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Validation of Quality Education in Online Distance Learning and Face-to-Face Learning

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A B S T R A C T

With the continuous and rapid change in technology and unpredictable turn of events, online education became the world wide prime schooling modality in times of pandemic, this research aims to validate quality education in online distance learning and face-to-face learning.

The researchers used a quantitative and qualitative design approach by collecting the final grades of the grades 9 and 10 students from Upsouth Education Foundation, Inc. a private school in Parañaque City for four consecutive years: two school years of face-to-face schooling (2018-2020) and two school years under online distance learning (2020-2022). Final grades will be used to measure their academic performance and their confidence level. A four likert scale was conducted to verify the needs and prerequisite in conducting online schooling.

Based on the initial findings, there is a slight difference in the academic performance of the students. Confidence level of students diminished but can be empowered and regained by properly using the digital applications fit for their age level and support from the parents, and teachers teaching styleshave improved immensely and is more in tune to the 21st century teaching skills because of computer-aided lessons.

Online Distance Learning and Traditional Learning provide the same quality of education with or without pandemic. With support from parents and regular monitoring of teachers, quality of education is attainable in an online distance learning. It is cost efficient to all concerns, accessible anywhere, superior in lesson presentation, and most of all, with proper use and guidance, dynamic have improved immensely and is more in tune to the 21st century teaching skills because of computer-aided lessons.

Keywords:Online Schooling; Traditional Schooling; Academic Performance

1. INTRODUCTION

Can online learning replace face-to-face? In the advent of COVID-19 in 2020 in the Philippines which put the entire country in the strictest community lockdown, drastic changes were made which did not spare the education sector.

In the wake of widespread school closures ordered as part of public health attempts to prevent the spread of COVID-19, educational systems around the world are confronting an unprecedented challenge. In order to maintain the continuity of curriculum-based study and learning for everyone, government agencies are collaborating with partners from the corporate sector, civic society, and foreign organizations to deliver education remotely. (UNESCO, Solutions for Distance Learning, 2020)

DepEd Order No. 12, which was issued on June 19, 2022, came into effect. Its release was made to ensure that learning continuity would be maintained during the health emergency and to ensure that education would continue. Thus, the use of distance learning methods like TV/radio-based instruction, online distance learning, and modular distance learning (MDL).

Even long before the pandemic, there were already predictions that open and distance learning delivery formats or online learning education will soon overtake other factors as the main influencers of transnational higher education. ICEF Monitorreveals that the US, Australia, India, China, South Korea, Malaysia, South Africa and the UK all adopted online education as early as 2012.

The health crisis forced the education system to operate remotely adopting a new learning modality, shelving for the meantime the traditional

learning method and taking advantage of what the technology could offer.

As the health and economic situation improve, the education sector is gradually preparing for the face-to-face learning modality again albeit clamor for online distance learning to remain. While most studies analyzed the roadblocks to ODL, this research will validate that there is no significant difference in the quality of education received through online distance learning versus face-to-face modality. This study applied quantitative analysis on the academic performance of Grade 9 and 10 students who have both experienced two (2) years of face-to-face modality and two (2) years of ODL.

1.1 Objectives of the Study

1. The objective of this study is to determine the validity of quality education in online distance learning.
2. This study will also determine the necessary tools and requisites of onlineschooling.

1.2 Statement of the Problem

The advent of transitioning to online schooling in the Philippines raised many speculations and issues. Parents are most concerned on the quality of education which the new set-up will give to their children. Other apprehensions include whether the learning management system which the school will be using will be sufficient and whether the teachers are prepared enough to conduct such new teaching modality or have the needed technological and pedagogical competencies in conducting online schooling.

1.3 Research Questions

This study aims to validate that there is no significant difference in the quality of education received online distance learning via face-to-face modality.

1. What is the effect of quality education in an online distance learning set up?

2. How do teachers' skills affect the quality of education in online distance schooling?

3. What effect of redesigning learning objectives affects students' study habits?

1.4 Significance of the Study

The intention of this study is to provide validation that online schooling is as effective as traditional schooling provided all necessary skills, tools, gadgets, equipment and support are present in the environment of each student.

This aims to help other schools prepare for their attempt to conduct or will conduct online schooling.

2. METHODOLOGY

1. Local Study

This study was conducted in Upsouth Education Foundation, Inc. a private school in Paranaque city that started its operation in 1984 that offers Kindergarten to Grade 10 levels. The school was able to offer online schooling during the first year of online schooling and it has until now.

All teachers and student materials are online based using LMS offered by a private publishing company in the Philippines. The school conducts its regular webclass using conference rooms. Their webclass schedule is conducted every Monday, Wednesday and Friday for 5 hours and Tuesday and Thursday for 2 hours weekly. The rest of the day is completely asynchronous, class hours were limited because in a previous study about mental fatigue it indicated that `cognitive endurance in perceived performance tends to disappear as learning time increases` (Giboin and Wolff, 2019).

Surveys among parents and teachers were conducted regarding the effectiveness of their online school setting and adopted teaching strategies used in the webclass that generated positive results among parents and students.

Hence, the school was chosen due to its successful implementation of online schooling.

2. Respondents

The researchers used the grades of the students from school years 2018-2020 (Face to Face Classes) and 2020-2022 (ODL).

A total of 126 students' grades; 60 students from a combined levels of grades 9 and 10 from SY 2018-2020 were used and another 62 students from a combined levels of grade 9 and 10 from SY 2020-2022 were used.

Survey results from a yearly assessment of the school was used in checking the effectiveness in the implementation of online schooling that was participated by 55 parents and teachers as the respondents were also applied.

3. Data Gathering

The researchers with the permission of the school gathered the academic grades of grade 9 and 10 students from SY 2018-2022. Survey results of two school years regarding the online schooling as parents being the respondents were also given as additional reference.

No standardized examinations were used in the private school. All student assessments were completely created, which is DepEdguidelines compliant, and graded by the teachers of the school. The grading system used by the school during the face-to-face classes and online classes was slightly changed. Written works like seatwork, assignment, quiz and note taking is higher by 5% and the quarterly examination is down by 5% both in the online setting.

The final grades per school year and per grade level were computed to get the average of the class. Likewise, average grades of the core subjects like English, Mathematics, Science, Filipino and Social Studies were computed per grade level and per school year.

Results from a survey conducted with parents and teachers were also gathered.

4. Data Analysis

The researchers used a mixed method and used a descriptive statistical analysis. It emphasizes on the grades of students from two years of traditional schooling and two years of online schooling and the grades in the five core subjects. While the survey results using a four-likert scale were analyzed based on the percentage results.

3. RESULTS AND DISCUSSION

The effect of quality education in an online distance learning set up can be gleaned on the following discussions.

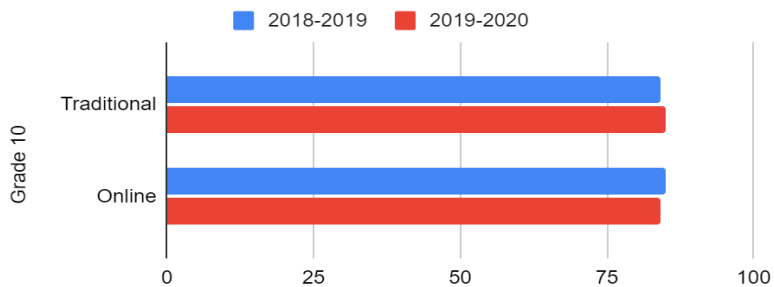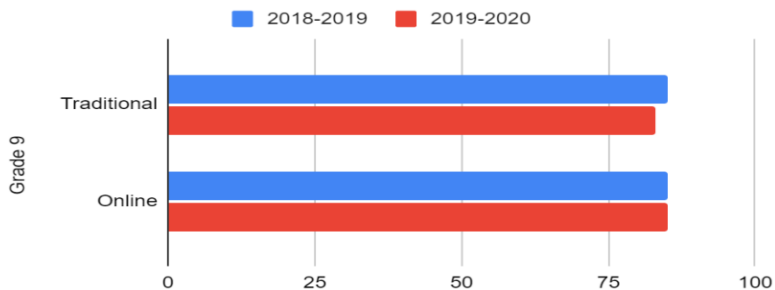Figure 1- Grade 10 Students General Average in Four School years

Figure 2 - Grade 9 Students General Average in Four School Years

As shown in figures 1 and 2, there is a slight difference in learning outcomes from the four different school years based on the general average of students. The second year of online schooling among grade 10 students is similar to the last three school years who attended the traditional schooling, therefore this result indicates a steady learning outcomes among grade 10 students. However, differences in the results can be attributed to the lack of internet facilities for some students, lack of parent assistance and incomplete tools and gadgets for online schooling. Among grade 9 students, the average

grades indicate a success in the implementation of online schooling for their learning stability. Furthermore, regular monitoring from teachers is an advantage to keep students' interests from studying and that results in promotions of all students to the next higher level.

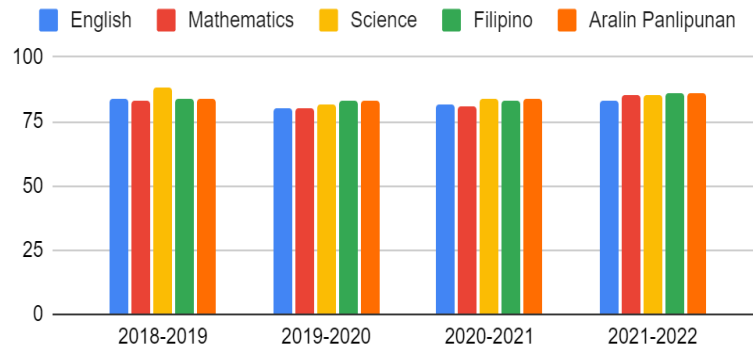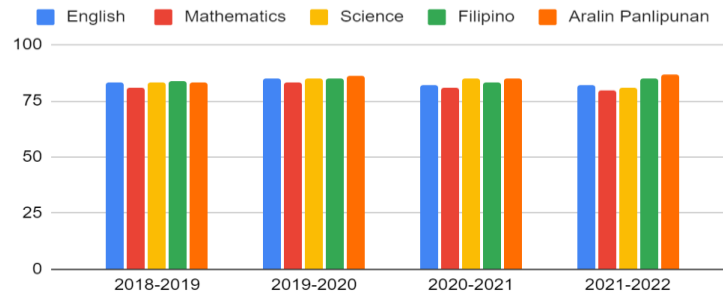Figure 3 - Grade 9 Grades per Subject Area in 4 School Years

Figure 4 - Grade 10 Grades per Subject Areas in 4 School Years

Figure 3 indicates that all subjects show an increase in the grades among students for the four different school years while figuree 4 shows that English, Filipino and Araling Panlipunan manifested a good and steady learning outcome whereas Mathematics and Science manifested varying results. Furthermore, the grade 10 varying slopes is attributed to the inclination of wanting to see their classmates as they are graduating students. According to Salvador (2021), an extended stay in the residences and away from school have affected them.

Studies have established that learning online is more effective accordingly,it retains 25% to 60% of the learning average compared only to 8% to 10% in a classroom setting provided all necessary equipment and technology is present.

The following results will determine the questions for 2 and 3 which are:
How do teachers' skills affect the quality of education in online distance learning?
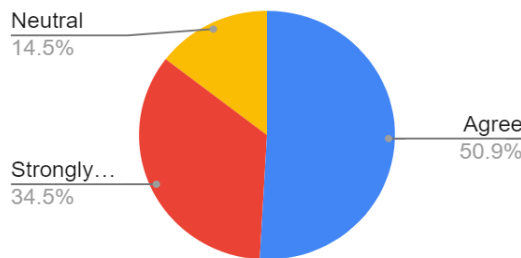What effect of redesigning learning objectives affects students' study habits? respectively.

Figue 5- Narrowed Learning Content

Figure5 refers to the redesigned learning objectives, organization lessons, appropriateness of workload, and time for students to submit requirements. The changes in the learning, distribution and method were due to a different delivery of instruction, delivery of teaching methods and the study methods and/or habits of students. Thus, the results in the graph indicate no one answered fair, 14.5% neutral, 50.9% agree, 34.5% strongly agree, this illustrates a positive effect of the change in curriculum wherein a narrowed and focused target is ideal in achieving learning goals in a remote setting. In one of the studies conducted by Stronge & Grant, it reveals that goal-oriented exercises and practices aid students to concentrate on specific tasks, motivates students to solve challenging areas, and clarifies which tasks need to be completed first.
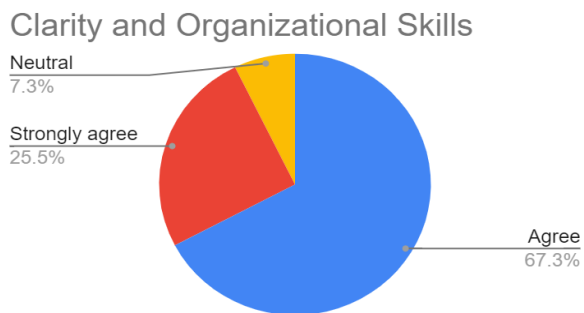

Figure 6- Clarity and Organizational Skills

Figure6 reflects the clarity and organizational skills of constructive presentations of lessons to capture the interest of students. The data shows 7.3% is neutral, 25.5% strongly agree, and 67.3% agree. None answered Fair. Therefore, skillfully targeting the most essential points presented in a concise and organized way with the help of different gadgets and diverse apps during online platforms are important to respond and retain students' interest in studying. Based on one study,clarity and organization is not new but it matters (Blaich and et al, Sept, 2016).
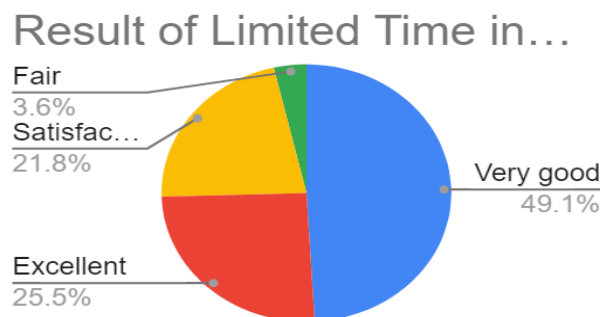

Figure 7 - Result in the Limited Time Spent in the Computer

Figure7 refers to the number of hours spent in the computer during actual online class of teachers and students discussion. It shows that 3.6% fair, 21.8% satisfactory, 49.1% very good, and 25.5 % excellent, this implies the ratings of the limited number of hours spent in computers during online class. Restricting the time for online class is a positive indicator to reduce mental fatigue and retain absorption of new learnings.

Time management is one of the major viewpoints in one of the studies conducted by Khalil and et al in 2020 and the survey demonstrated that online sessions have saved time and improved performance level among students.

4. CONCLUSIONS AND RECOMMENDATIONS

This study validates that online schooling is effective when all necessary equipment is available to the students' environment.

There aren't many variations between equivalent traditional and online courses in terms of student performance, according to studies that compare them. One business applications course that was provided both online and in person and was taught by the same professor throughout a ten-year period was taken into consideration by Wagner, Garippo, and Lovaas (2011). The researchers discovered that there was no discernible difference between the two delivery techniques in terms of student performance (i.e., grades). Similar to this, Burns et al. (2013) investigated the effects of a two-series course delivered over two years in traditional, online, and hybrid modes. Students who took the first course in person had superior learning outcomes for that course, but those who completed the first course online or in a hybrid format fared considerably better on the second, according to the study.

The skills of teachers in presenting their lessons in a constructive, clear and organized presentation is also very important to keep students focused and interested. As well as the skills of teachers in presentation delivery, it is also associated with higher learning among students. The centered or narrowed curriculum helps in attaining focus and concentration among students and a limited number of hours in the computer contributes to a healthier mind by reducing mental fatigue among students.

For online schooling to be successful, redesigning the curriculum map that is appropriate in the learning environment and situation is critical. Skills and knowledge of teachers in the use of gadgets and application of new software and apps are fundamental knowledge a teacher should possess and thus constant training and seminar are necessary, internet infrastructure and tools for the online schooling should also be readily available.

Likewise, students' high confidence level is also necessary to make online learning effective. Training or orientation on the Learning Management System to be used, technology tools and availability of needed resources are the important ingredients in developing self-confidence among learners.

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