek different methods in aiding their lesson plans and interacting with their students and observe the students' performances. This would affect the students' motivation and therefore enhance the results if they are to be studied by future researchers.

Parents: Since they are the source of finance for providing their children their schooling, this would help them determine whether e-learning would help them or not. This would also assist them in their decision making regarding what kind of education system would fit for their children.

School Administrators: They shall use this study to verify what strategies should be taken in order to heighten the quality of online education. They shall employ new strategies wherein it would enhance the learning of the students and also for them to gain more motivation to engage in online learning despite their distance from their instructors.

Government Officials: With this study, they shall be able to detect on how they would implement programs, improve the platforms and curriculums in accordance to the preferred online learning style of the students for the purpose of motivating them to engage in online learning.

Information and Technology Specialists: The people involved in this field in Philippine International School Qatar shall determine what the system lacks and how to improve e-learning for their students. This shall also serve as part of their sources to enhance the performance of the online learning systems in order to improve the education among students and to aid the teachers with their duty to educate them.

Researchers: It will provide them with a much deeper understanding and first-hand knowledge towards the use of e-learning in many schools nowadays. They shall use this study as a basis to understand more about e-learning.

Future Researchers: For the reason that the researchers acquired neutral results, this study can be used as the basis for the future researchers who would like to conduct a study related to this. This would therefore enhance the knowledge

regarding this topic and more importantly, deepen the understanding in order to conclude the actions to be taken according to the results of the undertaking. They can reconduct this study in order to get clearer and more accurate results which would indicate whether e-learning affects the students' learning motivation positively or negatively. Moreover, the researchers suggest to carry out an experimental study to acquire results that could be used to compare to the output of this study for the purpose of verification. They can also conduct this study using a different population and using surveys not through Google Forms but through personal means.

Declaration of Originality

We hereby certify that we are the sole authors of this research and that neither any part of this research nor the whole of the research has been submitted for a degree to any other University or Institution. We certify that, to the best of our knowledge, our research does not infringe upon anyone's copyright, not violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my research, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that we have included copyrighted material that surpasses the bounds of fair dealing with the meaning of the R.A. 8293, or the Intellectual Property Code of the Philippines, we certify that we have obtained a written permission from the copyright owners to include such materials in my research and have included copies of such copyright clearances as part of our appendages. We declare that this is a true copy of our research, including any final revisions, as approved by the research review committee at Philippine International School – Qatar.

In partial fulfillment of the course Research Project, this research paper entitled "The Relationship of Teachers' Perception on E-Learning to the Grade 12 Students' Learning Motivation at the Philippine International School - Qatar A.Y. 2019-2020"has been prepared and submitted by Phil Angelo T. Ganitano, Lara Caitlin Y. Baunsit, Sophia A. Ilagan, Germaine Armielle C. Rentoria, and Danielle Angelika S. Tenorio, who are hereby recommended by oral examination.

Dedication

We, the researchers, dedicate this study to our families and friends who have been with us since day one. Special mention goes to Mr. & Mrs. Ganitano, Mr. & Mrs. Tenorio, Mr. & Mrs. Rentoria, Mr. & Mrs. Ilagan and Mrs. Baunsit for being the primary supporters of the group. Our brothers and sisters are also among the people who we would like to dedicate this paper to. We also dedicate this paper to our many friends and classmates who helped us, specifically our friends from the section 12 STEM C. We would also like to dedicate this study to our former study entitled The Effects of Chicken Feed on the Fecal Material Used as Fertilizer: An Experimental Study A.Y. 2019-2020 which was, unfortunately, cancelled due to the COVID-19 outbreak. Further dedication goes to our adviser and Research Facilitator, Ms. AikkoPelayo who became our second parent and primary source of guidance in the research process and to Ms. Rosanna Almero, our Research Adviser who had been with us to help us since day one. We would also like to dedicate this paper to the school, Philippine International School – Qatar for being the institution that provided us with this opportunity to create a research paper. Finally, we would like to dedicate this research paper to God Almighty who has been guiding, blessing and giving us strength in whatever it is that we do.

Acknowledgement

We, the researchers of the study, "The Relationship of Teachers' Perception on E-Learning to the Grade 12 Students' Learning Motivation at the Philippine International School - Qatar A.Y. 2019-2020",would like to thank and acknowledge the many people who have helped us in the creation of our research paper. Among those we would like to thank are the following:

We would like to thank Ms. Aikko R. Pelayo for being both our classroom adviser and research facilitator. She gave us an opportunity to conduct this study and taught us the basics of proceeding with quantitative research. Additionally, she also provided us with advice and support as our classroom adviser. We would like to thank Ms. Rosanna Almero for being our Research Adviser who guided us and helped us in the creation of our own topic and title. She corrected many of our mistakes and helped us in any way she can. She also served as our statistician and helped us with the calculations, statistical treatment and data analysis. Lastly, we would like to thank our parents, families, other teachers, faculty and staff, friends, classmates and everyone who helped in the creation of this research.

References

[1] Huang, E. Y., Lin, S., & Huang, T. K. (2012, January). What type of learning style leads to online participation in the mixed-mode e-learning environment? A study of software usage instruction. In *Science Direct*. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S0360131511001813

[2] Wu, J., Tennyson, R. D., & Hsia, T. (2010, August). A study of student satisfaction in a blended e-learning system environment. In *Science Direct*. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S0360131510000035

[3] Arimbuyutan, R. C., Kim, S., Song, J., & So, W. (2007, October). A study on e-learning for Philippines. In *International Journal of Media and Ubiquitous Engineering*. Retrieved from https://pdfs.semanticscholar.org/89d9/00cdc88713524aa80b14a0df1871acee3bcb.pdf?_ga=2.114105538.413637461.1585558837-459741017.1585558837

[4] Mobo, F. D., & Sabado, G. O. (2019, August 1). An Assessment of the Effectiveness of E-Learning in AMA Olongapo Campus . In *Oriental Journal of Computer Science and Technology*. Retrieved from http://www.computerscijournal.org/vol12no3/an-assessment-of-the-effectiveness-of-e-learning-in-ama-olongapo-campus/

[5] Tabios, H. (2020, March 13). E-learning: What it is, how it works. In *Manila Bulletin*. Retrieved from

https://news.mb.com.ph/2020/03/13/e-learning-what-it-is-how-it-works/

[6] Reyes, M. L., &Galang, A. R. (2009). Motivational and Social Aspects ofthe Filipino College Experience. In *Philippine Journal of Psychology*. Retrieved from https://www.researchgate.net/publication/236270200_Motivational_and_social_aspects_of_the_Filipino_college_experience

[7] Al-Shuaibi, A. (2014, January). The Importance of Education. In *ResearchGate*. Retrieved from https://www.researchgate.net/publication/260075970_The_Importance_of_Education?fbclid=IwAR2yUS8m8fPpzIMrOBTBw_4RpciRC_7fW7sMAI23QvGzRfCRDqIj3WPpNes

[8] Soulunii, S. (2019, July 23). Challenges Facing Traditional Education and the Need to Shift to Smart Learning. In *EdTechReview*. Retrieved from https://edtechreview.in/trends-insights/insights/3553-challenges-traditional-education-faces-today-and-the-need-to-shift-to-smart-classroom?fbclid=IwAR3QYgNuC44IWXrTCnVXekAhS1rY0N4VEBoP4zpfSgv-ruM9Z2I

[9] Montemayor, M. (2018, March 19). Class-size affects students' learning : DepEd. In *Philippine News Agency*. Retrieved fromhttps://www.pna.gov.ph/articles/1029281?fbclid=IwAR0Gd09wniwAiJ5l4zTR5yz3z6mOEU3qdzYN4Mfki8VG39WomQc081BuV8

[10] Dela Pena-Bandalaria, M. M. (2009, October). E-Learning in the Philippines: Trends, Directions, and Challenges. In *LearnTechLib*. Retrieved from https://www.learntechlib.org/noaccess/30504/?fbclid=IwAR1oWTCwWqf4TpQdzx1gzozoVI3IeM_XZhfuIxbOz8CNsvBLs-cUwSTn2Sgw

[11] Garcia, M. B. (2017, January). E-Learning Technology Adoption in the Philippines: An Investigation of Factors Affecting Filipino College Students' Acceptance of Learning Management Systems. In *ResearchGate*. Retrieved fromhttps://www.researchgate.net/publication/323576195_E-Learning_Technology_Adoption_in_the_Philippines_An_Investigation_of_Factors_Affecting_Filipino_College_Students'_Acceptance_of_Learning_Management

[12] About Student Attitudes on Learning. (2018, August 26). In *Ministry of Education, Guyana*. Retrieved from https://education.gov.gy/web/index.php/teachers/tips-for-teaching/item/2192-about-student-attitudes-on-learning?fbclid=IwAR0CbTXZCeXzQtHKHBmUrSfJzAzwYWnHXUDvEJFjz8vTAJLWtARjPc162A8

[13] Harandi, S. (2015, May). Effects of e-learning on Students' Motivation. In *ResearchGate*. Retrieved from https://www.researchgate.net/publication/277026626_Effects_of_e-learning_on_Students'_Motivation?fbclid=IwAR3lbeIFA2Mkz9pt40DSz6DHAc9-OM6x9whMEKdoenlUtyoQkikuZY0BcgI

[14] Pham, L., Limbu, Y. B., Bui, T. K., & Nguyen, H. T. (2019, March 8). Does e-learning service quality influence e-learning student satisfaction and loyalty? Evidence from Vietnam. In *International Journal of Educational Technology in Higher Education*. Retrieved from https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-019-0136-3

[15] Salloum, S. A., &Shaalan, K. (2018, September). Investigating students' acceptance of E-learning system in Higher Educational Environments in the UAE: Applying the Extended Technology Acceptance Model (TAM). In *ResearchGate*. Retrieved fromhttps://www.researchgate.net/publication/327418762_Investigating_students'_acceptance_of_Elearning_system_in_Higher_Educational_Environments_in_the_UAE_Applying_the_Extended_Technology_Acceptance_Mod

[16] Hernando-Malipat, M. (2018, March 20). DepEd reaffirms effort to achieve ideal class size, teacher-student ratio. In *Manila Bulletin*. Retrieved from https://news.mb.com.ph/2018/03/20/deped-reaffirms-effort-to-achieve-ideal-class-size-teacher-student-ratio/

[17] Al-Seoud, S. A., Seddiek, N., Taj-Eddin, I., & Mohamed, M. (2014, August). E-Learning and Students' Motivation: A Research Study on the Effect of E-Learning on Higher Education. In *ResearchGate*. Retrieved from https://www.researchgate.net/publication/264417866_E-Learning_and_Students'_Motivation_A_Research_Study_on_the_Effect_of_E-Learning_on_Higher_Education

[18] Yanti, H., Setiawan, A., Nurhabibah, ., &Yannuar, . (2017). Teacher's Perception about the Use of E-Learning/Edmodo in Educational Activities . In *ResearchGate*. Retrieved from https://www.researchgate.net/publication/323339671_Teacher's_Perception _about_the_Use_of_E-LearningEdmodo_in_Educational_Activities

[19] Basilaia, G., &Kvavadze, D. (2020, April). Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia. In *Research Gate*. Retrieved from https://www.researchgate.net/publication/340560537_Transition_to_Online_Education_in_Schools_during_a_SARS-CoV-2_Coronavirus_COVID-19_Pandemic_in_Georgia

[20] Paechter, M., & Maier, B. (2010, December). Online or face-to-face? Students' experiences and preferences in e-learning. In *Science Direct*. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S1096751610000692

Appendices

Appendix A

Appendix 1: Letter for Research Adviser

PHILIPPINE INTERNATIONAL SCHOOL-QATAR
P.O. Box 9875 Ain Khalid St. State of Qatar
DepEd Government Recognition No. 001, Series of 2018

المدرسة الفلبينية الدولية

DATE

Mr/Ms. Rosanna A. Almero
Department: Intermediate

Dear Mr./Ms. Almero:

Good day!

I take great pleasure in inviting you to be the research adviser of the following student-researchers; Sophia Hagan, Germaine Remorin, Angela Banitano, Lara Bawnsit & Danielle Tenorio with their thesis entitled, ______. I am confident that your expertise and experience will be beneficial to the students in guiding them toward the successful completion of the thesis.

I hope that you will accept this invitation. If there are queries that you need to clarify in this regard, I will be more than happy to assist.

Respectfully yours,

MS. AIKKO R. PELAYO
Practical Research 2 Instructor

Recommending Approval:

MR. JOJO L. CALAGUE
Department Head

EVALUATOR'S FINAL

☑ *YES*

☐ *NO*

CONFORME: ROSANNA A. ALMERO
Signature Over Printed Name

Appendix 2: Letter for Data Gathering

April 13, 2020

Mr. Jojo L. Calague
SHS Department Head
Philippine International School-Qatar

Dear Sir Calague:

Greetings!
In fulfillment of our Research Project entitled, *"The Relationship of Teachers' Perception on E-Learning to the Grade 12 Students' Learning Motivation at the Philippine International School - Qatar A.Y. 2019-2020"*, we would like to ask your permission to allow us to conduct an online survey among the Grade 12 students and teachers during this quarantine period . The aim of our study is to find the perception of teachers towards e-learning, the motivation to of the students to learn using e-learning, and to determine the relationship between the teachers' perception on e-learning and students' learning motivation. Attached is the questionnaire that will be used to gather data for this study. The respondents will be receiving a survey questionnaire from the researchers through private messaging in Messenger. All information obtained will be treated strictly as confidential, stored securely, and used only for academic purposes.

Appendix 3: Questionnaire for Students

Name (Optional):_____
Section:_____
Class Number:_____
DIRECTIONS: This questionnaire is designed to collect information about The Relationship of Teachers' Perspective onE-learning to Grade 12 Students' Learning Motivation in Philippine International School - Qatar A.Y. 2019-2020. Please answer the questions as truthfully as possible, rest assured the responses will be treated with confidentiality. Kindly check your chosen extent of agreement on how it applies to you as a student.

Strongly Agree=5 points, Agree =4 points, Neither Agree or Disagree=3 points, Disagree=2 points, Strongly Disagree=1 points

Question	5	4	3	2	1
I like using e-learning for my subjects.					
I think the teacher's application of e-learning in teaching my subjects helps me improve my skills.					
I think the teacher's application of e-learning in teaching my subjects is not useful.					
I think my grades will improve by using e-learning for my subjects.					
I find my subjects easier when the teacher uses e-learning in teaching.					
I hope teachers will continue to use e-learning in their teaching.					
Using e-learning for subjects is more interesting than the traditional method.					
E-learning makes me more in interested in learning.					
By using e-learning for my subjects, the opportunity of interaction with the teacher is enhanced.					
By using e-learning for my subjects, the opportunity of interaction with my classmates is enhanced.					
Using e-learning for my subjects encourages me to continue learning on the internet by myself.					
I am unwilling to learn my subjects through using e-learning.					
I prefer E-Learning than traditional learning.					

Appendix 4: Questionnaire for Teachers

Name (Optional):_____
DIRECTIONS: This questionnaire is designed to collect information about The Relationship of Teachers' Perspective onE-learning to Grade 12 Students' Learning Motivation in Philippine International School - Qatar A.Y. 2019-2020. Please answer the questions as truthfully as possible, rest assured the responses will be treated with confidentiality. Kindly check your chosen extent of agreement on how it applies to you as a teacher.

Strongly Agree=5 points, Agree =4 points, Neither Agree or Disagree=3 points, Disagree=2 points, Strongly Disagree=1 points

Question	5	4	3	2	1
My students like to use e-learning for the subjects.					
I think my application of e-learning in teaching my subjects help the students improve their skills.					
I think my application of e-learning in teaching my subjects is not useful.					
I think the student's grades will improve by using e-learning for my subjects.					
My students find the subject easier when I use e-learning in teaching.					
My students hope that I will continue to use e-learning in the future.					
Using e-learning for subjects is more interesting than the traditional method.					
E-learning makes my students more interested in					
My students' think that through e-learning, interaction with the teacher is enhanced.					
My students' think that through e-learning, interaction with their classmates is enhanced.					
Using e-learning for my subjects encourages my students to continue learning on the internet by themselves.					
My students are unwilling to learn my subjects by using e-learning.					
My students prefer E-Learning than traditional learning.					

Appendix B

Appendix 1: Responses for Teachers' Perception

Timestamp	Name (Optional)	Q1 [My students like to use e-learning	Q2 [I think my application of e-	Q3 [I think my applicati	Q4 [I think the student' s grades	Q5 [My students find the subject	Q6 [My students hope that I	Q7 [Using e-learning for subjects	Q8 [E-learning makes my students	Q9 [My students' think that through e-	Q10 [My students ' think that	Q11 [Using e-learning for my	Q12 [My students are unwilling	Q13 [My students prefer E-Learning	Average
4/14/2020 16:56:49		3	3	2	4	3	2	2	2	1	1	3	3	2	2.384615385
4/14/2020 17:00:07		4	4	1	4	3	3	4	4	3	2	3	2	3	3.076923077
4/14/2020 17:13:15		4	4	1	5	5	5	4	4	4	4	4	3	4	3.923076923
4/14/2020 18:21:21		3	4	2	3	3	3	4	3	2	2	4	2	3	2.923076923
4/14/2020 18:47:58		3	2	3	4	3	2	2	1	1	1	4	3	1	2.307692308
4/14/2020 19:55:54		3	3	2	2	4	3	2	3	3	3	3	2	3	2.769230769
4/15/2020 11:47:55		3	4	3	4	3	3	3	3	3	2	3	3	3	3.076923077

Appendix 2: Responses for Students' Motivation

1	HUMSS	B1	5	5	2	5	5	5	5	5	4	2	5	2	5	4.230769231
2	HUMSS	B2	3	3	3	3	2	3	4	4	3	3	2	3	3	3
3	HUMSS	B3	4	4	2	2	4	4	4	3	4	2	4	2	4	3.307692308
4	HUMSS	G1	5	3	2	3	4	4	3	3	4	5	4	4	3	3.615384615
5	HUMSS	G2	2	2	3	4	1	1	1	3	1	1	1	3	3	2
6	HUMSS	G3	4	3	2	4	4	4	3	3	3	4	4	3	4	3.461538462
7	HUMSS	G4	3	3	3	3	2	1	2	2	1	3	4	3	1	2.384615385
8	STEM A	B1	2	2	5	3	4	3	3	3	2	2	4	2	3	2.923076923
9	STEM A	B10	3	3	3	3	4	3	4	3	3	3	4	3	3	3.230769231
10	STEM A	B11	1	2	4	3	1	1	1	1	1	3	1	3	2	1.846153846
11	STEM A	B12	4	4	3	3	3	3	3	3	2	2	3	3	2	2.923076923
12	STEM A	B13	4	4	2	4	4	4	2	4	2	2	4	2	1	3
13	STEM A	B14	4	3	2	3	3	2	3	3	2	2	2	4	3	2.769230769
14	STEM A	B15	3	2	3	2	1	2	2	2	1	1	5	3	3	2.307692308
15	STEM A	B2	3	3	2	3	3	2	3	3	2	2	3	3	2	2.615384615
16	STEM A	B3	4	4	3	4	4	4	4	4	4	4	4	2	4	3.769230769
17	STEM A	B4	4	4	3	3	4	3	4	4	5	3	5	2	4	3.692307692
18	STEM A	B5	5	4	2	4	4	4	4	4	3	4	4	1	4	3.615384615
19	STEM A	B6	3	3	3	3	3	3	3	3	4	4	3	2	3	3.076923077
20	STEM A	B7	4	3	3	5	3	3	2	3	3	3	4	3	2	3.153846154
21	STEM A	B8	4	4	3	4	4	4	4	4	4	4	4	3	4	3.846153846
22	STEM A	B9	4	4	2	4	4	5	3	4	4	4	4	1	4	3.615384615
23	STEM A	G1	4	3	2	3	3	4	2	4	3	3	2	2	3	2.923076923
24	STEM A	G10	2	3	3	3	2	2	2	2	2	2	2	2	2	2.230769231
25	STEM A	G11	3	3	3	4	3	3	2	3	4	2	4	3	2	3
26	STEM A	G12	5	5	2	4	4	4	5	5	5	5	4	1	4	4.076923077
27	STEM A	G13	4	4	2	3	3	4	3	3	4	3	2	2	3	3.076923077
28	STEM A	G14	3	3	3	4	3	3	2	3	3	3	2	3	2	2.846153846
29	STEM A	G15	4	4	2	2	2	3	3	4	3	3	4	4	2	3.076923077
30	STEM A	G2	4	3	4	2	2	3	3	2	2	2	3	3	3	2.769230769
31	STEM A	G3	4	3	3	3	3	3	3	3	3	2	3	3	4	3.076923077
32	STEM A	G4	2	2	3	3	3	2	2	1	1	1	3	4	3	2.307692308
33	STEM A	G5	2	3	3	2	2	2	2	2	2	2	2	3	2	2.230769231
34	STEM A	G6	4	3	2	2	3	3	4	3	2	1	4	2	2	2.692307692
35	STEM A	G7	4	3	3	3	2	3	4	3	2	2	3	4	3	3
36	STEM A	G8	4	5	3	5	5	5	4	5	4	4	4	3	4	4.230769231
37	STEM A	G9	3	2	3	3	4	3	1	4	3	4	4	3	1	2.923076923
38	STEM B	B1	5	5	1	5	5	5	5	5	4	4	4	1	5	4.153846154
39	STEM B	B10	2	2	3	3	4	4	4	3	1	1	4	4	1	2.769230769
40	STEM B	B11	3	3	3	3	4	3	4	4	3	4	3	4	3	3.384615385
41	STEM B	B12	3	3	3	3	3	3	3	3	3	3	4	3	2	3
42	STEM B	B13	3	3	3	3	3	3	3	3	3	3	4	3	2	3
43	STEM B	B14	3	3	3	3	3	3	3	3	3	3	3	3	3	3
44	STEM B	B15	2	3	3	3	2	3	3	3	2	2	3	3	2	2.615384615

45	STEM B	B16	4	4	3	4	3	4	5	5	4	3	3	3	4	3.769230769
46	STEM B	B2	4	4	3	4	3	4	5	4	3	4	4	2	4	3.692307692
47	STEM B	B3	3	2	3	4	2	3	3	2	2	1	4	3	4	2.769230769
48	STEM B	B4	4	4	3	4	3	4	4	4	3	2	3	3	3	3.384615385
49	STEM B	B5	3	1	3	1	1	1	1	1	1	1	1	5	1	1.615384615
50	STEM B	B6	4	3	3	4	3	4	5	4	3	3	3	1	3	3.307692308
51	STEM B	B7	4	3	3	4	4	4	3	3	2	2	4	1	3	3.076923077
52	STEM B	B8	4	4	1	2	2	2	3	2	3	3	5	3	2	2.769230769
53	STEM B	B9	3	3	3	3	3	3	3	3	3	3	3	3	3	3
54	STEM B	G1	3	3	3	3	2	4	2	2	2	2	4	4	5	3
55	STEM B	G2	4	3	2	4	3	2	2	3	2	2	4	2	2	2.692307692
56	STEM B	G3	4	4	4	4	4	4	4	4	4	4	4	4	3	3.923076923
57	STEM B	G4	4	5	1	5	5	5	5	5	3	3	5	1	5	4
58	STEM B	G5	3	4	2	3	4	4	4	4	4	3	4	3	3	3.461538462
59	STEM B	G6	3	3	4	2	3	2	2	2	3	3	3	4	2	2.769230769
60	STEM B	G7	1	2	3	3	1	1	1	1	1	1	1	4	1	1.615384615
61	STEM B	G8	3	4	2	3	3	4	3	2	2	2	5	3	3	3
62	STEM B	G9	5	5	1	4	4	4	3	4	5	5	4	2	4	3.846153846
63	STEM C	B1	5	5	2	5	5	5	5	5	5	5	5	3	5	4.615384615
64	STEM C	B10	2	3	1	3	4	3	4	3	3	3	5	3	5	3.230769231
65	STEM C	B11	3	4	3	3	3	3	4	4	2	2	4	3	3	3.153846154
66	STEM C	B12	3	2	3	3	2	2	2	3	1	2	2	2	2	2.230769231
67	STEM C	B13	4	4	1	5	4	4	3	4	4	4	4	1	4	3.538461538
68	STEM C	B14	3	3	3	3	3	3	3	3	3	3	3	5	1	3
69	STEM C	B15	3	3	3	3	3	3	3	3	3	3	3	3	3	3
70	STEM C	B16	3	4	2	3	3	3	4	4	2	2	4	2	4	3.076923077
71	STEM C	B17	4	3	2	3	3	4	2	3	1	1	5	2	3	2.769230769
72	STEM C	B18	3	3	3	4	2	2	4	4	2	2	4	3	2	2.923076923
73	STEM C	B19	2	4	2	2	2	1	2	2	4	2	4	4	2	2.538461538
74	STEM C	B2	5	5	3	4	4	4	4	4	4	4	3	3	2	3.769230769
75	STEM C	B3	3	2	4	5	4	2	1	2	1	1	3	4	1	2.538461538
76	STEM C	B4	4	3	3	5	4	4	3	3	2	1	5	3	4	3.384615385
77	STEM C	B5	3	2	4	2	2	2	4	2	1	1	4	3	2	2.461538462
78	STEM C	B6	3	4	3	3	3	2	2	2	2	3	4	2	3	2.769230769
79	STEM C	B7	5	3	4	5	5	5	5	5	5	4	5	1	5	4.384615385
80	STEM C	B8	4	4	4	4	4	4	4	4	4	4	4	4	4	4
81	STEM C	B9	4	4	2	4	4	4	4	5	1	1	5	2	4	3.384615385
82	STEM C	G1	3	2	4	2	2	3	3	3	3	3	3	3	2	2.769230769
83	STEM C	G10	5	5	3	4	5	4	4	4	3	5	5	5	4	4.307692308
84	STEM C	G2	3	3	3	2	2	3	3	3	4	3	4	4	2	3
85	STEM C	G4	3	2	3	2	3	2	1	1	1	3	3	4	5	2.538461538
86	STEM C	G5	2	3	2	2	3	2	2	2	2	2	4	2	2	2.307692308
87	STEM C	G6	5	3	3	3	4	4	4	3	2	2	4	3	2	3.230769231
88	STEM C	G9	4	3	3	4	4	3	4	4	3	3	3	4	2	3.384615385

Appendix 3: Weighted Mean Calculation for Teachers' Response

Weighted Mean (Teachers)

Question	Weight	Weight X Score	Weighted Mean
1	1	0	3.29
	2	0	
	3	15	
	4	8	
	5	0	
2	1	0	3.43
	2	2	
	3	6	
	4	16	
	5	0	
3	1	2	2
	2	6	
	3	6	
	4	0	
	5	0	
4	1	0	3.71
	2	2	
	3	3	
	4	16	
	5	5	
5	1	0	3.43
	2	0	
	3	15	
	4	4	
	5	5	
6	1	0	3

	2	4	
	3	12	
	4	0	
	5	5	
7	1	0	3
	2	6	
	3	3	
	4	12	
	5	0	
8	1	1	2.86
	2	2	
	3	9	
	4	8	
	5	0	
9	1	2	2.43
	2	2	
	3	9	
	4	4	
	5	0	
10	1	2	2.14
	2	6	
	3	3	
	4	4	
	5	0	
11	1	0	3.43
	2	0	
	3	12	
	4	12	
	5	0	
12	1	0	2.57
	2	6	
	3	12	
	4	0	
	5	0	
13	1	1	2.71
	2	2	
	3	12	
	4	4	
	5	0	

Appendix 4: Weighted Mean Calculation for Students' Response

Question	Weight	Weight X Score	Weighted Mean
1	1	2	3.47
	2	20	
	3	96	
	4	132	
	5	55	
2	1	1	3.3
	2	28	
	3	120	
	4	96	
	5	45	
3	1	6	2.73
	2	46	
	3	147	
	4	36	
	5	5	
4	1	1	3.33
	2	28	
	3	114	
	4	100	
	5	50	
5	1	5	3.17
	2	34	
	3	93	
	4	112	
	5	35	

6	1	6	3.17
	2	32	
	3	90	
	4	116	
	5	35	
7	1	7	3.14
	2	36	
	3	84	
	4	104	
	5	45	
8	1	5	3.2
	2	30	
	3	102	
	4	100	
	5	45	
9	1	14	2.75
	2	46	
	3	81	
	4	76	
	5	25	
10	1	13	2.7
	2	52	
	3	84	
	4	64	
	5	25	
11	1	4	3.58
	2	16	
	3	66	
	4	164	
	5	65	
12	1	9	2.83
	2	40	
	3	117	
	4	68	
	5	15	
13	1	8	2.93
	2	52	
	3	78	
	4	80	
	5	40	

Appendix 5: Table for Regression Analysis

	STUDENTS (Y)	TEACHERS (X)
HUMSS	4.230769231	2.897435897
	3	2.897435897
	3.307692308	2.897435897
	3.615384615	2.897435897
	2	2.897435897
	3.461538462	2.897435897
	2.384615385	2.897435897
STEM A	2.923076923	2.756410256
	3.230769231	2.756410256
	1.846153846	2.756410256
	2.923076923	2.756410256
	3	2.756410256
	2.769230769	2.756410256
	2.307692308	2.756410256
	2.615384615	2.756410256
	3.769230769	2.756410256
	3.692307692	2.756410256
	3.615384615	2.756410256
	3.076923077	2.756410256
	3.153846154	2.756410256
	3.846153846	2.756410256
	3.615384615	2.756410256
	2.923076923	2.756410256
	2.230769231	2.756410256
	3	2.756410256
	4.076923077	2.756410256
	3.076923077	2.756410256
	2.846153846	2.756410256
	3.076923077	2.756410256
	2.769230769	2.756410256
	3.076923077	2.756410256
	2.307692308	2.756410256
	2.230769231	2.756410256
	2.692307692	2.756410256
	3	2.756410256
	4.230769231	2.756410256
	2.923076923	2.756410256

STEM B	4.153846154	3.025641026
	2.769230769	3.025641026
	3.384615385	3.025641026
	3	3.025641026
	3	3.025641026
	3	3.025641026
	2.615384615	3.025641026
	3.769230769	3.025641026
	3.692307692	3.025641026
	2.769230769	3.025641026
	3.384615385	3.025641026
	1.615384615	3.025641026
	3.307692308	3.025641026
	3.076923077	3.025641026
	2.769230769	3.025641026
	3	3.025641026
	3	3.025641026
	2.692307692	3.025641026
	3.923076923	3.025641026
	4	3.025641026
	3.461538462	3.025641026
	2.769230769	3.025641026
	1.615384615	3.025641026
	3	3.025641026
	3.846153846	3.025641026
STEM C	4.615384615	2.897435897
	3.230769231	2.897435897
	3.153846154	2.897435897
	2.230769231	2.897435897
	3.538461538	2.897435897
	3	2.897435897
	3	2.897435897
	3.076923077	2.897435897
	2.769230769	2.897435897
	2.923076923	2.897435897
	2.538461538	2.897435897
	3.769230769	2.897435897
	2.538461538	2.897435897
	3.384615385	2.897435897
	2.461538462	2.897435897
	2.769230769	2.897435897
	4.384615385	2.897435897
	4	2.897435897
	3.384615385	2.897435897
	2.769230769	2.897435897
	4.307692308	2.897435897
	3	2.897435897
	2.538461538	2.897435897
	2.307692308	2.897435897
	3.230769231	2.897435897
	3.384615385	2.897435897

Author Profile

Almero, Rosanna A.MAEd is an Intermediate Math Teacher since 2017. She has taught Elementary Science, Elementary and High School Mathematics. She has done basic course in human Resource Management.

Ganitano, Phil Angelo T. is a Science, Technology, Engineering and Mathematics student. His interests include Photography, playing Basketball and Volleyball.

Baunsit, Lara Caitlin Y., is a Science, Technology, Engineering and Mathematics student. She is a consistent honors student since 2004. She is a literary writer for the official gazette of Philippines international school Qatar, The Ilustrado. She also plays Volleyball

Rentoria, Germaine Armielle C., is a Science, Technology, Engineering and Mathematics student. She achieved highest honors in 2017-2018. She is consistent with high honors students since 2016. She is editor in Chief in Illustrado (2019-2020)

Ilagan, Sophia A., is a Science, Technology, Engineering and Mathematics student. She is honors student. She has won young innovators competition in 2019 and semi finalist for Pi Day, Carnegie Mellon University-Qatar (2020)

Tenorio, Danielle Angelika S., is a Science, Technology, Engineering and Mathematics student. In 2018-2019 she was auditor, Supreme Student Government (2018-2019). At present she is President, Supreme Student Government. In 2016-2017 she was OKOR representative.