

# Level of College Readiness and Challenges Encountered in The Online Distance Learning of Grade 12 Senior High School Students of Divine Word College of Legazpi, School Year 2020-2021: A Correlational Study

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**Abstract:** The purpose of this study was to know the implications of ODL to college readiness of Grade 12 senior high school students and the relationship between the encountered challenges and the college preparedness of the students. This study will also enable the department to guide and prepare the students for higher education. This study sought to answer the following research questions: (1) What are the demographic profile of the respondents in terms of the following: [a] Sex, [b] Device used during online distance learning and [c] Internet Provider. (2) What are the challenges encountered by Grade 12 Senior High School students in their Online Distance Learning in terms of: [a] Academic Performance, [b] Technology and Internet Connectivity, [c] Teacher-Related and [d] Personal-Related. (3) What is the level of College Readiness of Grade 12 Senior High School students? (4) Is there a significant relationship between the challenges encountered by Grade 12 Senior High School students in their Online Distance Learning to their College Readiness? (5) What strategic interventions can be done to improve the implementation of Online Distance Learning? The researchers chose the entire population of the Grade 12 Senior High School students of Divine Word College of Legazpi, the School Year 2020-2021 as the respondents of the study. The total respondents are three hundred twenty-three (323). The retrieval rate of the response is 78.63% for the survey in the challenges encountered by the students while the retrieval rate of the students took the aptitude test is 86.15%. This study made use of the correlational research design to measure two variables and assess the statistical relationship (i.e., the correlation) between them with little or no effort to control extraneous variables. In addition, the researchers used survey questionnaire to identify the challenges encountered by Grade 12 Senior High School students in their Online Distance Learning. The challenges are presented into four groups: Academic Performance, Internet and Connectivity, Teacher-related, and Personal-related challenges. Moreover, to measure the level of readiness of students in Higher Education, the researchers will use the data of the Aptitude Test administered by Asian Psychological Services and Assessment Inc (APSA). There was a total of two hundred fifty-four (254) grade 12 respondents, one hundred twenty-five (125) of them were male and one hundred twenty-nine (129) of them were female. Majority of the respondents (59.1%) use both Laptop/Desktop and Smartphone as their gadgets for online distance learning. In addition, the majority of the respondents

(35.8%) uses DCTV as their internet service provider. The Top 5 challenges encountered by the students: (1) I am having a hard time studying online. (2) I have trouble concentrating when doing my activities at home. (3) My area is always affected by power service interruptions. (4) I experience mental fatigue after online classes. (5) I do house chores while I am attending my classes. Half of the respondents meet the standards based on the standardized test administered by APSA. Only 1.1% of the respondents had a descriptive rating of “excellent/highly proficient” while 4.3% of the respondents had a descriptive rating of “does not meet standard”. Furthermore, 44.6% of the respondents had a descriptive rating of “progressing towards standards”. The researchers used Pearson r Correlation to know if there is a relationship between the college readiness and the challenges encountered by the students during ODL. The Pearson r Correlation value is -0.02069 which indicates that it has a negative relationship. Although it has a negative relationship it is a negligible correlation based on literature.

**Keywords:** College Readiness, Online Distance Learning

## I. INTRODUCTION

One of the most urgent global concerns is the outbreak of COVID 19, an infectious disease caused by a novel coronavirus (SARS-CoV-2, previously referred to as 2019 nCoV) transmitted from animals to humans (World Health Organization). Common symptoms include fever, cough, and breathing problems which can be transmitted through direct exposure or contact with an infected person. Anyone can be infected but adults, children, and people with comorbidities are more vulnerable. This disease has drastically affected over 240,940,937 people as of October 19, 2021 and has claimed 4,903,911 lives in over 200 countries and territories (World Health Organization, 2021) since the first documented case in Wuhan, China. With the number of infections from COVID 19 continues to increase around the world, strict health protocols such as quarantine, self-isolation, social distancing, wearing of face masks and face shields, contact tracing, hand washing, and surface disinfecting are implemented in the hope to mitigate the spread of the virus.

As the world continues to fight against this deadly virus, the repercussions brought about by it remain in the background of every aspect of human life. Aside from the dramatic loss of human life in many countries, challenges to public health, food systems, and work (WHO, 2020) carry on with chains of problems affecting people regardless of age, gender, and status in society. High burden of the functioning of the existing medical system, overload on doctors and other healthcare professionals, who are at a very high risk, slowing of the manufacturing of essential goods, undue stress among the population (Haleem A-n et al., 2020) travel restrictions, closure of schools, lack of medical facilities and personnel to name a few of the examples of how disruptive it has been since the outbreak. Global economy is also significantly affected. Significant economic impact has already occurred across the globe due to reduced productivity, loss of life, business closures, trade disruption, and decimation of the tourism industry. COVID-19 may be a “wake-up” call for global leaders to intensify cooperation on epidemic preparedness and provide the necessary financing for international collective action (Pak, et. al., 2020).

In the Philippines, there are 2,727,286 confirmed cases as of October 19, 2021 (Department of Health). Aside from being a public health crisis, one of the most affected sectors of this COVID 19 pandemic is education. According to UNESCO (2020), more than 1.5 billion students and youth across the planet are or have been affected by school and university closures due to the COVID-19 pandemic. In response to this, schools and universities have temporarily closed to contain the spread of the virus affecting students and teaching professionals. This situation resulted in teachers and students to study and to work at home with lessons and activities being delivered through online learning platforms. The Higher Education Institutions and Basic Education, under the Commission on Higher Education and Department of Education respectively, adapted to different learning modalities relative to the closure of learning centers. At the basic education level, the Department of Education (DepEd) reported that 21,724,454 learners have enrolled in public and private schools nationwide for the academic year 2020-2021 (Montemayor, 2020). As part of the Philippines’ short- and long-term strategies, Secretary Leonor Briones introduced the Basic Education Learning Continuity Plan (BE-LCP) as a guideline for the department on how to deliver education in time of the COVID-19 pandemic while ensuring the health, safety, and welfare of all learners, teachers and personnel of DepEd (DepEd, 2020). This Basic Education Learning Continuity Plan (BE-LCP) responds to the directive of the Secretary and provides guidance to the department on how to deliver education in this time of crisis. The BE-LCP lays down the direction for basic education in the coming school year. Implementation specifics will be embodied in appropriate guidelines, rules or directives, and operationalized through programs, projects and activities (DepEd BE-LCP, 2020). Public and private schools have implemented this BE-LCP since the beginning of the school year for 2020-2021.

DepEd outlined and specified learning delivery modalities that schools can adopt depending on the restrictions or requirements set forth by the local Inter-Agency Task Force (IATF) and on the context of learners in the locality. Distance learning (Modular Distance Learning and Online Distance Learning or ODL) and Blended Learning are among the modalities being practiced. DepEd embarked on the development of the BE-LCP to enable learners of basic education to continue learning, and for teachers to be able to deliver instruction in a safe work and learning environment amid the threat of COVID-19 (DepEd BE-LCP, 2020)

Traditional learning or Face-to-Face learning is the mainstream modality in schools and universities. It involves live interaction between a learner and an instructor. It is the most traditional type of learning instruction (Top Hat Glossary). The typical scenario for a traditional learning is where teachers and the students are situated in a physical environment, attending an in-person session and closely monitored at a specific time period. Alternatively, online learning has been present in the past years, offered to students wanting to earn degrees, crash courses, and certificates but cannot be physically present because of distance or other factors, however; only now with schools closed that adaptation of this mode of teaching and learning has replaced the traditional learning as the primary mode of instructional delivery.

One of the exits of Senior High School is the Higher Education. To be in college requires that a student is ready to perform in a higher education degree or program, thus, the students must be college ready. College readiness can be defined operationally as the level of preparation a student needs to enroll and succeed—without remediation—in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate degree or transfer to a baccalaureate program (Conley, 2007).

Along with other schools in the Philippines and true to its mission to give quality education and produce globally competitive individuals, the Divine Word College of Legazpi Senior High School (SHS) department has adopted the Online Distance Learning (ODL) as a modality of teaching and learning. The schedule of classes is divided into two schemes: two (2) synchronous and (2) asynchronous per week per subject. During synchronous classes, the teachers and students meet virtually through online platforms such as Google Meet, Aralinks’ Collaborative Learning Environment, and Messenger. For asynchronous classes, the students are given activities or tasks to be accomplished during the time allotted to the subject. Another option for this scheme is when teachers upload recorded video lessons so the students can access it at the most suitable time considering the internet connectivity in their area.

The researchers will conduct this study to know the implications of ODL to college readiness of Grade 12 senior high school students and the relationship between the encountered challenges and the college preparedness of the

students. This study will also look into possible strategic interventions to resolve the existing challenges being faced by the students. In doing so, the learning strategies and processes will be meaningful and authentic as the ODL continues to be implemented. Furthermore, the institution, specifically the SHS department will be able to modify instructional methodologies and maintain relevant curriculum to cope up within the background of the pandemic. This study will also enable the department to guide and prepare the students for higher education.

#### Statement of the Problem

This study focused on the implication of Online Distance Learning to College Readiness of Grade 12 Senior High School students of Divine Word College of Legazpi. This study sought to answer the following research questions:

1. What are the demographic profile of the respondents in terms of the following:
  - a. Device used during online distance learning
  - b. Internet Provider
2. What are the challenges encountered by Grade 12 Senior High School students in their Online Distance Learning in terms of:
  - a. Academic Performance
  - b. Technology and Internet Connectivity
  - c. Teacher-Related
  - d. Personal-Related
3. What is the level of College Readiness of Grade 12 Senior High School students?
4. Is there a significant relationship between the challenges encountered by Grade 12 Senior High School students in their Online Distance Learning to their College Readiness?
5. What strategic interventions can be done to improve the implementation of Online Distance Learning?

#### Research Hypothesis

*Null Hypothesis:* There is no significant relationship between the challenges encountered by Grade 12 Senior High School students in their Online Distance Learning to their College Readiness

*Alternative Hypothesis:* There is a significant relationship between the challenges encountered by Grade 12 Senior High School students in their Online Distance Learning to their College Readiness

#### Scope and Limitations of the Study

This study focused on the level of college readiness and challenges encountered in the online distance learning of grade 12 senior high school students of Divine Word College of Legazpi, School Year 2020-2021. It is limited to Grade 12 students and no other grade level is involved in this study.

#### Conceptual Framework

The main objective of this study is to know the level of college readiness and challenges encountered in the online distance learning of grade 12 senior high school students of Divine Word College of Legazpi, School Year 2020-2021 and to identify whether there is a significant relationship between the challenges encountered by grade 12 Senior High School students in their Online Distance Learning to their College Readiness. Figure 1 shows the process of achieving the main objective of the study.

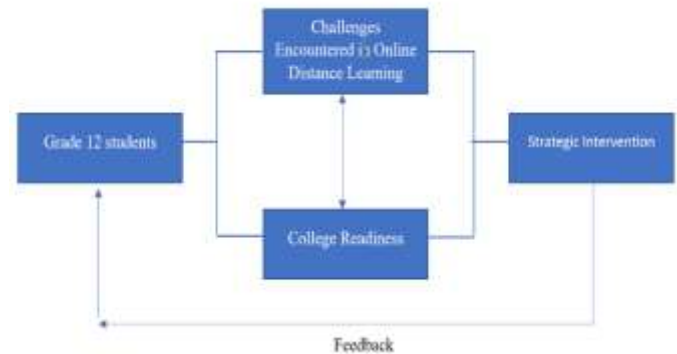


Figure 1. Conceptual Framework Model

## II. METHOD

#### Research Design

This study made use of the correlational research design to measure two variables and assess the statistical relationship (i.e., the correlation) between them with little or no effort to control extraneous variables. The researchers want to know if there is a relationship between the college readiness of the Grade 12 students and their challenges encountered with OLD. The researchers used a complete enumeration where all members of the population are measured.

#### Sources of Data

This study used 2 types of data sources: primary and secondary. The primary sources of data will come from the survey answers of the Grade 12 Senior High School students of Divine Word College of Legazpi and the results of the Aptitude Test administered by Asian Psychological Services and Assessment Inc., that measured the readiness of the students in Higher Education. The secondary sources of data were the internet articles & published and unpublished research studies.

#### Respondents of the Study

The researchers chose the entire population of the Grade 12 Senior High School students of Divine Word College of Legazpi, the School Year 2020-2021 as the respondents of the study. The total respondents are three hundred twenty-three (323). The retrieval rate of the response is 78.63% for the survey in the challenges encountered by the

students while the retrieval rate of the students took the aptitude test is 86.15%.

Table 1. Retrieval Rate

Sections	Population	Challenges Encountered by the Students		Aptitude Test	
Fr. Buttenbruch	37	28	75.67%	26	70.27%
Bp. Duschak	29	26	89.67%	28	96.55%
Br. Meyer	36	27	75%	27	75%
Fr. Buerschen	31	30	96.77%	31	100%
Fr. Estioko	34	29	85.29%	29	85.29%
Fr. Floresca	32	29	90.63%	25	78.13%
Fr. Limbrock	33	29	87.88%	30	90.91%
Fr. Mueller	33	21	63.64%	32	96.97%
Fr. Rahmann	33	20	60.61%	31	93.94%
Br. Punto	27	15	55.56%	21	77.78%
Total	323	254	78.63%	280	86.15%

**Research Instrument**

This research used a survey questionnaire to identify the challenges encountered by Grade 12 Senior High School students in their Online Distance Learning. The challenges are presented into four groups: Academic Performance, Internet and Connectivity, Teacher-related, and Personal-related challenges. The researchers test the reliability of the survey questionnaire using Cronbach’s Alpha. The researchers found out that the survey questionnaire has an internal consistency descriptive rating of “good” with a Cronbach’s alpha value of “0.888”.

Table 2. Test of Reliability of the Survey Questionnaire

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.888	.890	25

Moreover, to measure the level of readiness of students in Higher Education, the researchers used the data of the Aptitude Test administered by Asian Psychological

Services and Assessment Inc (APSA). The college readiness test is a powerful assessment tool for gauging the readiness of students for college life, responding to the challenges of university education, and aligning skills and competencies with existing national and international standards for 21st century learning and work. It has three major assessment components: the Achievement Test, the Aptitude Test and the Attitudinal Test. The respondents took the Aptitude Test. The test examines if the students could pass and complete the academic requirement using his or her innate abilities. It has five test areas: Verbal Analogy, Abstract Reasoning, Logic, Quantitative Analysis and Knowledge Management. The table below shows the four proficiency levels are given with their corresponding scaled ability scores and equivalent qualitative descriptions.

Table 3.

Scaled Ability Score	Qualitative Descriptions for Aptitude Test
90-110	Excellent/Highly Proficient
80-89	Meet Standards/Proficient
70-79	Progressing Toward Standards
50-69	Does Not Meet Standards

These instruments helped to know what strategic interventions can be done to improve the implementation of Online Distance Learning. Furthermore, the researchers would know the implications of Online Distance Learning to College Readiness of Grade 12 Senior High School students of Divine Word College of Legazpi.

**Data-gathering Process**

The researchers surveyed all Grade 12 Senior High School students of Divine Word College of Legazpi, the School Year 2020-2021. The researchers created an online survey form using Google Form as their platform. A link was forwarded to the graduates of Grade 12 Senior High School students of Divine Word College of Legazpi, School Year 2020-2021. The respondents were asked to indicate some personal information but were also assured of confidentiality. Furthermore, the researchers wrote a letter to Rev. Fr. Bernard Collera, SVD, RGC, director of Admission, Guidance and Testing Center, asking permission to access the results of the Aptitude Test as part of the program of the AGTC with the Asian Psychological Services and Assessment, Inc. (APSA) as the test provider for Divine Word College of Legazpi Senior High School Department.

**III. RESULTS**

**Demographic Profile of the Respondents**

There was a total of two hundred fifty-four (254) grade 12 respondents, one hundred twenty-five (125) of them

were male and one hundred twenty-nine (129) of them were female. The population is three hundred twenty-three (323) grade 12 students, and the retrieval rate of the survey questionnaire is 78.15%. One hundred fifty of the respondents (59.1%) use both Laptop/Desktop and Smartphone as their gadgets for online distance learning. Also, fifty-six of the respondents (22%) use smartphones only. While the remaining forty-eight (18.9%) respondents use Laptop/Desktop only. The researchers also asked the respondents to identify their internet provider used for online distance learning. Ninety-one of the respondents (35.8%) uses DCTV as their internet service provider, forty-five (17.7%) uses PLDT, thirty-nine (15.4%) uses Globe at Home Wi-Fi, thirty-two (12.6%) uses Converge, twenty-six (10.3%) uses Globe/TM Prepaid Data, fourteen (5.5%) uses Smart/TNT/Sun Prepaid Data, six (2.36%) uses other internet service provider.

*The challenges encountered by Grade 12 Senior High School students in their Online Distance Learning*

Table 4. Academic performance-related challenges (N=232)

Academic Performance-Related	Weighted Mean	Interpretation
I cannot submit the given tasks during asynchronous classes on time.	2.53	Agree
I cannot attend synchronous classes regularly.	2.67	Agree
I find it difficult to cope with a lot of activities.	2.98	Agree
I do not stay in a conducive area during classes.	2.71	Agree
I do not have a complete set of books that aid in my learning whether synchronous or asynchronous.	2.48	Disagree
I do not study the lesson I missed if I was absent from the class.	2.20	Disagree
I have trouble concentrating when doing my activities at home.	3.23	Agree
I cram when I do the activities.	2.90	Agree
I am not confident to voice out during class recitation.	3.04	Agree
I am having a hard time studying online.	3.26	Agree

The table above illustrates the challenges encountered by the students pertaining to their academic performance. Based on the result, students were able to identify eight (8) out of ten (10) challenges that they experienced during the ODL. The following are the challenges faced by the students: (1) I am having a hard time studying online. (2) I have trouble concentrating when doing my

activities at home. (3) I am not confident to voice out during class recitation. (4) I find it difficult to cope with a lot of activities. (5) I cram when I do the activities. (6) I do not stay in a conducive area during classes. (7) I cannot attend synchronous classes regularly. (8) I cannot submit the given tasks during asynchronous classes on time.

Table 5. Technology and Internet Connectivity-related challenges (N=232)

Technology and Internet Connectivity-Related	Weighted Mean	Interpretation
My area is always affected by power service interruptions.	3.22	Agree
It is difficult for me to finish an activity or task because of the internet connection.	3.08	Agree
Online games get in the way of doing my activities.	1.94	Disagree
My device cannot handle software needed in Online Distance Learning.	2.39	Disagree
I am not familiar with learning platforms (Google Classroom, CLE).	1.85	Disagree

Table 5 presents the challenges encountered by the students pertaining to their technology and internet Connectivity. Based on the result, students were able to identify two (2) out of five (5) challenges that they experienced during the ODL. The following are the challenges faced by the students: (1) My area is always affected by power service interruptions. (2) It is difficult for me to finish an activity or task because of the internet connection.

Table 6. Teacher-Related challenges (N=232)

Teacher-Related	Weighted Mean	Interpretation
My subject teachers do not deliver the lessons clearly.	2.05	Disagree
My subject teachers do not give feedback about my performance in their respective classes.	2.28	Disagree
My subject teachers do not give enough learning resources.	2.05	Disagree
My subject teachers give more than 2 activities in a week.	3.01	Agree
My subject teachers do not teach during the scheduled synchronous classes.	1.90	Disagree

Table 6 exhibits the challenges encountered by the students pertaining to their teachers. Based on the result, students were able to identify only one (1) out of five (5) challenges that they experienced during the ODL. The number of activities being given to the students by the teachers exceeds the allowed number of activities per week.

Table 7. Personal-Related challenges (N=232)

Personal-Related	Weighted Mean	Interpretation
I do house chores while I am attending my classes.	3.16	Agree
Family issues affect my learning during synchronous and asynchronous classes.	2.86	Agree
I feel tired, bored, and sleepy during class hours.	3.03	Agree
I do not feel enthusiastic and excited during class hours.	3.03	Agree
I experience mental fatigue after online classes.	3.20	Agree

The table above demonstrates the challenges encountered by the students pertaining to their personal matters. Based on the result, students were able to identify five (5) out of five (5) challenges that they experienced during the ODL. The following are the challenges faced by the students: (1) I experience mental fatigue after online classes. (2) I do house chores while I am attending my classes. (3) I do not feel enthusiastic and excited during class hours. (4) I feel tired, bored, and sleepy during class hours. (5) Family issues affect my learning during synchronous and asynchronous classes.

*The Level of College Readiness of Grade 12 Senior High School students*

Figure 2. Level of College Readiness

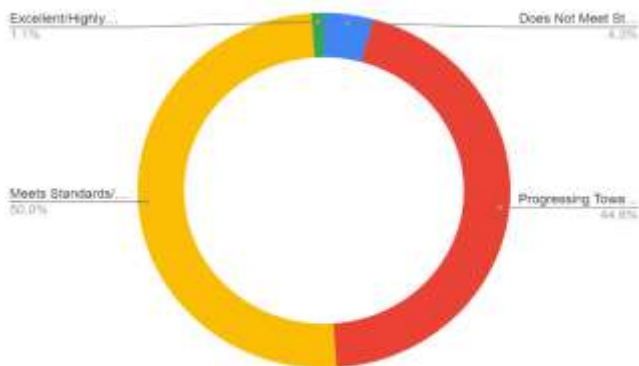
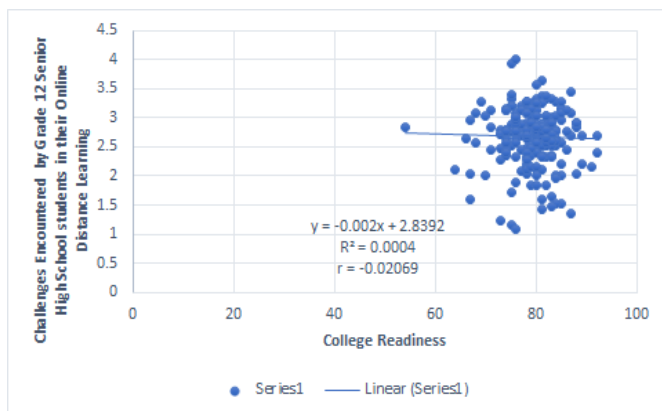


Figure 2 shows the results of the level of college readiness of Grade 12 students after taking the aptitude test administered by Asian Psychological Services and Assessment Inc (APSA). Twelve out of two hundred eighty (4.3%) students have a descriptive rating of “does not meet standard”, one hundred twenty-five out of two hundred eighty (44.6%) students have a descriptive rating of “progressing towards standards”, one hundred forty out of two hundred eighty (50%) students have a descriptive rating of “meet standards/proficient” and only three out of two hundred eighty (1.1%) students has a descriptive rating of “excellent/highly proficient”

*Significant relationship between the challenges encountered by Grade 12 Senior High School students in their Online Distance Learning to their College Readiness*

Figure 3 shows that the Pearson r Correlation value is -0.02069 which indicates that it has a negative relationship. Although it has a negative relationship it is a negligible correlation based on literature.



*Strategic interventions that can be done to improve the implementation of Online Distance Learning*

Based on the challenges encountered by the respondents, the following are the proposed strategic interventions for ODL:

- Strict implementation and monitoring of subject teachers regarding the given activities in the different subjects
- Strict monitoring of the coordinators on the giving of asynchronous activities by their respective teachers
- Conduct webinars on different topics such as Time Management, Stress Management, Coping Skills, Study Habits, and Mental Health.
- Seminar-Orientation for the parents about the challenges encountered by the students in ODL.
- Teachers must prepare interactive lessons and materials to motivate the students.

IV. DISCUSSIONS AND RECOMMENDATIONS

There was a total of two hundred fifty-four (254) grade 12 respondents, one hundred twenty-five (125) of them were male and one hundred twenty-nine (129) of them were female. Majority of the respondents (59.1%) use both Laptop/Desktop and Smartphone as their gadgets for online distance learning. In addition, the majority of the respondents (35.8%) uses DCTV as their internet service provider. The Top 5 challenges encountered by the students: (1) I am having a hard time studying online. (2) I have trouble concentrating when doing my activities at home. (3) My area is always affected by power service interruptions. (4) I experience mental fatigue after online classes. (5) I do house chores while I am attending my classes. According to the study conducted by Barrot, J.S., Llenares, I.I. & del Rosario, L.S. (2021), learning environment plays an important role in the learning process of students. If the environment is not conducive to learning, this will pose a greater problem on the quality of

learning experience. Moreover, the findings of the study further revealed that the COVID-19 pandemic had the greatest impact on the quality of the learning experience and students' mental health.

Half of the respondents meet the standards based on the standardized test administered by APSA. Only 1.1% of the respondents had a descriptive rating of "excellent/highly proficient" while 4.3% of the respondents had a descriptive rating of "does not meet standard". Furthermore, 44.6% of the respondents had a descriptive rating of "progressing towards standards". The Scaled Ability Score (SAS) ranges from 50 to 110, with 80 as the mean score and 10 as the standard deviation (SD). A high SAS (value nearer to 110) indicates better performance or stronger level of mastery of core subject matter that the tests measure. A low SAS (value nearer to 50) indicates that you are not meeting standards and have not mastered the core subject areas. This means that half of the respondents has at least have the mastery in core subjects that is need in college. In the study of Mamba, M., Tamayao A., & Velcado R. (2020), K to 12 graduate students (7,533 respondents) were found to be college unprepared. The study also revealed that students manifested college readiness with languages and literature while subjects such as mathematics and science are subjects where students performed poorly. The researchers used Pearson r Correlation to know if there is a relationship between the college readiness and the challenges encountered by the students during ODL. The Pearson r Correlation value is -0.02069 which indicates that it has a negative relationship. Although it has a negative relationship it is a negligible correlation based on literature. Therefore, fail to reject the null hypothesis that there is no significant relationship between the challenges encountered by Grade 12 Senior High School students in their Online Distance Learning to their College Readiness

The following recommendations are made based on the results and discussions of the study to further improve the implementation of Online Distance Learning: (a) Strict implementation and monitoring of subject teachers regarding the given activities in the different subjects; (b) Strict monitoring of the coordinators on the giving of asynchronous activities by their respective teachers; (c) Conduct webinars on different topics such as Time Management, Stress Management, Coping Skills, Study Habits, and Mental Health; (d) Seminar-Orientation for the parents about the challenges encountered by the students in ODL; and (e) Teachers must prepare interactive lessons and materials to motivate the students.

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