

# Effects of Online Learning on the Academic Performance of First Year College Students of Notre Dame of Midsayap College in Midsayap, North Cotabato, Philippines

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**Abstract:** This study generally aimed to determine the Effects of Online Learning on the Academic Performance of First Year Education Students of Notre Dame of Midsayap College. This study made use of the causal-comparative and correlation design. It described the profile of the respondents in items of sex, course and major taken. It is also correlational for it determined the difference of academic performance when grouped according to sex. It also determined the significant relationship between the academic performance and the qualities of instructions, characteristics of learning materials, and features of Schoology given to the respondents during the first semester of academic year 2020-2021.

There was no significant difference on the academic performance of the respondents when group according to sex. Moreover, there was no significant relationship between the academic performance and the qualities of instruction, characteristics of learning materials, and features of Schoology.

## I. INTRODUCTION

The COVID-19 pandemic has introduced uncertainty into significant aspects of national and global society, including for schools. There is uncertainty about how school closures last spring impacted student achievement. The rapid conversion of most instruction to an online platform this academic year will continue to affect achievement without data on how the virus impacts student learning, making informed decisions about whether and when to return to in-person instruction remains difficult. Even now, education leaders must grapple with seemingly impossible choices that balance health risks associated with in-person learning against the educational needs of children, which may be better served when kids are in their physical schools. Amidst all this uncertainty, there is a growing consensus that school closures in spring 2020 likely negatively affected student learning (Kuhfeld & Soland, 2020).

Most first-year education students are new to the learning environment of Notre Dame of Midsayap College, which is done using Schoology, and it gives them much anxiety since not all of them cannot afford a stable internet connection. This has been a big problem for most first-year education students in achieving academic excellence. Adapting to the new

learning environment would give them many confusions, apprehensions, and other factors that would affect their expectations in achieving their academic success.

Covid-19 pandemic gives us so many uncertainties, especially in delivering quality education for all. With the adoption of Schoology as an online learning tool, the dreams and hopes of every Notre Damean became possible. However, with the demands of internet connections, a lot of students need to acquire their online learning tools including laptops, phones, a comfortable place to conduct conferences, and of course stable internet connections that would really help in their online learning environment. Some students have a hard time attending online conferences because of unpredictable internet connection since most of the students only use data connection because of its availability.

## II. LITERATURE REVIEW

### *Online Learning*

#### *Meaning of Online Learning*

Online learning is education that takes place over the Internet. It is often referred to as “eLearning,” among other terms. However, online learning is just one type of “distance learning” - the umbrella term for any learning across distance and not in a traditional classroom. Online learning uses the Internet as a delivery modality to offer thoughtfully designed, quality, student-focused learning experiences built on proven best practices that create effective interactions between learners, peers, instructors, and content.

Online learning education entails instruction and content being delivered primarily over the internet (Watson & Kalmon, 2005). The term does not include printed based correspondents’ education, broadcast television or radio, video cassettes, and stand-alone educational software programs that do not have a significant internet-based instructional component (U.S. DepEd Office of Planning, Evaluation, and Policy Development and program Studies Service, 2010) used interchangeably with virtual learning, cyber-learning and e-learning.

*Advantages of Online Learning*

According to Priyanka Gautam (2020), there are five advantages of Online

Learning. It includes efficiency, accessibility of time and space, affordability, improved students, attendance, and suits various learning styles.

*Efficiency.* Online learning offers teachers an efficient way to deliver lessons to students. Online learning has several tools such as videos, PDFs, podcasts, and teachers to use them as part of their lesson plans. By extending the lesson plan beyond traditional textbooks to include online resources, teachers can become more efficient educators.

*Accessibility of Time and Place.* Another advantage of online education is that it allows students to attend classes from any location of their choice. It also allows schools to reach out to a more extensive network of students instead of being restricted by geographical boundaries. Additionally, online lectures can be recorded, archived, and shared for future reference. This allows students to access the learning material at a time of their comfort.

Thus, online learning offers students the accessibility of time and place in education. **Affordability.** Another advantage of online learning is reduced financial costs. Online education is far more affordable as compared to physical learning. This is because online learning eliminates the cost points of student transportation, student meals, and, most importantly, real estate. Additionally, all the course or study materials are available online, thus creating a paperless learning environment that is more affordable while also being beneficial to the environment.

*Improved Student Attendance.* Since online classes can be taken from home or location of choice, fewer students miss out on lessons.

*Suits A Variety of Learning Styles.* Every student has a different learning journey and a different learning style. Some students are visual learners, while some students prefer to learn through audio. Similarly, some students thrive in the classroom, and other students are solo learners who get distracted by large groups. With its range of options and resources, the online learning system can be personalized in many ways. It is the best way to create a perfect learning environment suited to the needs of each student.

*Disadvantages of Online Learning*

According to Priyanka Gautam (2020), there are five disadvantages of Online Learning. It includes the inability to focus on the screen, technology issues, sense of isolation, teacher training, and manage screen time.

*Inability to Focus on Screens.* One of the biggest challenges of online learning for many students is the struggle with focusing on the screen for long periods. With online learning, there is also a greater chance for students to be easily distracted by social media or other sites. Therefore, the

teachers must keep their online classes crisp, engaging, and interactive to help students stay focused on the lesson.

*Technology Issues.* Another critical challenge of online classes is internet connectivity. While internet penetration has grown in leaps and bounds over the past few years, a consistent connection with decent speed is a problem in smaller cities and towns. Without a consistent internet connection for students or teachers, there can be a lack of continuity in learning for the child. This is detrimental to the education process. **Sense of Isolation.** Students can learn a lot from being in the company of their peers. However, in an online class, there are minimal physical interactions between students and teachers. This often results in the sense of isolation for the students. In this situation, the school must allow other communication forms between the students, peers, and teachers.

*Teacher Training.* Online learning requires teachers to have a basic understanding of using digital forms of learning. However, this is not always the case. Very often, teachers have a fundamental understanding of technology. Sometimes, they do not even have the necessary resources and tools to conduct online classes.

To combat these, schools need to train teachers with the latest technology updates to conduct their online classes seamlessly.

*Manage Screen Time.* Many parents are concerned about the health hazards of having their children spend so many hours staring at a screen. This increase in screen time is one of the biggest concerns and disadvantages of online learning. Sometimes students also develop bad posture and other physical problems due to staying hunched in front of a screen

An excellent solution to this would be to give the students plenty of breaks from the screen to refresh their mind and their body.

*Learning Materials**Meaning of Learning Materials*

Learning materials refer to one of four elements of integral self-evaluations — in addition to neuroticism, self-efficacy, and self-esteem. It can also predict several professional outcomes, including job performance and job satisfaction, with a high degree of accuracy. Some see this as a personality trait that an individual is born with, but events and experiences also shape some evidence in childhood. Learning materials can also include online resources, videos, and other interactive materials that reinforce course content. Remote classrooms often rely on technology tools and platforms to deliver learning materials (Gagne, R., & Briggs, L., 2016).

Learning materials are necessary because they can significantly increase student achievement by supporting student learning. For example, a worksheet may provide a student with significant opportunities to practice a new skill gained in class. This process aids in the learning process by

allowing the student to explore the knowledge independently and provide repetition. Regardless of what kind, learning materials all have some function in student learning (Ministry of education, 2019).

In education, TLM is a commonly used acronym that stands for "teaching/learning materials." Broadly, the term refers to a spectrum of educational materials that teachers

use in the classroom to support specific learning objectives, as set out in lesson plans. These can be games, videos, flashcards, project supplies, and more. Classroom teaching that uses only a teacher lecturing the class, perhaps writing on the chalkboard or whiteboard, is the classic example of not using any TLM. Using TLM can significantly assist students in the learning process (Beth Lewis, 2019).

Learning materials can also add meaningful structure to lesson planning and the delivery of instruction. Particularly in lower grades, learning materials act as a guide for both the teacher and student. They can provide a valuable routine. For instance, if you are a language arts teacher and teach new vocabulary words every Tuesday, knowing that you have a vocabulary game to provide the students with practice regarding the new words will take pressure off of you and provide important practice (and fun) for your students.

communication to students to more easily play a role in discussion and teamwork. In addition, Schoology is also supported by various forms of media, such as; videos, audio, and images that can attract students' interest in the learning process. Schoology further guides students to apply technology in the learning process. Thus, Schoology is a free service that uses the concept of managing social learning, which is devoted to building an online learning environment that is simple and easy to share information and educational features or content in writing, files, and links that the teacher can share. There are special features in the form of courses, groups, and resources.

Suprihanto explains that Schoology has features that strongly support learning activities. The features of Schoology, namely; a) courses (courses), are facilities for making subjects, for example, PPK subjects (Pancasila and Citizenship Education); b) groups (groups), is a facility to create groups in the assignment of tasks carried out based on different themes or class can also be grouped; c) resources (learning resources), this facility serves to present learning resources to individuals and groups. On the course menu, teachers can also make quizzes or questions (this is what Facebook does not have) with various types of multiple-choice, right-wrong, matchmaking, short entries, and so on. In addition, the teacher also does not have to make questions for the number of classes that are handled, but it is enough with the import feature of the question.

The advantages of web Schoology according to Adinda, namely available attendance facilities/ presence, which is used to check student attendance, and analytical facilities to see all student activities on each course,

### *Schoology Platform*

#### *Meaning of Schoology*

Schoology is an online learning management system (LMS) that allows educators

to organize curriculum, create lesson plans, and provide student assessment. The LMS platform allows for peer collaboration and engagement through public or private discussion forums and cross-application. It is an online course management system that allows teachers to create and manage academic courses for their students. It provides teachers with a method of managing lessons, engaging students, and sharing content. Schoology provides a secure and safe, easy-to-use way for teachers, students, parents, and administrators to communicate and collaborate to enhance students' learning seamlessly and success (Carrollwood Day School (n.d.).

#### *Features of Schoology*

Schoology is one of the innovative platforms created based on inspiration from Facebook social media, which aims to educate education. The platform was developed in 2009 in New York. Schoology aims to help teachers open broad opportunities for

assignments, discussions, and other activities that users prepare for students. In addition, Schoology offers tools used by Teachers to support online learning activities, providing curricular and collaborative group resources for students and teachers to build and engage in their learning networks, can be operated on any web browser, including on mobile applications such as Android and iOS. Schoology is an API (Application Programming Interface), which means that other applications can connect and interact with Schoology programs, for example; google drive, Twitter, and Facebook, free instructional components for teachers and students.

The use of Schoology-based e-learning has been carried out by several previous researchers. First, Khairil shows that the internet-based learning model using Schoology effectively improves student learning outcomes in Introduction to Language Science courses at the Indonesian Language and Literature Education Study Program FBS Uned 2017-2018 learning years. Second, Natalia produces findings that the development of e

Learning with Schoology has very interesting, easy-to-use, and effective qualities used as enrichment learning. Third, Misbah produces findings that Schoology-based e-learning can train digital literacy and is suitable for use in learning.

Schoology is part of the Learning Management System (LMS) that students and lecturers use in higher education. Luaran (2012) says that Schoology is an online learning session, classroom management, and social networking platform that improve learning. Through the Schoology application, teaching nine learning can be more powerful and create a dynamic learning process. Some lecturers at the University of Muhammadiyah Malang have

used this application since Schoology is a software application that students can download on the internet and for free. Schoology also supports the lecturer to deliver their material anywhere. Schoology is an online tool to help students

manage their classrooms more effectively, engage students in media-rich lessons, and instantly communicate.

### *Academic Performance*

#### *Meaning of Academic Performance*

Academic performance is the measurement of student achievement across various academic subjects. Teachers and education officials typically measure achievement using classroom performance, graduation rates, and results from standardized tests.

Student performance is measured using grade point average (GPA), high school graduation rate, annual standardized tests, and college entrance exams. A student's GPA is typically measured on a scale of zero to four, with higher GPAs representing higher grades

in the classroom. State and federal education officials collect graduation rates as a baseline measurement of secondary education performance. Each state conducts annual tests at the elementary, middle, and high school levels to determine

Independent learners take seeds of knowledge and grow them in ways that become personally meaningful. This leads to unique and long-lasting understandings that are the prerequisites of genius.

*Curiosity.* An inherent curiosity fuels education to know and urge to question. Neuroscience shows that being puzzled as to why something is the way it is, primes its absorption into long-term memory.

Students with a desire to ponder and discuss what they are taught after leaving the classroom are those who assimilate learning long term.

*Optimism.* The expectation of success breeds motivation. Whether it is facing an exam, a daunting study project, or contemplating graduation prospects, having a positive attitude empowers students with the will to succeed, day after day.

Aiming high may seem risky, but actually, the psychology of meeting expectations nurtures self-belief, yet the flipside provokes self-examination to do better.

*Persistence.* Part motivation, persistence is a hard-work ethic that allows learners to perform well term after term. It goes hand-in-hand with consistency, where having routines makes completing homework and assignments seem like an automatic task.

The antidote to procrastination is persistence which comes with an internally imposed approach to educational self-development. In the long run, it makes the journey of learning an efficient one.

*Personal Growth.* Being a closeted bookworm does not make

student proficiency in English and mathematics. These tests are also used to comply with federal education standards. School districts also track student performance on the ACT and SAT to determine readiness for higher education.

### *Students of Good Academic Performance*

The path through education can be a long and challenging one. Some students shine while others struggle. However, what makes the difference between an A-star student and a college dropout?

Whether its children are just entering high school or graduating college, there is a range of psychological characteristics that make great learners. The first step to nurturing these is to be aware of them. So here we will take a look at eight key traits that contribute to student excellence. The following are the different types of motivation to increase academic performance according to *Frontiers in Psychology* (2019):

*Independence.* Successful students understand that their teachers and instructors are facilitators of their own learning journey. The classroom is just one part of knowledge discovery, and learning is not simply about listening. It involves processing, internalizing, and understanding knowledge at different levels.

for great student development. Students with a passion for expanding their learning also need to take on themselves.

*Resilience.* A typical student experiences close to two decades of education in order to graduate college. Whether a personal event or an academic woe, there will always be things that try to take the wind out of a student's sails from time to time.

The resilience to pick things up and move on can make the difference between a student's progress being derailed and them coming out of it a stronger person.

*E-Literacy.* We live in a digital and connected world. Computers provide access to vast and immediate sources of knowledge. Proficient use of them develops skills that increasingly matter in academia and careers after graduation.

There is also the fast-growing world of online learning. At any age, students have the opportunity to expand their academic horizons and acquire qualifications from universities like Oxford, MIT, and Harvard.

*Trained Cognitive Abilities.* Students all need mental focus to learn. Becoming lifelong learners is imperative for the 21st century. The challenge is that information loads are increasing exponentially, consuming more and more attention. Since 2000, the average attention span of a student has dropped from 12 seconds down to 8 seconds in 2013, and by some estimates may drop to 2 seconds.

Students who actively train their selective attention and sustained attention gain an educational performance advantage, which will become ever more critical as we move further into the 21st century.



challenges that teach them about themselves

#### *Instructions*

Instruction was defined previously as "the purposeful direction of the learning process" and is a significant teacher class activity (along with planning and management). The definition of *instruction* is educating, giving the steps that must be followed or and order. An example of instruction is someone giving another person detailed direction to the library.

Directions and instructions are exchanges often used by people in everyday situations. People communicate information by giving directions and instructions. Because of their almost identical meanings, the two terms are often used interchangeably.

Both directions and instructions are used as plurals. They can be delivered both in an oral and written manner. The differences between directions and instructions are dependent on the context or usage in a particular situation. Both directions and instructions act as guidelines and often appear as a series of steps or stages. This form implies that one step must be done before proceeding to another to complete a task or achieve the desired result.

Directions tend to be associated with places. People often ask for directions when trying to get to a specific geographical location. The most common directional cues are north, south, east, west, top, down, left, and right. Combinations of the abovementioned cues are possible as well. This accomplishes the main goal of getting from one specified area or location to another.

In a different context, directions can also be considered as orders; both guide on what to do. In directions, the manner of delivery is less forceful compared to that of instructions. Directions act as general guidelines with an indication of authority. Additionally, directions do not provide the doer with the context and the result of each step or action (Celine, 2017).

#### *Objectives of the Study*

1. What is the profile of the respondents in terms of sex, course/program, and year level?
2. What were the academic performances of the respondents (General Point Average) during the first semester of the school year 2020-2021?
3. What were the qualities of instructions given to the respondents during the first semester of the school year 2020-2021?
4. What were the characteristics of learning materials given to the respondents during the first semester of the school year 2020-2021?

#### *Research Questions*

1. What were the features of the Schoology platform that the respondents utilized during the first semester of the school year 2020-2021?

2. Is there a significant difference in the academic performance of the respondents when grouped according to sex?
3. Is there a significant relationship between the respondents' academic performance and the quality of instructions given to them?
4. Is there a significant relationship between the respondents' academic performance and the characteristics of learning materials given to them? 9. Is there a significant relationship between the respondents' academic performance and the features of Schoology utilized by them?

### III. METHODOLOGY

#### *Research Design*

The study used causal-comparative and correlational designs. It is causal comparative since it described the profile of the respondents in terms of sex, course, and major taken. It is also correlational since the qualities of instruction for online learning, characteristics of learning materials, and features of Schoology are correlated with the academic performance of the first-year Education students of Notre Dame of Midsayap College during the first semester of the academic year 2020-2021.

#### *Sampling Technique*

The simple random sampling technique was done through Schoology with sixty respondents coming from the first-year education students of Notre Dame of Midsayap College A.Y. 2020-2021. The researchers used simple random sampling, a probability sampling technique. This means that each member of the population has an equal chance to be a respondent.

#### *Locale and Respondents of the Study*

The respondents of the study were sixty-first-year Education students of Notre Dame of Midsayap College for the school year 2020-2021. The number of respondents will depend on the number of students willing to participate in the research study by answering the administered questionnaires. The study will be conducted during the 2nd Semester of School Year 2020-2021.

#### *Instrumentation*

The instrument used in this study was a researcher-made questionnaire. The questionnaire has four parts. The first part is the profile of the respondents in terms of sex, course, and major taken. The respondents supplied the needed data by clicking the information that corresponds to their circumstances on the space provided.

The second part includes the qualities of good instructions for Online learning. It has fifteen questions and categorized into three, namely the substantive, formal, and procedural.

The third part includes the characteristics of effective learning materials. It has fifteen questions and categorized into three, namely the content, relevance, and accessibility.

The fourth part is the features of good utilization of Schoology. It has fifteen questions and is categorized into three: the uploading and notifications, activities and submissions, and monitoring and evaluation.

*Validity and Reliability of Instruments*

The face and content validity of the instrument was done through the statistician, adviser to ensure the clarity of instruction. The researchers conducted the pilot testing of the questionnaires to twenty respondents from the BSED 2 students. The reliability of the questionnaire was obtained and completed using Cronbach Alpha. The pre-test yielded the reliability coefficient of .928, indicating a reliable instrument that is valid and ready to use.

*Data Gathering Procedure*

The researchers asked permission from the Dean of CED. Upon approval, the research professor, the researchers facilitated the administration and distribution of the research instrument. The researchers delivered the survey questionnaires through the use of the Schoology platform.

To ensure understanding and objectivity, the researchers explained first the content of the questionnaire and allowed the respondents to ask for clarifications along the way. The respondents were given time to finish answering the survey forms before these were retrieved.

In data analysis and interpretation, a quantitative method was used. The researchers first underwent the sorting out of questionnaires. Then, preparation of coding guides and coding sheets was done. Finally, it was submitted for statistical analysis to the statistician.

*Statistical Tools and Treatment of Data* Frequency, percentage distribution, weighted mean, t-test and Pearson-r were used as statistical tools to answer and interpret the results of the survey For problem 1, percentage distribution was used to treat the demographic profile of the respondents in terms of sex, and course/program.

For problem 2, frequency and percentage distribution were used to treat the general point average of the respondents.

For problems 3,4, 5 and 6, weighted mean, standard deviation was used to treat the qualities of instructions given to the respondents during the first semester of school year 2020-2021, characteristics of learning materials given to the respondents during the first semester of school year 2020-2021, and the features of Schoology platform that the respondents utilized during the first semester of school year 2020-2021.

For problems 7, 8, and 9, correlational analysis was used to treat the relationship of academic performance to the qualities of instructions given to the respondents during the first semester of school year 2020-2021, relationship of academic performance to the characteristics of learning materials given to the respondents during the first semester of school year 2020-2021, and the relationship between

academic performance and the features of Schoology platform that the respondents utilized during the first semester of school year 2020-2021.

IV. RESULTS

*Personal Profile of Respondents*

The information pertaining to the personal profile of the respondents in terms of sex and course/program and major being taken are shown in Table 1.

Table 1. Personal Profile of the Respondents

Sex Frequency (n) Percent
Male 20 33.3
Female 40 66.7
Total: 60 100.0
Course and Major
BSED-Filipino 9 15.0
BSED-Science 5 8.3
BSED-English 18 30.0
BSED-Social Studies 5 8.3
BSED-Mathematics 9 15.0
BEED 7 11.7
BPED 7 11.7
Total: 60 100.0

*Sex of the Respondents*

Table 1 shows that the greater number (f=40 or 66.7%) of the respondents were female. A considerable number (f=20 or 33%) of them were male —a total number of 60 respondents coming from the first year Education students.

*Course and Major of the Respondents*

Data show that the greater number (f=18 or 30%) of the respondents are BSED English 1, followed by (f=9 Or 15%) coming from BSED-Filipino and Mathematics, followed by (f=7 or 11.7%) from BEED and BPED, and with a considerable number of (f=5 or 8.3%) coming from BSED-Social Studies and BSED-Science.

*Academic Performance of Respondents*

The information relative to the academic performance of the respondents in terms of grade point average is shown in Table 2.

Table 2. Academic Performance of Respondents

<i>GPA Frequency (n) Percent (%) Description</i>
GPA=1.00 0 0 Excellent 1.00<GPA≤1.50 31 51.67 Very Good 1.50<GPA≤2.00 29 48.33 Good 2.00<GPA≤2.50 0 0 Fair 2.50<GPA≤3.00 0 0 Poor 3.00<GPA≤5.00 0 0 Very Poor Overall GPA <u>1.53</u> Good Total 60 100

Table 2 shows that the greater (f=31 or 51.67%) of the respondents belongs to the average of less than 1.00 but greater than or equal to 1.50 and describe as very good students, and with an (f=29 or 48.33%) average of less than 1.50 but greater or equal to 2.00 and describe as good

students. However, there were no equivalent grades reflected in the other bracket of the GPA in the figure. The overall GPA was Good based on the figures reflected in table 2.

*Qualities of Instructions in Online Learning* The information relative to the qualities of instructions given to the respondents during the first semester of 2020-2021 using the Schoology platform is shown in Table 3.

Table 3. Qualities of Instructions in Online learning

Item	Mean	Standard Deviation (SD)	Description	Interpretation (M)
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*Substantive*

The instructions were understandable to me. 4.18 0.87 Agree Good Quality

The instructions were brief, simple and concise. 4.28 0.69 Agree Good Quality

The instructions provided me with what I am going to do. 4.32 0.72 Agree Good Quality

The instructions were relevant to the assigned activities / tasks. The instructions were aligned with the objective of the particular topic. **Overall M/SD: 4.32 0.69 Agree Good Quality**

*Formal*

The instructions appeared clearly on my device. 4.30 0.67 Agree Good Quality

The instructions were readily accessible in my device. 4.25 0.60 Agree Good Quality

The instructions were authoritative but with considerations. The instructions were detailed, specific and self-explanatory. The instructions were posted in a visible area/corner of the Schoology. 4.17 0.72 Agree Good Quality

**Overall M/SD: 4.23 0.66 Agree Good Quality**

*Procedural*  
The instructions were timely given. 4.23 0.62 Agree Good Quality

The instructions were regularly given. 4.20 0.71 Agree Good Quality

The instructions were regularly updated. 4.18 0.60 Agree Good Quality

The instructions were practical and convenient. 4.10 0.66 Agree Good Quality

The instructions contain procedures that were easy to follow. **Overall M/SD: 4.25 0.65 Agree Good Quality Grand Mean: 4.27 Agree Good Quality**

*Legend:*

Range Description Interpretation

1.00-1.49 Strongly Disagree Very Poor Quality

1.50-2.49 Disagree Poor Quality

2.50-3.49 Moderately Agree Fair Quality

3.50-4.49 Agree Good Quality

4.50-5.00 Strongly Agree Very Good Quality

*Substantive*

Data in table 3 shows that the respondents Agree (OM= 4.32, OSD= 0.69) that the specified items were qualities of substantive aspects of instruction given to them during the first semester of academic year 2020-2021 using the Schoology platform. Moreover, the respondents agree (M= 4.18) that “the instructions were understandable to me”; agree (M= 4.28) that “the instructions were brief, simple and concise and has a good quality”; agree (M= 4.32) that “the instructions provided me with what I am going to do”; agree (M= 4.40) that “the instructions were relevant to the assigned activities/tasks”; agree (M= 4.40) that “the instructions were aligned with the objectives of particular topic”

*Formal*

Data in table 3 shows that the respondents Agree (OM= 4.23, OSD= 0.66) that the specified items were qualities of formal instruction given to them during the first semester of academic year 2020-2021 using the Schoology platform. Moreover, the respondents agree (M= 4.30) that “the instructions appeared very clearly in my device”; agree (M= 4.25) that “the instructions were readily accessible in my device”; agree (M= 4.17) that “the instructions were authoritative but with consideration”; agree (M= 4.20)

that “the instructions were detailed, specific and self-explanatory”; agree (M= 4.23) that “the instructions were posted in a visible area/corner of the Schoology”.

*Procedural*

Data in table 3 shows that the respondents Agree (OM= 4.25, OSD= 0.65) that the specified items were qualities of procedural aspects of instruction given to them during the first semester of academic year 2020-2021 using the Schoology platform. Moreover, the respondent agree (M= 4.23) that “the instructions were timely given”; agree (M= 4.20) that “the instructions were regularly given”; agree (M= 4.18) that “the instructions were regularly updated”; agree (M= 4.10) that “the instructions were practical and convenient”; agree (M= 4.35) that “the instructions contains procedures that were easy to follow”.

*Characteristics of Learning Materials in Online Learning*

The information relative to the learning materials given to the respondents during the first semester of academic year of 2020-2021 using the Schoology platform are shown in Table 4.

Table 4. Characteristics of Learning Materials in Online Learning

Item Mean Standard Deviation Description Interpretation (M) (SD)

*Content*

The learning materials were 4.11 0.78 Agree Effective systematically organized.

The learning covered all subjects 4.08 0.69 Agree Effective matters of the courses.

The learning materials were 3.82 0.81 Agree Effective supplemented by audios and videos.

The learning materials provided 4.05 0.76 Agree Effective clear explanations of their contents.

The learning materials contained 4.43 0.64 Agree Effective topics that were related to the course. The learning materials contained texts, 4.08 0.71 Agree Effective figures and/or tables that were readable

**Overall M/SD: 4.10 0.73 Agree Effective Relevance**

The learning materials contain 4.08 0.80 Agree Effective practical illustrations.

The learning materials had 3.93 1.03 Agree Effective enough concrete examples.

The learning materials contained 4.20 0.87 Agree Effective information that are up-to-date. The learning materials stimulated 4.03 1.11 Agree Effective my interest and/or imagination. The learning materials used languages 4.38 1.05 Agree Effective that were easy to understand. The learning materials contained 4.20 1.19 Agree Effective concepts that are applicable to real situations

**Overall M/SD: 4.18 1.01 Agree Effective Accessibility**

The learning materials previously uploaded 4.38 1.36 Agree Effective can be reviewed or read again in Schoology. The learning materials could be easily located 4.25 1.46 Agree Effective in Schoology application and/or other websites.

The learning materials could be easily opened 4.30 1.61 Agree Effective in Schoology application and or other websites.

**Overall M/SD: 4.18 1.48 Agree Effective Grand Mean: 4.15 Agree Effective**

*Legend*

Range Description Interpretation

1.00-1.49 Strongly Disagree Very Ineffective

1.50-2.49 Disagree Ineffective

2.50-3.49 Moderately Agree Moderately Effective

3.50-4.49 Agree Effective

4.50-5.00 Strongly Agree Very Effective

*Content*

Data in table 4 shows that the respondents Agree (OM= 4.10, OSD= 0.73 that the specified items were characteristics of the content learning materials given to them during the first semester of academic year 2020-2021 using the Schoology platform. Moreover, the respondents Agree (M=4.11) that “the learning materials were systematically organized”; agree (M=4.08) that “the learning covered all subject matters of the courses”; Agree (M=3.82) that “the learning materials were supplemented by audios and videos”;

agree (M=4.05) that “the learning materials provided clear explanations of their contents”; they agree (M=4.43) that “the learning materials contained topics that were related to the course”; Agree (M=4.08) that “the learning materials contained texts, figures and/or tables that were readable”.

*Relevance*

Data in table 4 shows that the respondents Agree (OM=4.18, OSD=1.01 that the specified items were characteristics of relevant learning materials given to them during the first semester of academic year 2020-2021 using the Schoology platform. Moreover, the respondents Agree (M=4.08) that “the learning materials contain practical illustrations”; Agree (M=3.93) that “the learning materials had enough concrete example”; Agree (M=4.20) that “the learning materials contained information that are up to -date”; Agree (M=4.03) that “the learning materials stimulated their interest and/or

imagination”; Agree (M=4.38) that “the used languages were easy to understand”; agree

(M=4.20) that “the learning materials contained concepts that are applicable to real situations”.

*Accessibility*

Data in table 4 shows that the respondents Agree (OM=4.80, OSD=1.48) that the specified items were characteristics of accessible learning materials given to them during

the first semester of the academic year 2020-2021 using the Schoology platform. Moreover, the respondents Agree (M=4.38) that “the learning materials previously uploaded can be reviewed or read again in Schoology”; Agree (M=4.25) that “the learning materials could be easily located in Schoology application and/or other websites”; Agree (M=4.30) that “the learning materials could be easily opened in Schoology application and /or other websites”.

*Features of Schoology*

The information relative to the features of Schoology utilized by the respondents is shown in Table 5.

Table 5. Features of Schoology

Item Mean Standard Deviation Description Interpretation (M) (SD)



*Uploading and Notifications*

I could easily see the 4.00 0.84 Agree Good Features reminders posted by my teachers.

I could easily see the deadlines 3.93 1.00 Agree Good Features in the upcoming section

I could return to the past lessons 3.95 0.81 Agree Good Features posted by our teachers.

I could easily open the folders that 4.03 0.94 Agree Good Features contain learning materials. I could timely be notified of newly 3.88 0.92 Agree Good Features uploaded learning materials I could easily see announcements posted 4.25 0.75 Agree Good Features by school administrators **Overall M/SD: 4.01 0.87 Agree Good Features**

*Activities and Submissions*

I could participate in class 3.97 0.76 Agree Good Features discussions

I could collaborate/interact 3.82 0.85 Agree Good Features with my classmates

I could perform my tasks 3.57 1.01 Agree Good Features anywhere and anytime.

I could accomplish my 3.95 0.91 Agree Good Features tasks/assignments on time.

I can post comments/reactions 4.17 0.74 Agree Good Features in the comments section.

I can easily send messages to our 3.67 1.08 Agree Good Features teachers for queries.

I could easily receive the response 3.53 1.07 Agree Good Features of my teachers about my queries. **Overall M/SD: 3.81 0.92 Agree Good Features**

*Monitoring and Evaluation*

I could regularly keep track of 3.80 0.82 Agree Good Features my grades and performances I could promptly be updated of the 3.83 0.89 Agree Good Features results of my quizzes, assignments, and major exams.

**Overall M/SD: 3.88 0.85 Agree Good Features Grand Mean: 3.90 Agree Good Features**

*Legend*

Range Description Interpretation

1.00-1.49 Strongly Disagree Very Poor Features

1.50-2.49 Disagree Poor Features

2.50-3.49 Moderately Agree Fair Features

3.50-4.49 Agree Good Features

4.50-5.00 Strongly Agree Very Good Features

*Uploading and Notifications*

Data in table 5 show that the respondents Agree (OM= 4.01, OSD= 0.88) that the specified items were uploading and notification features in Schoology they used during the first semester of academic year 2020-2021. Moreover, the respondents agree (M 4.00) that “I could easily see the reminders posted by their teacher”; agree (M= 3.93) that “I could easily see the deadlines in the upcoming section”; agree (M= 3.95) that “I could return to the past lessons posted by their teacher”; agree (M= 4.03) that “I could easily open the

folders that contain learning materials”; agree (M= 3.88) that “I could be timely notified of newly uploaded learning materials”; agree (M= 4.25) that “I could easily see announcements posted by School Administrators”.

*Activities and Submissions*

Data in Table 5 show that the respondents Agree (OM= 3.81, SD= 0.92) that the specified items were the activities and submission features of Schoology they used during the first semester of academic year 2020-2021. Moreover, the respondents agree (M= 3.97) that “I could participate in class discussions”; Agree (M= 3.82) that “I could

collaborate/interact with their classmates”; Agree (M= 3.57) that “I could perform their task anywhere and anytime”; Agree (M= 3.95) that “I could accomplish their task/assignments on time”; Agree (M= 4.17) that “I can post comments/reactions in comment section”; Agree (M= 3.67) that “I can easily send messages to their teachers for queries”; Agree (M= 3.53) that “I could easily receive the response of their teachers about their queries”.

*Monitoring and Evaluation*

Data in Table 5 show that the respondents Agree (OM= 3.81, SD= 0.92) that the specified items were the activities and submission features of Schoology they used during the first semester of academic year 2020-2021. Moreover, the respondents Agree (M= 3.97) that “I could participate in class discussions”; Agree (M= 3.82) that “I could collaborate/interact with their classmates”; Agree (M= 3.57) that “I could perform their task anywhere and anytime”; Agree (M= 3.95) that “I could accomplish their task/assignments on time”; Agree (M= 4.17) that “I can post comments/reactions in comment section”; Agree (M= 3.67) that “I can easily send messages to their teachers for queries”; Agree (M= 3.53) that “I could easily receive the response of their teachers about their queries”. **Difference on Academic Performance when Grouped According to Sex** Table 6 presents the difference between the academic performance when grouped according to sex.

Table 6. Difference between the Academic Performance when Grouped according to Sex  
 Sex n Group Mean Difference in Mean p-value Indication Decision Male 20 1.56 0.05 .376\*  
 Not Accept Null Female 40 1.51 Significant hypothesis Total 60

\*Significant p-value  $\leq 0.05$

Entries in table 6 show that with respect to academic performance, the group mean for male is 1.56 while the group mean for female is 1.51, with a mean difference of 0.05.

Moreover, the computed absolute p-value is 0.376 which is greater than the set p value of 0.05. This result indicates that there is no significant difference on the academic performance of the respondents when they are grouped according to sex. The null hypothesis, therefore, is accepted.

**Relationship of Academic Performance and Qualities of Instructions** Table 7 presents the relationship between the academic performance of the respondents and the qualities of instructions given to them.

Table 7. Relationship Between the Academic Performance of the Respondents and the Qualities of Instructions Given to Them

Variable	r-value	Indication	p-value	Indication	Decision
Academic	-.035	weak negative	.793	Relationship is	Accept
Qualities of hypothesis				performance correlation	not significant
Instructions Given				null	

Qualities of hypothesis Instructions Given

\*Correlation Coefficient Index

Negative Positive

Perfect	Very Strong	Strong	Moderate	Weak	Zero	Weak
Moderate	Strong	Very Strong	Perfect	-.1	-.75	-.5
				-.3	-.1	0.0
				.1	.3	.5
				.75	1	

Significant p-value  $\leq 0.05$

Entries in table 7 show that the computed r-value for the variable academic performance in relation to the variable Qualities of instruction is -.035. This figure indicates that there is weak negative correlation between the two variables. Moreover, the computed absolute p-value with respect to the relationship of academic performance in relation to the variable qualities of instruction are 0.793, which is greater than the set p-value of 0.05. This indicates that the correlation between the variables is not significant.

Table 8 presents the relationship between the academic performance and learning materials.

**Table 8. Relationship between academic performance and learning materials** Variable r-value Indication p-value Indication Decision

Academic	r-value	Indication	p-value	Indication	Decision
0.68	weak negative	.606	Relationship is	Accept	
			performance correlation	not significant	null
			Characteristics		
			hypothesis of learning		
			materials		

materials

\*Correlation Coefficient Index

Negative Positive

Perfect	Very Strong	Strong	Moderate	Weak	Zero	Weak
Moderate	Strong	Very Strong	Perfect	-.1	-.75	-.5
				-.3	-.1	0.0
				.1	.3	.5
				.75	1	

Significant p-value  $\leq 0.05$  Entries in table 8 show that the computed r-value for the variable academic performance in relation to the variable learning materials is 0.68. This figure indicates that there is zero to weak correlation between the two variables. Moreover, the computed absolute p-value with respect to the relationship of academic performance in relation to the learning materials is 0.606, which is greater than the set p-value of 0.05. This indicates that the correlation between the variables is not significant.

*Relationship Between Academic Performance and Features of Schoology*

The relationship between the academic performance of the respondents and the features of the Schoology platform utilized by them during the first semester of academic year 2020-2021 is shown in Table 9. Table 9. Relationship Between Academic Performance of Respondents and the Features of Schoology

Variable	r-value	Indication	p-value	Indication	Decision
Academic	-.082	weak negative	.532	Relationship is	Accept
Features of hypothesis				performance correlation	not significant
Good Utilization				null	

Features of hypothesis Good Utilization

of Schoology \*Correlation Coefficient Index

Negative Positive

Perfect	Very Strong	Strong	Moderate	Weak	Zero	Weak
Moderate	Strong	Very Strong	Perfect	-.1	-.75	-.5
				-.3	-.1	0.0
				.1	.3	.5
				.75	1	

Significant p-value  $\leq 0.05$

Entries in table 9 show that the computed r-value for the variable academic performance in relation to the variable features of Schoology Utilized is -0.82. This figure indicates that there is a weak negative correlation between the two variables. Moreover, the computed absolute p-value with respect to the relationship of academic performance in relation to the features of Schoology utilized is 0.532, which is greater than the set p-value 0.05. This indicates that the correlation between the two variables is not significant. The null hypothesis, therefore, is accepted.

## V. DISCUSSIONS

### *Personal Profile of the Respondents*

Results revealed that the greater number of respondents were females and with a considerable number of males from the first year Education students of Notre Dame of Midsayap College during the first semester of the academic year 2020-2021.

### *General Point Average of the Respondents*

Results show that the highest general point average of respondents came belongs to the GPA of less than 1.00 but greater than or equal to 1.50 and can be classified as Very Good students and with a considerable general point average of less than 1.50 but greater than or equal to 2.00 and can be classified as good students. However, there was no equivalent GPA reflected on the other bracket of the GPA in the figure. The overall GPA was Good based on the figures reflected in table 2.

This finding supports the theory of Online Collaborative Learning (OCL) proposed by Linda Harasim that the internet is used as a means to reshape formal, non-formal, and informal education for the knowledge age (Harasim, 2012).

### *Qualities of Instructions for Online Learning*

#### *Substantive Aspect*

Results show that the respondents Agree that the specified items were qualities of substantive instruction given to them during the first semester of the academic year 2020- 2021 using the Schoology platform. This means that this aspect of instruction has good quality. Moreover, they signified their higher agreement to the items “*The instructions were relevant to the assigned activities/tasks*” and “*The instructions were aligned with the objectives of a particular topic.*” This implies that the instructions were applicable to activities/tasks assigned to students, such as making reflections, answering quizzes and exams, reporting, and role-playing. This further implies that the instructions were related to the aims and purposes of the particular topics. Students can define terms, explain theories, apply specific skills, evaluate values, differentiate concepts, and create new ideas. This finding supports the study of Rouet et al. (2018), which stated that instructions signal the importance of the processing of tasks and how these would guide the strategic decisions students undertake to use a set of articles to solve a specific goal.

#### *Formal Aspect*

Results show that the respondents Agree that the specified items were qualities of the formal aspect of instruction given to them during the first semester of the academic year 2020-2021 using the Schoology platform. This means that this aspect of instruction has good quality. Moreover, they signified their higher agreement to the items “*The instructions appeared very clearly in my device*” and “*The instructions were readily accessible in my device.*” This implies that the instructions were very visible on their device. This further implies that the instructions were readily available on their device. This finding supports the study of Ryfdnet (2007), which stated that formal instruction

contributes directly or indirectly to their internalization of these different knowledge types and, in so doing, enables the classroom learner to perform a broader range of linguistic tasks.

#### *Procedural Aspect*

Results show that the respondents Agree that the specified items were qualities of the procedural aspect of instruction given to them during the first semester of the academic year 2020-2021 using the Schoology platform. This means that this aspect of instruction has good quality. Moreover, they signified their higher agreement to the items “*The instructions contain procedures that were easy to follow*” and “*The instructions were timely given.*” This implies that the instructions include processes that were easy to follow for them. This further implies that the instructions were well-timed and delivered to them by their teachers. This finding supports the study of Catrambone (2017), which stated that procedural instructions describe how to complete tasks in a stepwise manner, principles describe rules governing tasks. Examples demonstrate how instances of the task are carried out.

### *Characteristics of Learning Materials in Online Learning*

#### *Content*

Results show that the respondents Agree that the specified items were characteristics of content learning materials during the first semester of the Academic year 2020-2021 using the Schoology platform. This means that these characteristics of learning materials have effective learning materials. Moreover, they signified higher agreement to items “*The learning materials contain topics that were related to the course and the learning materials were systematically organized.*” This implies that the learning materials fit the needs of the first-year education students in terms of the area of their specialization. This further implies that the learning materials are thoroughly planned out before distributing to the students. This study is supported by the study of Gagne & Briggs 2016 which says that learning materials would reinforce course content in online learning and it can also add importance in the structure of lesson planning in delivering instruction through Schoology.

#### *Relevance*

Results show that the respondents Agree that the specified item were characteristics of relevant learning materials during the first semester of the Academic year 2020-2021 using the Schoology platform. This means that the characteristics of learning materials have good quality. Moreover, they signified higher agreement to items “*The learning materials used languages that were easy to understand and the learning materials contained concepts that are applicable to real situations.*” This implies that the teacher utilized learning materials with simple terms that were easy to comprehend. This further

implies that ideas that the students learn can be used in the real-life setting. This study is supported by the study of Beth Lewis 2019, which states that using learning materials can greatly assist students in their learning process. Moreover, this is also supported by Guyana 2019, which stated that learning materials could assist teachers in an important professional duty.

### Accessibility

Results show that the respondents Agree that the specified item were characteristics of accessible learning materials during the first semester of the Academic year 2020-2021 using the Schoology platform. This means that the characteristics of learning materials have good quality. Moreover, they signified higher agreement to items *“The learning materials previously uploaded can be reviewed or read again in Schoology and the learning materials could be easily opened in Schoology application and or other websites.”* This implies that the learning materials that are uploaded can be retrieved easily by the students. This further implies that the learning materials are convenient to the students in reviewing their lesson anytime and anywhere. This study is supported by the

study of Beth Lewis 2019, which stated that teaching-learning materials were accessible to all students.

### Features of Schoology Platform

#### Uploading and Notifications

Results show that the respondents Agree that the specified items were the Uploading and Notification features of Schoology they used during the first semester of the academic year 2020-2021 using the Schoology platform. This means that the Uploading and notification feature of Schoology has good quality. This implies that the respondents signified their higher agreement to the items *“I could easily see announcements posted by school administrators”* and *“I could easily open the folders that contain learning materials.”* This means that the features of Schoology utilized can help them be notified with every announcement posted, such as TES Application in Land Bank and Exam schedules. Furthermore, this implies that the features of Schoology are handy, and students can access files without any difficulty.

According to Sicat (2015), Schoology is similar to Facebook in which conversations take place, messages are sent, statuses are updated, and information and other media are shared within a classroom network.

#### Activities and Submissions

Results show that the respondents Agree that the specified items were the Activities and Submission features of Schoology they used during the first semester of the academic year 2020-2021 using the Schoology platform. This means that the activities and submissions feature of Schoology has good quality. This implies that the respondents

signified their higher agreement to the items *“I can post comments/reactions in the comment section”* and *“I could participate in class discussion.”* This finding supports the study of Low (2017), Schoology increased student’s motivation and developed student’s positive attitudes toward learning outside the classroom, increased interaction between teachers and students, increased student’s engagement in learning.

### Monitoring and Evaluation

Results show that the respondents Agree that the specified items were the Monitoring and Evaluation features of Schoology they used during the first semester of the academic year 2020-2021 using the Schoology platform. This means that the monitoring and evaluation feature of Schoology has good quality. This implies that the respondents signified their higher agreement to the items *“I could promptly be updated of the results of my quizzes, assignments and major exams”* and *“I could regularly keep track of my grades and performances.”* This means that the features of Schoology utilized can help inform students immediately with their scores, such as short and long quizzes and significant exams. Additionally, students can check their grades and performances at any time. Schoology can deliver academic information to students, and students can access their grades, attendance list, and teacher feedback on electronically submitted assignments (Sicat, 2015).

#### Difference on the Academic Performance of Respondents When Grouped According to Sex

The result indicates no significant difference in the respondents' academic performance when they are grouped according to sex. Although the respondents had varied academic performance in terms of grade point average, the difference in their sex did not cause such variations. This signifies that there are factors other than the sex of the respondents that had caused such variations. This implies that both the male and the female students had equally performed well in their academic courses during the first semester of the academic year 2020-2021 in online learning using the Schoology platform. Therefore, the null hypothesis is accepted: there is no significant difference in the respondents' academic performance when they are grouped according to sex.

This finding supports the claims of Goni et. al. (2015) that there is no such significant gender difference in a student's academic performance.

#### Relationship Between Academic Performance and Qualities of Instructions

Results disclose a weak negative correlation between the variable academic performance concerning the variable qualities of instructions. This finding implies that the respondents who had relatively high academic performance are also those who signified relatively low agreement in qualities of instruction. Those who had lower academic performance are also those who signified relatively high agreement in qualities of instructions.

Moreover, the results indicate that the correlation between the two variables is not significant. This implies that the first-year college education students who have a high academic performance during the first semester of the academic year 2020-2021 in online learning using the Schoology platform were not necessarily those who signified



low agreement in qualities of instructions. Therefore, the null hypothesis is accepted; that is – there is no significant relationship between academic performance and instruction quality. This contradicts the study of Decristan et al. (2015) that instructional quality is a construct that reflects those features of teacher’s instructional practices well-known to be positively related to student outcomes, both cognitive and effective ones.

#### *Relationship between the Academic Performance and Characteristics of Effective learning materials*

Results disclose a zero to a weak positive correlation between the variable academic performance in relation to the variable characteristics learning materials. This finding implies that the respondents who had relatively high academic performance also signified relatively low agreement in characteristics of learning. Those who had lower academic performance are also those who signified relatively high agreement in characteristics of learning materials.

Moreover, the results indicate that the correlation between the two variables is not significant. This implies that the first-year college education students who have a high academic performance during the first semester of the academic year 2020-2021 in online learning using the Schoology platform were not necessarily those who signified low agreement in qualities of instructions, and vice versa. Therefore, the null hypothesis is accepted: there is no significant relationship between academic performance and characteristics of learning materials.

This contradicts the study of Okendu (2012), who asserted that regular instructional supervision has a significant bearing on students’ academic performance. He also affirmed that the adequate supply of instructional resources has a significant effect on a student's academic performance. This contradicts the study of Stansfield et al. (2004) that identified several educational and social factors and include experienced

learners studying strategically, self-sufficient learners, the flexibility of access to learning materials, learner control over the pace of study, and assessments aimed at developing more excellent learner reflection.

## VI. SUMMARY OF FINDINGS

The respondents came from the first-year Education students of Notre Dame of Midsayap College during the first semester of the academic year 2020-2021. The greater number of respondents were females and with a considerable number of males.

The findings show that the overall General Point Average of the respondents is 1.53. The findings show that the respondents agree that the instructions under substantive, formal, and procedural have good quality for the qualities of instructions. The findings

show that the respondents agree that the learning materials under content, relevance, and accessibility are adequate for

the characteristics of learning materials.

For the features of Schoology, the findings show that the respondents agree that the features of Schoology under uploading and notifications, activities and submissions, and monitoring and evaluation have a good feature.

There is no significant difference between the respondent’s academic performance when grouped according to sex. Likewise, there is no significant difference between the respondent’s academic performance and the qualities of good instruction. Moreover, there is no significant difference between the respondent’s academic performance and effective learning materials. Furthermore, there is no significant difference between the respondent’s academic performance and good features of Schoology.

Additionally, there is a weak negative correlation between the two variables' academic performance in relation to the variable qualities of instruction. Likewise, there is a zero to a weak correlation between the two variables' academic performance in relation to the variable characteristics of learning material. Finally, there is a weak negative correlation between the two variables' academic performance in relation to the variable features of Schoology.

#### *Conclusion*

Based on the research findings, the researchers concluded that the respondents agreed on the effects of online learning on academic performance during the first semester of the academic year 2020-2021. However, there are still aspects or areas of qualities of instructions, learning materials, and features of Schoology that need improvement to cater to all the students' needs for their learning process. To sum it up, the instructions, learning materials, and features of Schoology were sufficient to provide quality education. Although the Covid-19 pandemic has brought changes to the system of education, the Notre Dame of Midsayap College is very flexible in finding an alternative way to bring hope and pursue the dreams of every Notre Damean using the Schoology platform.

#### *Recommendations*

In the light of the findings and conclusion of the study, the following recommendations are given:

##### *A. Policy Recommendations:*

1. The School administrator shall enact a policy that would inform teachers to organize and create their learning materials briefly, concisely, and straightforwardly.

2. In collaboration with the Library, the School administrators must produce hard copies of the learning materials for the students but with compensation.

##### *B. Problem Discovered Recommendations:*

1. The school and the Local Government Unit, and stakeholders shall coordinate
2. for the National Telecommunication to select the best

internet provider to support the students' learning process.

3. The teachers must make their Schoology accounts public and accessible and be attentive to the queries and concerns of the students about their assignments/tasks given.

### C. Future Research Recommendations:

1. The future researchers compare face-to-face learning to online and what are the effects of these to the academic performance of the students.
2. Future researchers should conduct surveys to all colleges to gather their opinions regarding the effects of online learning.

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