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PROJECT E-MAIL (ELECTRONIC-MATERIALS, AUDIO AND INCENTIVES FOR LEARNERS): AN ACTION RESEARCH

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ABSTRACT:

In this study, the Project E-MAIL or Electronic-Material, Audio, and Incentives for Learners during the quarantine period were investigated for the incoming Grade 10 Beauty care students. The Pre-Test was given to 32 participants; however, there are only 17 students who accomplished all the online activities and given the Post Test and survey through Google Form. The research has also studied those participants who did not achieve online tasks and also provided an online survey. The difference of Pre-Test and Post Test Mean is -4.05882 with a standard deviation of 1.85306, and the p-value is .000, which less than .001 found that teaching intervention (Project E-MAIL) improves the participant's performance.

KEYWORDS: online teaching, distance education, strategic intervention materials.

INTRODUCTION:

The worldwide expansion of technology encouraged learners to use distance education. However, the use of modern technology can idealize distance learning. Without a strong foundation in research and theory, distance learning has struggled to be recognized by the traditional academic community even in the pandemic scenarios of school days. Although distance learning has its limitations, there are several reasons why it may be the biggest revolution in education today, according to Norman (2016). It covers distance programs in the primary and secondary, technical, as well as public and private sectors, added by Keegan (1996) and cited by Saba (2014).

Distance education originated in the United States in the 1880s, when teachers and students at the University of Chicago, who were in different locations, tried to connect through the program. It was progressive when radio development opened the door during the First World War and used by schools and colleges (Mclsaac & Gunawardena, 1996 and Sun & Chen, 2016). Furthermore, the advent of television in the 1950s, visual presentation became possible for the first time, and computer technology exploded in 1970, and distance learning started to grow. According to Harasim (2000), the first fully online course was offered in 1981, passed through its benefits, and possibly produced graduates in several universities during those years. The dawn of WWW or World Wide Web in 1991 has significantly created frameworks for people to learn online and has provided multiple advantages in the field of education.

A lot of research describes how the online learning environment looks and how learners insisted on its benefits. According to Yuan & Kim (2014) as cited by Sun & Chen (2016), the learning community was the development of self-reliance by a group of learners. Where learners trusted each other, developed knowledge, shared useful information, formed ties, set one learning goal, and believed that their needs would be met. The asynchronous, threaded dialog can also be helpful in establishing a shared learning atmosphere as well as interpersonal and community discrepancies, as argued by Cox and Cox (2008).

THE STUDY:

The E-MAIL or Electronic-Material, Audio and Incentives for Learners can be a significant reference in this study on how online learning or distance learning can be more successful during the quarantine period. A suitable research for educators who are looking for ways to deliver the lesson to students on the most simple and without complicated online procedures. The study components:

(1) Electronics Resources (e-learning modules or strategic interference resources, flipbooks, videos, pre-test, and post-test Google form),

(2) Video (Facebook, Video, and Chat)

(3) Incentives and Benefits (Load Bonuses, Online Contest Recognition Certificates)

RESEARCH QUESTIONS:

Specifically, it will seek answers to following questions:

1. What is the level of performance of Grade 10 Beauty Care students before and after the conduct of Project E-MAIL?
2. Is there a significant difference in the level of performance of Grade 10 Beauty Care students under Project E-MAIL before and after the conduct of the study?
3. How may the students overall impression on the following:
   a. E-learning materials (SIM 7&8)
      a.1 attainability (addressed all the learning objectives)
      a.2 quality (easy to read and understand)
      a.3 Aaccessibility(encourage to ask question, observations, online activities)
   b. Powerpoint with audio/teacher made-video (engagement)
   c. Audio Instructions
   d. Incentives(Load Rewarding, Giving of Recognition and Certificates)
   e. Online Evaluation (Pre-Test and Post Test)
   f. Online Progress Chart (Feedback)
   g. Instructor knowledge on the subject matter
   h. Recommendation of the project
   i. Access to Technology
4. The impression of students who did not accomplish their task online

HYPOTHESIS:

Ho = There is no significant difference in the level of performance of incoming Grade 10 Beauty Care students under Project E-MAIL before an after the conduct of the study.

H_1 = There is a difference in mean pre- and postmarks

SAMPLING PROCEDURES:

The study conducted to 17 incoming Grade 10 Beauty Care students that responded in accomplishing the e-learning Strategic Intervention Material (SIM 7 & 8). The purposive sampling procedure used in getting the list of participants. April 1, the Project E-Mail was introduced to the 67 members (online /offline). The mechanics of the project initiated, including the procedure in SIM activities, audio contests, incentives, etc. However, among the 67 students registered on the GC or Group Chat, there were only 32 students who made their online Pre-Test. The students were given the schedule of submission on the 8th day and made an extended period until the 11th day of May 2020. Only the 17 students who accomplished the SIM/s, online Post Test,and Survey. However, the researcher wanted to know the reason why they have not gained performance on their SIM activities, and an online survey will also be given to students who don't accomplish their tasks.

INSTRUMENTS:

The researcher used a teacher-made Flipbook of Strategic Intervention Material or SIM (7&8) sent to students online. Power point

transformed into a video (can be downloaded and saved by students in their cellphone), and audio instructions also became the tool for learning. While FB Messenger became the first virtual room for both teachers and students. A cellphone used for checking the submitted activities in the messenger and its camera played an essential role in capturing images and screenshots. Then MS Excel became the tool of recording the student's output. Incentives such as Load Reward for Audio Game, PhotoGrid Contest, also became popular to boost the interest of students. Giving of certificates of recognition and participation was included to recognize student's effort. All the needed tools were basic electronic applications, both online and offline, for teachers and students. Online instruments were

(1) Google Forms (for Pre Test, Post Test and a modified survey based on Kirkpatrick's Model (1959) cited by Kurl (2018)

(2) FB Messenger and www.Fliphtml5.com for transforming the pdf file of SIM to a flip book.

ANALYSIS:

The data collected from various instruments were adequately recorded, tabulated, treated, analyzed, and interpreted using the following tools (by Prieto, Naval & Carey, 2017):

1. Mean often called the average of a set data, the sum of the observed values divided by the number of observations.
2. T-Test (Test of Significance of Difference) served as inferential data analysis in measuring the significant differences of the Pre-Test and Post Test under the Project E-MAIL.
3. Linkert Scale was used to assume the strength/intensity of an attitude of participants on how they agree or disagree with a particular statement (Mcleod, 2019).
4. Google Forms Data Analysis Results and Illustrations

Table 1 **:** The Results of T-Test (Pre & Post Test)

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE TEST	3.8235	17	2.03824	.49435
	POST TEST	7.8824	17	1.72780	.41905

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PRE TEST & POST TEST	17	.526	.030

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	PRE TEST - POST TEST	-4.05882	1.85306	.44943	-5.01158	-3.10607	-9.031	16	.000

Table 1 shows The difference of Pre-Test and Post Test Mean is -4.05882 with a standard deviation of 1.85306, and the p-value is .000, which less than .001; for example, in a minimal probability of this result occurring by chance, under the null hypothesis of no difference. The null hypothesis is rejected, since p-value < 0.001 (in fact p = .000). It shown on the tables that there is strong evidence t=-9.031, p=0.000) that the teaching intervention (Project E-MAIL) improves marks. In this data set, it improved marks on average by approximately 4 pts. Of course, if we were to take other samples of marks, we could get a 'mean paired difference'. That is why it is important to look at the 95% Confidence Interval (95% CI). In this study, the 95% CI is from -5.0158 to -3.10607.

The Over-All Impression of Students on the Project E-MAIL

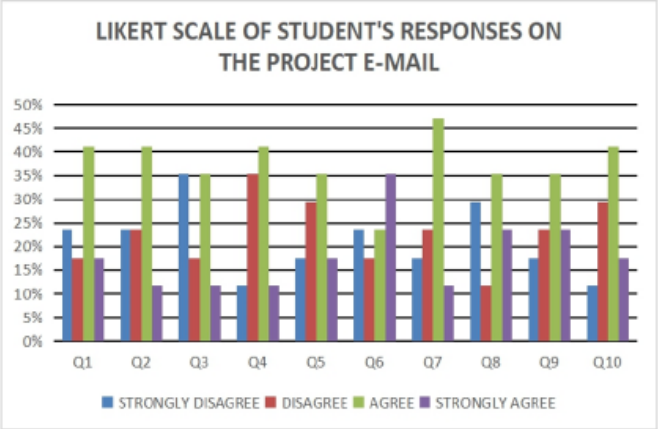
Table 2 The Total Numerical Responses of Students per Category

TOTAL PARTICIPANTS	17	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
STRONGLY DISAGREE	1	4	4	6	2	3	4	3	5	3	2
DISAGREE	2	3	4	3	6	5	3	4	2	4	5
AGREE	3	7	7	6	7	6	4	8	6	6	7
STRONGLY AGREE	4	3	2	2	2	3	6	2	4	4	3
TOTAL		17	17	17	17	17	17	17	17	17	17

Table 3 The Percentage Results of Responses of Students on the Project E-MAIL

QUESTION NO.	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
Q1	24%	18%	41%	18%
Q2	24%	24%	41%	12%
Q3	35%	18%	35%	12%
Q4	12%	35%	41%	12%
Q5	18%	29%	35%	18%
Q6	24%	18%	24%	35%
Q7	18%	24%	47%	12%
Q8	29%	12%	35%	24%
Q9	18%	24%	35%	24%
Q10	12%	29%	41%	18%

Bar **Graph 1 :** The Illustration of Responses of Students per Questions



A modified survey based on Kirkpatrick's Model (1959) cited by Kurl (2018)

Question No. 1: The e-learning materials (module) addressed all of the learning objectives on SIM 7 & 8

Results: There are 41% of participants agreed that e-learning materials(module) addressed all the learning objectives on SIM 7 & 8 , 24% strongly disagreed while 18% for disagree and strongly agree.

Question No. 2:The e-learning materials were easy to read and understand.

Results: There are 41% of participants agreed that learning materials were easy to read and understand. Both responses under strongly agree and disagree flow on 24%.

Question No. 3: I was encouraged to ask questions, voice my concerns, observations, and engage in online activities.

Results: There were 35% of participants with a response of "Agree and Strong Disagree" on how much they encourage to ask questions, voice their concerns, observations, and engage in online activities. However, there are only 12% on them who said they are encouraged to do so.

Question No.4 The Power Point with audio was engaging.

Results: 41% of participants were agree that the Power point with audio was engaging them in the lesson. However, 35% of them disagreed, both 12% strongly disagreed and strongly agreed.

Question No. 5: The audio instructions were helpful.

Results: There are 35% of participants agreed that the audio instructions became helpful for them, while 29% responded disagree. The same response of 18% for strongly disagree and strongly agree.

Question No.6: Giving incentives and recognitions motivated me a lot.

Results: There were 35% (for strongly agree) responded that giving incentives and recognitions motivated them a lot; both 24% approve and strongly disagreed, while 18% responded as disagree.

Question No.7: I found Online Pre-Test and Post Test accessible to me.

Results: There were 45% of them found online Pre-Test and Post Test accessible as they respond "Agree." While 24% responded, they disagree on the strategy of taking the test. There were 18% for strongly disagree, and 12% strongly agree.

Question No. 8 I am encouraged when I see my scores on Online Progress Chart.

Results: There were 35% of participants agreed that they were encouraged to see their scores on the progress chart online.

However, they are 29% for strongly disagree, 24% for strongly agree, and 12% for opposing.

Question No. 9 the instructor was knowledgeable about the subject matter.

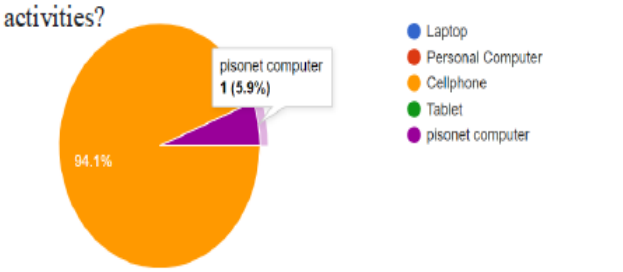
Results: There was 35% respond "Agree" for their instructor's knowledge of the subject matter. However, both responses strongly agree and 24% for agree. While there was 18% response of strongly disagree.

Question No. 10: I would like to recommend Project E-Mail to others.

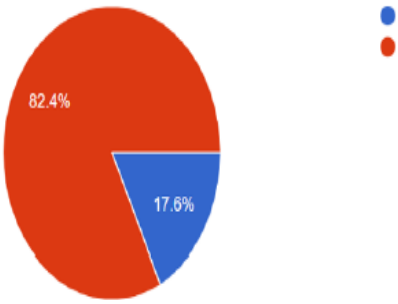
Results: Among the 17 participants, 41% responded that they would like to recommend Project E-MAIL for other students and teachers. 18% strongly agree, 29% for disagreeing, and 12% for strongly disagree.

Pie Graph No.1 : Illustration of Students Access to Technology

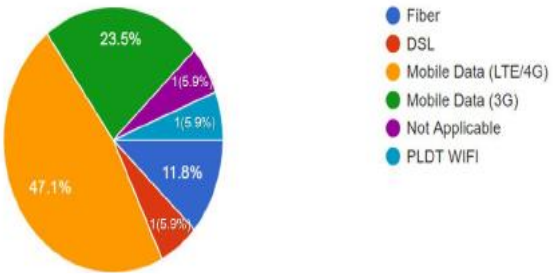
Question No. 1: What did you use in answering the activities?



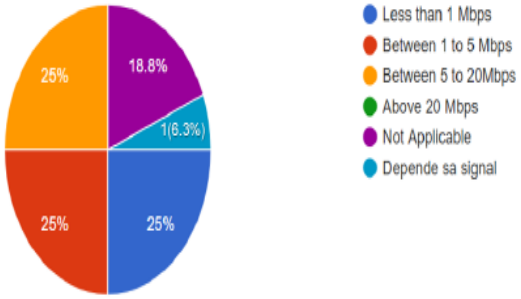
Question No. 2: Do you have internet connection at home?



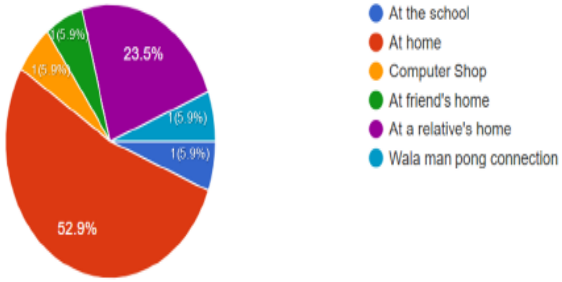
Question No. 3 : What internet connection did you use?



Question No. 4: How fast your internet connection?



Question No. 5: Where can you connect your laptop, PC, cellphone to use the internet?



Question No. 6: Do you agree on Distance Learning or Online Learning?

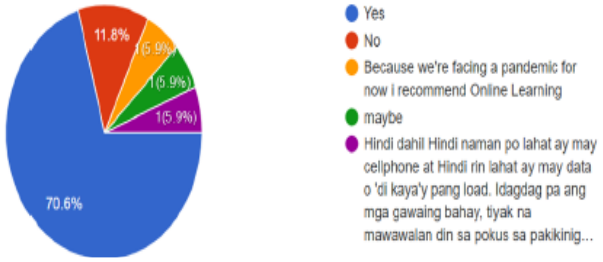


Table 4 The Percentage Results of Responses of Students Who did not Participate on the Project E-MAIL

Response	Strongly Disagree	Disagree	Agree	Strongly Agree
No load for mobile internet	0%	40%	50%	10%
No access to home internet like wifi	20%	30%	40%	10%
No cellphone and computer (I only borrow cellphone to my relative)	10%	60%	30%	0%
No time to read because of task at home	0%	70%	30%	0%
Not interested to online activities	10%	90%	0%	0%

Bar Graph No. 2 Representation of Responses from Students who Did not Participate in Online Teaching

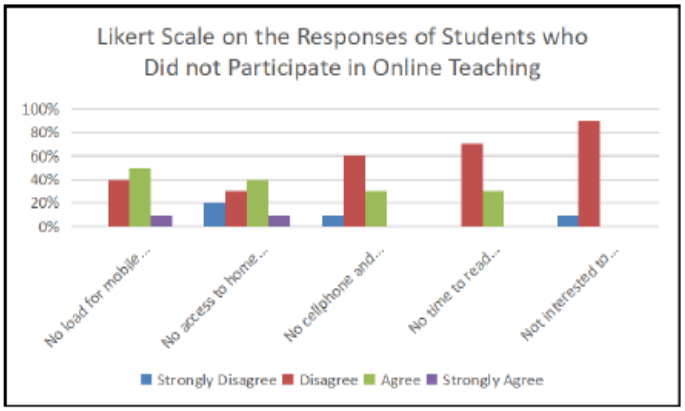


Table 4 illustrated the response of students who did not accomplish their activities online. The data showed 50% of them agreed it is because of having "no-load for their mobile internet," and 40% of them "don't have access on the internet at home like wifi." However, the results indicated that it is not all about having cellphone (70%), time in doing the activities (70%) and they also have the interest to have their online activities (90%)

CONCLUSIONS:

I. The level of performance of Grade 10 Beauty Care Students before conducting the Project E-MAIL has indicated on their Pre-Test Mean of 3.82. However, the level of their performance after the conducted project seen on their Post Test Mean of 7.88. Therefore, the difference of Pre-Test and Post Test Mean is -4.05882 with a standard deviation of 1.85306, and the p-value is .000, which less than .001; The null hypothesis is rejected, since p-value < 0.001 (in fact p = .000). It is shown on the resulted data that the teaching intervention (Project E-MAIL) improved the performance of the student.

II.The study determined the over-all impression of students through an online survey, which resulted in:

2. a There are 41% of participants agreed that e-learning materials (module) addressed all the learning objectives on SIM 7 & 8 so that e-learning materials can be an alternative tool in distance education.

2. b The attainability (41%=Agree), quality (41%=Agree) and accessibility (35%=Agree) of e-learning material or Strategic Intervention Materials (SIM) was delivered and agreed upon by the participants. However, the convenience (seen in

Question No. 3 having 35% strongly Disagree) of students in online activities must be improved.

2.3 Inserting audio in PowerPoint presentation (41%=Agree) and transforming it to video engaged learners on the lesson provided by their teacher.

2. d Audio instructions (35%=Agree)became a helpful tool for precise instructions.

III. Giving of incentives and recognitions (35%= Strongly Agree) motivated the learners to accomplished more in their activities.

IV.Online Pre-Test and Post Test (45%=Agree) found accessible and practical to the learners.

V. Posting the Progress Chart online (35%) encouraged learners to participate more.

VI. The instructor (35%=Agree) was knowledgeable about the subject matter.

VII.The participants recommend the concept of Project E-MAIL (41%=Agree) as an alternative way of teaching online.

VIII. The study concluded the access of students to technology, which affects their online activities. It determined that 94.1% of the participants answered their tasks using their cellphones, and they don't have an internet connection at home. Many of them only using mobile data (47.1% LTE/4G) and had between 1-20 Mbps (25%) for their internet connection at home (52.9%). Sometimes it depends upon the signal how fast their internet (25%). However, 70.6% agreed on distance learning or online teaching.

IX. The study found the reason why the students who did not perform was because of having "No-load for their mobile

internet(50%=Agree)", followed by they "don't have access on the internet at home like wifi" even though they have cellphones, time in doing the activity and have the interest to accomplish their activities.

RECOMMENDATIONS:

1. The strategies used under Project E-MAIL can be a reference for the improvement of online education. If a teacher was not too good in online tool making, fundamental and alternative tools (e.g. PowerPoint) and installed offline could be a great help. Basic knowledge of uploading and downloading is essential.
2. Educators must have training in improving their e-materials for more creative, more accessible, more interactive to learners.
3. Audio instructions can give students clear directions on (a) what to do, (b) how to do, and (c)until when they can submit a particular activity. If audio instructions had an impact on online teaching, visual or webcam instructions could consider.
4. They were giving feedback, whether audio or chat and posting their progress on their activities can encourage students to perform well.
5. Giving incentives and recognitions must be considered in motivating students during online activities.
6. Online Pre-Test and Post Test can be an alternative evaluation site for students' understanding. The training for Google Forms and other Google apps can be a helpful strategy.
7. Students doing good in face-to-face teaching might not perform well because they lack resources primarily on access to the internet. Giving of printed learning materials can consider an alternative.
8. The possibility of building good relationships and cooperation between students and teachers in achieving the same goal (learning) seen in the study. So, proper giving of feedback, appreciation, and recognition to students online is essential.
9. Teachers must have an excellent performing electronic instruments (such as a computer, mobile phone or webcam) and continuous internet connection in delivering the online lesson.

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