



Aprendizaje a distancia en línea en medio de la pandemia COVID-19

Online Distance Learning Amidst the Pandemic COVID-19

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RESUMEN.

El propósito de este documento es determinar el factor que hace que el aprendizaje a distancia en línea sea exitoso durante la pandemia COVID-19 y se centró en descubrir factores para hacer posible el aprendizaje a distancia en línea durante la pandemia. La investigación es de naturaleza fenomenológica y se realizó durante la pandemia COVID-19. Se utilizó un método de encuesta descriptiva para identificar las habilidades tecnológicas, la actitud hacia las características de un maestro / alumno exitoso en línea y el nivel de preparación de los administradores, junto con los beneficios experimentados que se experimentaron en el aprendizaje a distancia en línea. Se empleó análisis correlacional para determinar la relación entre las variables. La actitud hacia el aprendizaje a distancia en línea está fuertemente relacionado con los beneficios experimentados del aprendizaje a distancia en línea por parte de profesores y estudiantes. La preparación de la institución para adaptar el aprendizaje en línea está fuertemente relacionado con los beneficios experimentados de los administradores. El estudio sacó a la luz las experiencias vividas por los encuestados en el aprendizaje a distancia en línea durante COVID-19. Este documento será útil para los administradores escolares y los maestros como base para la formulación de políticas y programas para la implementación del aprendizaje a distancia en línea que se adaptará al entorno de la “nueva normalidad”.

PALABRAS CLAVE.

Aceptación, Implementación, Aprendizaje a distancia en línea, Pandemia, COVID-19.



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ABSTRACT.

The purpose of this paper is to determine the factor that makes online distance learning successful during the pandemic COVID-19 and focused on uncovering factors to make online distance learning possible during the pandemic. The research is phenomenological in nature and was conducted during the pandemic COVID-19. A descriptive-survey method was used to identify the technology skills, attitude towards the characteristics of a successful online teacher/student, and level of readiness for the administrators, together with the experienced benefits that were experienced in online distance learning. Correlational analysis was employed to determine the relationship between the variables. Attitude towards online distance learning is strongly correlated to the experienced benefits of online distance learning by the teachers and students. The readiness of the institution in adapting online learning is strongly correlated to the experienced benefits of the administrators. The study brought to surface the lived experiences of the respondents in online distance learning during COVID-19. This paper will be useful for school administrators and teachers as a basis for policy and program formulation for online distance learning implementation to be crafted to suit in the “new normal” environment.

KEY WORDS.

Acceptance, Implementation, Online Distance Learning, Pandemic, Covid-19.

1. Introduction.

Many educational reformers have long held out hope that computers and other information and computer technologies (ICTs) can play crucial and integral roles in bringing about long-needed changes to education systems (Trucano, 2014). Online learning has a critical place in widening access and participation in education for a diverse range of students, many of whom are from backgrounds that have been historically underrepresented at university (Stone, 2017). The Coronavirus 2019 (COVID-19) pandemic has driven more than 85% of countries around the world to close schools entirely or partially, leaving more than 1.6 billion students out-of-school (as of April 10, 2020) (World Bank, 2020). The COVID-19 is preventing students and staff from meeting face-to-face; hence learning institutions are developing alternative educational delivery methods to move the classroom online (Educause, 2020). Teachers and students were barred from going to school, but learning should not stop. Online learning is the only option right now, but the preparedness of every member of the school community is a concern that requires proper handling. Some educational institutions tried to continue and finish the semester online, but few (if any), are well-equipped to offer online learning for all students at scale quickly (World Bank, 2020). The Philippines, being a third world country, is too way behind the practices of other countries, especially in the utilization of technology. Persuading everyone in the school to go online education is not that easy. It is like putting a mask just to cover the reality of the scenario.

A sudden decision of diverging to online learning to complete students' requirements also brings confusion to students and teachers who are traditionally meeting face to face in the classroom. It is a reality that not all teachers and students are ready for this kind of practice.





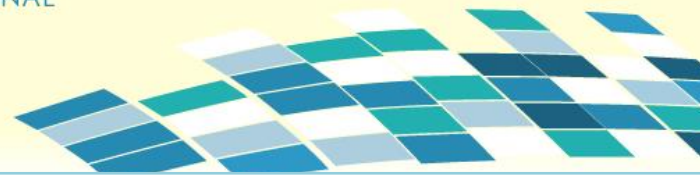
It is believed that online learning opportunities and the use of open educational resources and other technologies can increase educational productivity by accelerating the rate of learning; reducing costs associated with instructional materials or program delivery; and better utilizing teacher time (US Department of Education, 2020). But, teaching online often seems daunting to those with no previous experience; however, individuals who are already teaching in a face-to-face format have the most important skills they will need to be successful online educators: subject-matter expertise, the abilities to plan and manage a course, and the expertise to support and mentor students. Students' capability to engage in online learning should always be considered. The nature of the students who are growing up with the emerging technologies at their fingertips is described as Generation Z (Fell, 2020). As Santos (2017) found out in her study, the use of technology as a tool for learning is a very evident skill for the students. Many online students begin their programs with limited knowledge of computers, but quickly find themselves immersed in the use of technology for learning and communication (OEDb, 2020). Mercado (2008) explains the technology skills of students and teachers as basic computer skills, online skills and computer application literacy.

The previous review of the literature states that technology access and skills play an essential role in online learning. Still, there is another factor that could affect the result of those studies, which is attitude. Attitude towards a successful online user in online learning counts a lot in performing tasks. In the study of Bovernann et al., (2018), attitudes towards online and computer games showed a significant correlation with study-satisfaction in the dimension of coping. According to Omar et al., (2012), learners' attitude pertaining to the online learning environment is influential to students' engagement in e-mentoring. Further, learners who are able to control their own learning and utilize various assisted functions in online learning engage more with their mentor. Mercado (2008) measured student's attitude towards e-Learning along the following dimensions: study habits, abilities, motivation and their time management behavior. Thus, learners need to be valued and taking time out to review the issues discussed above is just the beginning of the valuing process and success of the e-Learning initiative. Mercado also defined teachers' attitude as to reflect on their teaching style and strategies, circumstances, abilities, motivation and time behavior management. Hence, by assessing themselves along the statements, the teachers will get some idea of their predisposition and temperament for online teaching experience.

Teachers and students who are used to the traditional mode (face-to-face) of learning find a hard time to appreciate the benefits of it. The literature continues to report that traditional students (age 18-24) believe they learn more in face-to-face courses but choose online courses for various personal reasons (Stern, 2016). These personal reasons could be learning more efficient, personalized, and accessible to learners when they need it (Baht, 2020). Further today, the benefits of eLearning are recognized by many companies, universities, industry leaders, employees, and students. Online courses are a convenient, cheaper, and engaging way to learn compared to traditional courses.

Most governments around the world have temporarily closed educational institutions in an attempt to contain the spread of the COVID-19 pandemic (UNESCO, 2020). This does not necessarily mean that schools are not delivering learning; many schools are providing learning for all or some of their students through online and virtual approaches (ISC Research, 2020).





This study aimed to determine the factors that can make online distance learning possible during COVID-19. The relationship of technology skills and attitude towards the characteristics of a successful online student/teacher to their experienced benefits of using online distance learning were defined. The institutional readiness and the experienced benefits of online distance learning, as responded by the administrators of different colleges, were correlated as well. The study also brought surface the lived experiences of the respondents in online distance learning during COVID-19.

2. Materials and Methods.

The study was Phenomenological in nature. The community, through this study, will understand the people's lived experiences during the pandemic COVID-19. It utilized a mixed-method approach to research. The descriptive-survey method was used to identify the technology skills, attitude towards the characteristics of a successful online teacher/student, and level of readiness for the administrators, together with the benefits that were experienced in online distance learning. A correlational analysis was employed to determine the relationship between the variables. This type of analysis uncovered the factors that made online distance learning possible during COVID-19. Online interviews were conducted to describe the experiences of the stakeholders on the abrupt implementation of online distance learning.

The respondents of the study were 1,514 students, 78 teachers, and 14 administrators from the different colleges of a university in Bulacan. The collection of data happened in the midst of Enhanced Community Quarantine (ECQ) in the Province of Bulacan during April 2020.

The instrument of the study in the form of the questionnaire has five parts: (1) technology skills; (2) attitude towards the characteristics of a successful online teacher/student; (3) and level of readiness for the administrators; (4) experienced benefits of online distance learning; (5) Open-ended questions, to be answered by concerned stakeholder respectively.

The first part of the questionnaire was adapted and modified to suit the objective of the study. It is based on the study of Mercado (2008) entitled "Readiness Assessment Tool for an eLearning Environment Implementation". The questionnaire has constructs that the researchers used to determine the acceptance of online distance learning during the pandemic COVID-19. A researcher-made questionnaire was formulated based on related literature to identify the experienced benefits of online distance learning to the stakeholders. The three experts from the field validated these questionnaires. Cronbach's alpha was used in all questionnaires to measure the internal consistency of all the items. Having an average value of 0.849 for the questionnaire for teachers, 0.854 for students, and 0.830 for the administrators, suggesting that the items have relatively high internal consistency.

The second part of the questionnaire consists of guide questions which were formulated to ascertain the lived experiences of the stakeholders in the use of online distance learning. Codes were taken and themes were analyzed to find out the commonality of stakeholders experiences.





3. Results.

Part I. Quantitative Result of the Study.

The study analyzed the result from the survey completed by the teachers and students on their technology skills, attitude towards online distance learning, and their experienced benefits of online distance learning. The administrators answered a different questionnaire measuring the level of readiness of the institution and the experienced benefits of online distance learning. The questions in the survey led to identifying the factors that could make online distance learning possible during the pandemic COVID-19.

Table 1. Students' Correlational Analysis.

		TechSkills	Attitude	Benefits
TechSkills	Pearson Correlation	1	.576**	.495**
	Sig. (2-tailed)		.000	.000
	N	1514	1514	1514
Attitude	Pearson Correlation	.576**	1	.620**
	Sig. (2-tailed)	.000		.000
	N	1514	1514	1514
Benefits	Pearson Correlation	.495**	.620**	1
	Sig. (2-tailed)	.000	.000	
	N	1514	1514	1514

** . Correlation is significant at the 0.01 level (2-tailed).

Table 1 displays the correlational analysis of technology skills, attitude to online distance learning of the students and experienced benefits of online distance learning to them. Having a Pearson-r value of 0.620, it reveals that there is a positive strong correlation between the attitude of students towards online distance learning and their experienced benefits. It means that the attitude of the students toward a successful online distance learning is directly related to their experienced benefits of online distance learning. It leads further to interpret that when students have a favorable attitude in doing their online task, they also regard the benefits of online distance learning and vice-versa. The result of the current study is similar to study of Perrera, et al. (2017), stating that overall, students in the fully online program have more positive views about science coming into the course, and they shift further toward more favorable views of science after taking the course. They also report greater benefits from taking the course than their i-course counterparts. Another study proved that attitude has a significant correlation to other factors in the study of Bovermann *et al.* 2018), which mentioned that attitudes towards online and computer games showed a significant correlation with study-





satisfaction in the dimension of coping. The students can only realize the benefits of online distance learning if they have a positive attitude towards it.

Table 2. Teachers' Correlational Analysis.

		TechSkills	Attitude	Benefits
TechSkills	Pearson Correlation	1	.460**	.545**
	Sig. (2-tailed)		.000	.000
	N	78	78	78
Attitude	Pearson Correlation	.460**	1	.622**
	Sig. (2-tailed)	.000		.000
	N	78	78	78
Benefits	Pearson Correlation	.545**	.622**	1
	Sig. (2-tailed)	.000	.000	
	N	78	78	78

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 shows the correlation of the variables technology skills, attitude to online distance learning, and its experienced benefits. Comparing the values of Pearson r, all of them are significantly correlated but it is the attitude and experienced benefits of online distance learning (0.622) which has the highest (strong) correlation. The attitude towards a successful online teacher is strongly correlated to the experienced benefits of online distance learning, meaning that if teachers have a favorable response on the task in online distance learning they experience and appreciate its benefits. In the study of (Guillén-Gámez & Mayorga-Fernández, 2020), it can be seen that university teaching staff have an average level of self-perception regarding attitudes, which evidences the need to motivate university teachers to increase their attitude towards ICT use. This is because having an average attitude of use conditions the teaching position towards the integration of ICT in the teaching-learning processes, and therefore hinders university innovation. Another study shows the role of attitude in online distance learning in the findings of Kao and Tsai (2009). The result of this study expressed that teachers' behavioral belief about web-based learning was the most significant positive predictor for the usefulness, ease of use, affection and behavior of web-based professional development. The belief for expecting positive outcomes of web-based learning is very critical for the favorable attitudes toward web-based professional development. The attitude of teachers to online distance learning counts a lot to make a positive response to the call of this time.

Institutional Readiness and Experienced Benefit of Online Distance Learning.

Institutional readiness of the University was measured through the observation and experiences of the administrators. The questions were formulated to measure if the readiness of the University in online distance learning is being experienced by the administrators in their respective colleges. A mean value of 3.10, with the verbal interpretation of 'somewhat true to





my institution’ was the overall rating based on the survey. This value signifies that the University never fails to offer opportunities for training to use technology in the classroom. The Training and Development Unit consistently provide training such as “Level Up: Empowering Faculty for 21st Century Education using Educational Technology Tools for the Digital Classrooms,” “Documents, Records, and Digital Information Management,” Training-Workshop on “Advancing Faculty Members’ Knowledge on the use of Digital Resources and Services,” to name a few. Other seminar-training workshops sponsored by other organizations outside the University were also made available to staff. Though faculty were not required to attend the training, the willingness of those who attended showed that they want to enhance their skills and be ready on using technology for teaching and learning.

The questions on the benefits of online distance learning were formulated to measure if the benefits of online distance learning is experienced by the administrators in their own colleges. The benefits of online distance learning are rated by the administrators with a mean of 2.97 (somewhat true to my institution). The University is not yet offering a structured online distance learning; the faculty are using online distance learning in their own prerogatives as an extension of their classroom. There are still some teachers who are traditional and have never experienced bringing their students online. The benefits of online distance learning will not be fully realized unless there will be a policy and structured program on its implementation. Now, the University in the coming semesters will implement flexible learning wherein teachers and students will be given the freedom to design their classroom in “The New Normal.” Thus, during COVID-19 and any future need for intermittent school closures, digital learning has the potential both to avoid widening learning inequalities and, paradoxically, to exacerbate them (Moreno & Gortazar, 2020).

Table 3. Administrators’ Correlational Analysis.

		InstiReadine SS	Benefits
InstiReadines	Pearson	1	.791**
	Correlation		
	Sig. (2-tailed)		.001
Benefits	N	14	14
	Pearson	.791**	1
	Correlation		
	Sig. (2-tailed)	.001	
	N	14	14

** . Correlation is significant at the 0.01 level (2-tailed).





The correlation between institutional readiness and experienced benefits of online distance learning is shown in Table 3. The value of Pearson-r (0.791) indicates a strong relationship between the two variables. The administrators therefore based on this study strongly believe that the readiness of the University in terms of commitment, policies, instructional, financial, human, and technical, directly and strongly affects the benefits of online distance learning. As to how the respondents in the study of Gādé and Manjari (2018) perceived online distance learning as an effective pathway for promoting distance education for educating the masses in India. This time of uncertainty because of the pandemic COVID-19, schools are turning to flexible learning, and one of these is online distance learning. There is a need for change of mindset especially for administrators that ICT infrastructure is not the only indicator for e-learning adoption, but how ready the learners and teachers are able to use them in an enabling environment (Doculan, 2014). Saekwo and Samson (2011) conclude that for the business dimension, delivering a clear aim and direction of e-learning adoption and providing continuous support from the executive level of the university is crucial.

Part II. Qualitative Result of the Study.

Students' and Parents' lived experiences on online distance learning during the pandemic COVID-19

During the first week of the Enhanced Community Quarantine (ECQ) in the Philippines, HEIs implemented the online delivery mode of instructions to the students. But it was only good for less than two weeks as it received backlash from students citing the lack of means among the majority of learners (Bagayas, 2020). Among the concerns of the students is the lack of reliable internet connection and the lack of necessary equipment like laptops, smartphones. Below is a sample response from 2 students:

**SR 4 – “If you have slow internet connection or worse no internet connection at home, online distance learning just won't help the student at all.”*

SR 5 – “Internet, lack of complete communication during discussion and it will be difficult to study online for us students.”

**SR- Student respondent*

Philippines is the top internet user in the world spending at least 10 hours of screen time every day (Kemp, 2019); and also ranked 13th among the countries with slowest internet network transmission in the world (Pascual, 2019). This may also reflect on the study of Trines (2018) on the rise of online education in Sub-Saharan Africa and South Asia which share the same experience in the Philippines as among the developing countries in the world. He reiterated that online learning is still constrained by technological infrastructure barriers called digital divide. This was supported by the study of Andersson and Grönlund (2009) when they found out that there are some “technological challenges” in online distance learning to the developing countries: access, cost of technology, and low user charge.





The students' answers are somehow the same as their parents. Though some are willing to support online distance learning for their children. Below are some of the common answers by the parents:

**P2 – “No, because not all students have internet access.”*

P3 – “Not all, what will happen to the students who do not have internet connection?”

P5 – “No, because I am also concerned with the students who have no internet connection at home. And because of this ECQ, they can't go to internet cafes to participate in online distance learning.”

**P – Parent respondent*

It may be safe to infer that parents are supportive of online distance learning for their children, but they are much concerned that not all are having reliable internet connection and necessary equipment needed for the implementation of online distance learning. Parent's role in implementing online distance learning is crucial; their cooperation with the program will actually be a lot of help. As a support, a study by Sapungan and Sapungan (2014) claims that the “strong collaboration of parents with school authorities can create a ‘tsunami of improvements.’” If the students are sending negative feedback on online distance learning, considerations should be made to encourage the parents first and let them understand the need for its implementation.

Administrators and teachers lived experiences during the pandemic COVID-19.

Many of the teacher-respondents of this paper use Facebook Page of the section in posting their lessons, which can be browsed at the convenient time of the students. Class representatives were informed via messenger prior to the posting of materials. One of the respondents reiterated that he uses messengers for urgent reminders and clarification of the lesson. One of them suggested that in this time of the pandemic, only lessons using the online platform is the most effective; but teachers should take into consideration that not all students have the capacity to access websites outside Facebook.

From the responses, Facebook and Messenger are the most common classrooms-distance platform that teachers and students could access. It has the potential to facilitate learning in the classroom. In the study of Shaw (2015), she disclosed that there are a wide number of potential benefits in using Facebook as an educational tool. There are many other similar technologies, such as Google+, MySpace, LinkedIn, and Twitter, but Facebook approaches the high number of users. In March 2014, 82% of Internet users worldwide had Facebook accounts. Because of its wide usage, Facebook provides a readily accessible platform that can be adapted for educational purposes, given thoughtful planning and curricular design. E-Learning exploits interactive technologies and communication systems to improve the learning experience. It cannot be done if there is an existing problem in using any online platform. Teacher respondents admitted that it is challenging for them to transport lessons and retrieve them because of poor internet connection. Many of their students' sentiments are the same as the teachers.





Common answers of the teacher respondents are:

TR1,3,10-14,22-29- "Not all teachers have internet access and computer."

TR5,9,15- "While transporting the lessons to the students, I encountered problems like a few were not able to download my lectures because of poor internet connection. Most of them use data."

TR 11, 30- "Very few students have stable internet connections. Most cellphones are not internet capable if so there is a problem for cellphone loads."

When teacher respondents were asked if IT platforms, software/apps are effective in delivering online distance learning, most of their answers fall to "Somehow". Online distance learning is somehow useful in facilitating learning amidst COVID 19. It makes them digitally competent.

**TR9 -" It is good enough if the students have access or if they don't have any problem in their wifi connection."*

TR1- "Online distance learning is less time consuming, less effort (no need to transfer from one classroom to another)."

TR3,6- "Learning would take place in the absence of an actual classroom setting if there is a well-planned online distance learning, and it would minimize the bulk of materials being produced by teachers when classes resume."

**TR- Teacher Respondents*

Among this positive feedback of teacher respondents, there are formidable challenges that remain on the part of the students - the principle of equity. As mentioned by many of them, "How can those with less in life be placed in equal footing with those who are technologically privileged?" The less fortunate students will be very obvious in this time of Pandemic brought by COVID-19. As always shown in the social media posts of student-netizens, they will just reserve their money for food and other family needs rather than using it for personal internet-related expenses. Moreover, online distance learning has failed to improve affordability, frequently costs more than in-person alternatives.

In the administrators' point of view, many of them encouraged teachers and students to use any platform they deem accessible to all and less complicated since they don't have the necessary training for it. Deans of different colleges suggested Google Classroom, Facebook and Messenger while the university is in the process of developing its own portal. They believe that online distance learning is useful while the world is experiencing pandemic and on Enhanced Community Quarantine (ECQ) in some places, wherein everybody could work from home to avoid exposure to the virus. However, not all students can comply with online classes since their resources are also limited.





**AR2,3 - "Classes could still happen even without face to face (F2F) meeting with the class, but the main issue here is everybody's access to the internet; students even teachers find it hard to communicate through any online platform."*

AR5 - "Favorable to everybody, and classes can be held in the comfort of our homes through the downside is not that warm, interaction is limited."

**AR- Administrators' Respondent*

The responses of deans and teachers verified the same with the result of Pew Research Center study written by Kokemuller (2016) when he stated that a common disadvantage of online education is limited social interaction. While online students often engage peers in online discussions and interact with teachers via e-mail or any online platform, this doesn't replicate the face-to-face experiences in a traditional classroom. The informal social interactions with peers before and after classes help instill a sense of community and belonging. As mentioned by one respondent that "No online platform could replace an effective teacher inside the classroom."

4. Discussion.

Online distance learning in this time of uncertainty brought by the pandemic COVID-19 brings apprehensions to the stakeholders of the University. The sudden closure of school did not stop education at all, which made schools and teachers themselves decide to use technology to reach out to their students and possibly continue learning. But, the sudden implementation of online distance learning was deemed inappropriate and readiness is such a huge question. Results of this study revealed that teachers and students have basic technology skills in online distance learning through the use of Facebook and Messenger; they can generate knowledge even without physical interaction and at their most convenient time. The attitude of teachers and students to become successful online students/teachers is hindered by other problems that they are facing at this time. Gadgets or devices useful for online distance learning and unreliable internet access and/or technology struggle in joining digital learning to do school tasks are the prevailing challenges of the teachers and students. Though the benefits of online distance learning are proven effective based on related literature, this can only be realized if the teachers and students have a positive attitude towards online distance learning. Thus, attitude towards online distance learning is strongly correlated to the experienced benefits of online distance learning by the teachers and students. The administrators, as representative of the institution, believed that institutional readiness is very significant in the realization of the benefits of online distance learning. Hence, in this study, the significant factor that can make online distance learning possible is the attitude towards the character of a successful online teacher or student.

Online distance learning is a symbol of opportunity and challenge to everyone in the academe especially those who just suddenly shift to this kind of approach. The experiences can be considered as opportunities for everyone to see the flexibility of learning that could fit to the unique needs of the stakeholders which still meet the goal of education at the end. It is a fact that the experience in online distance learning is bringing apprehensions to everyone, but the





challenges encountered on its implementation could bring to a realization that there are still so much to learn and so much to improve that makes stakeholders keep moving and keep learning. Even though online platforms can do something in helping teachers and students to go online with their learning, still it will not replace the face to face meeting and discussion as perceived by the different stakeholders. The sense of belongingness can be felt during the traditional classroom set-up. Therefore, social interaction enhance teaching and learning process.

Furthermore, this study could be a basis for policy and program formulation for online distance learning implementation. The research uncovered factors to make online distance learning possible during the pandemic. Once the curve is flattened, people cannot just go back to normal; everyone shall face what they call “new normal” which will create new situations wherein policies and programs are needed for implementation. This study recommends support to be planned and implemented for students and teachers, and policy and structured program for online distance learning implementation to be crafted to suit in the “new normal” environment.

The limitation of this study is the limited access to all students, teachers, and administrators. Not all stakeholders were given a chance to be part of this study; only those who have an internet connection during the collection of data.

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