

Students' Perception on Online Learning: Synchronous vs. Asynchronous

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Abstract: *The main objective of the research is to examine the different perceptions of students from both public and private schools in Marilao, Bulacan about this new normal learning environment. The main data gathering tool used in the study was sampling examinations to acquire the responses of the respondents. The participants were administered a questionnaire consisting of the different ways of participations they tried in terms of asynchronous and synchronous learning, technical problems in internet connections, and issues or problems they encountered in this new learning. The collected data were compiled to determine the responses between the students. The contribution of these researchers throughout the study was to help the other students to plan their participation effective in this e-learning. In the study, the students also explained how they used their experiences as their motivation to continue studying even if the new normal learning is quite off. Throughout the discussion, students showed how they think to use educational tools, the issues they have encountered, and their ways to fix the technical difficulties. It was found at the end of the research that the online learning students' perception were able to understand if other students help the other students to acknowledge their rights to find better learning tactics. Additionally, the perceptions of other students were different so there are many strategies to use in order to conduct their own ways in participating in the new normal learning system. Thus, this research conducted the different perception of students in the new normal learning.*

Keywords—online learning, asynchronous, synchronous learning, students' perceptions, qualitative research design

1. INTRODUCTION

Existing and emerging E-Learning are having enormous, instantaneous, and innovative transformations on education systems (Archer Garrison & Anderson, 1999); nowhere is the cause or impact felt more than on the educators and instructors who teach and work hard to provide the learnings of their students. Specifically, education has moved into a higher level, a third decade of intellectual change in how courses and programs are developed and distinguished. Online learning has radically changed the landscape of modern education. In our generation, many possibilities occurred, we're learning in a new and more fluid environment, one ripe with opportunities for the purpose of students of every kind.

With the rise of this Pandemic, it currently affects various aspects of our lives, involving education. Online learning has been a crucial topic for/in discussing education, especially during this time of Crisis. Students are suffering in different kinds of problems and issues. Classes in schools were suspended considering the fact that face-to-face classes are currently forbidden to prevent the virus from spreading. With that in mind, students are given an option to learn online: synchronous or asynchronous. A bunch of problems arose like having an unstable connection for synchronous online learning, problems in transportation or distribution of modules for asynchronous, and alike.

Nevertheless, there are a lot of online resources offered to give all students the opportunity to learn at any time and anywhere. These online resources do not only allow students

to learn, but also make the students more flexible and somehow proficient.

The focus of this research is to recognize students' perceptions with respect to synchronous and asynchronous e-learning assets at lesser to higher education levels. It is moreover focused to recognize the contrast within the utilize of online assets by public and private school students at higher education level, difference in perceptions of learner's in several programs about the use of synchronous and asynchronous online-learning assets at every education level. It also highlighted the students' perception about the need of teachers' presence during the use of online-learning assets. Researchers moreover recognized the students' opinions about the arrangement of e-learning assets in educational settings. Students' sees almost the viability of instruction by educators as compared to e-learning assets were also examined. Students' perceptions regarding effectiveness of book resources and e-learning resources for learning were also recognized. (SP about Asynchronous and Synchronous Resources at HEL).

The benefits of this study is to give importance to the perceptions of not only students that give their preeminent to study assiduously despite having some issues through online learning along with the educators who spend a lot of time making effective strategies for giving online instructions. But also the efforts that have been made to humanize the learning process to the best extent possible.

2. RELATED WORKS

According to the study of Shivangi Dhawan, fast advancements in technologies have made distance training simple (McBrien et al., 2009). "The majority of the terms (internet learning, open learning, online learning, PC interceded learning, mixed learning, m-learning, for ex.) share for all intents and purpose the capacity to utilize a PC associated with an organization, that offers the likelihood to gain from anyplace, whenever, in any cadence, means" (Cojocariu et al., 2014). Online learning can be named as an instrument that is listed in the "6 Journal of Educational Technology Systems 49(1)" makes the educating learning measure more understudy focused, more creative, also, significantly more adaptable. Online or E-learning is characterized as "learning experiences in synchronous or asynchronous environments using different devices (e.g., mobile phones, laptops, etc.) with internet access. In these environments, students can be anywhere (independent) to learn and interact with instructors and other students" (Singh and Thurman, 2019).

The synchronous learning structure is organized as in understudies go to live talks, there are constant communications among teachers and students, and there is a chance of moment input, though offbeat learning conditions are not appropriately organized. In such a learning climate, learning content isn't accessible in the type of live talks or classes; it is accessible at various learning frameworks and gatherings. Instant feedback and quick reaction are impractical under such an environment (Littlefield, 2018). Synchronous learning can give a ton of openings for social communication (McBrien et al., 2009). In the midst of this lethal infection spread such online stages are required where (a) video conferencing with at any rate 40 to 50 understudies is conceivable, (b) conversations with understudies should be possible to keep classes natural, (c) web associations are acceptable, (d) addresses are available in cell phones likewise and not simply PCs, (e) possibility of watching already recorded lectures, and (f) instant feedback from students can be achieved and assignments can be taken (Basilaia et al., 2020).

According to The Synchronous Learning vs. Asynchronous Learning in Online Education (TBS STAFF FEB 18, 2021), synchronous learning is for you if you like active discussions, immediate feedback, and interactions with people. Dynamic exploration is open in this type of learning that improves topics, ideas, and concepts.

Hence, synchronous learning is for the students who are into the dynamic way of learning- collaborative. It is also for the social butterflies and those who love engaging with classmates or teachers/professors. Asynchronous on the other hand, the materials are in your hands so does conveniently in completion. One of the best features in asynchronous learning is that you learn at your own pace, reading and reviewing materials are unlimited (except for the fact that there is still a deadline). You can power through materials and units that come easily to you if you're one of the quick learners. If the students prefer learning at their own pace and style, asynchronous learning is for them. This way of learning is

perfect for fast learners, and those who love working in a self-guided environment.

3. STATEMENT OF THE PROBLEM

The main objective of this study was to investigate the challenges and coping mechanisms of asynchronous and synchronous. Specifically, the researchers seek answers to the following questions:

- 1.)How do students participate in synchronous and asynchronous classes?
- 2.)What are the issues or problems that students are experiencing in this new normal learning?
- 3.)In synchronous method, how can they fix technical difficulties in terms of Wi-Fi connectivity and accessibility?

4. METHODOLOGY

The procedures we use and the findings that the researcher team discovered have been scrutinized by answering questions of how the studies experienced the e-learning system and we used a qualitative research analysis. The increase of reports in this research will be used to navigate or sort out the other specific categories of this topic. Additionally, this research is all about how the students make use their perception as their motivation to balance their time, efforts, and make their learnings valuable

The research technique that we conduct is a purposive formal interview and survey with snowball sampling method as the preferred sampling method to figure out the knowledge and relevancy of the chosen topic. This method focuses on the the purposive formal interview in a judgement subjective or selective sampling technique that relies on a researcher's judgement when choosing members of population to participate in the study based on the researcher's criteria of interviewees and by giving surveys.

The data collected in this study were collected from both public and private schools in the municipality of Marilao, Bulacan, Philippines. We used to ponder sampling examinations to pick the respondents. In qualitative research, deliberate sampling is the system used to characterize and choose data from the chosen students' response.

The inquiries distinguish the problems of students' perception about e - learning. The researchers explained the data gathered instead of analyzing it. The explication process referred to has five phases or steps: (1) bracketing and phenomenological reduction, (2) delineating units of meaning, (3) clustering of units of meaning to form themes, (4) summarizing each interview, and (5) extracting general and unique themes from

all the interviews and making a composite summary in the form of a grounded theoretical framework.

The researchers used interviews and observation in data gathering. This is to get the information requirements for

this study. The researchers interviewed the respondents. The investigators also gave the participants a letter of request. This letter signifies their agreement with the interview.

The study will utilize interview guide questions:

- 1.) How do you participate in synchronous and asynchronous classes?
- 2.) What are the issues or problems that you are experiencing in this new normal learning?
- 3.) In synchronous method, how can you fix technical difficulties in terms of Wi-Fi connectivity and accessibility?

5. RESULTS AND DISCUSSIONS

This study aimed to find out the perspective of each student with the new normal learning: Synchronous vs. Asynchronous in both public and private schools. The study hereby found the following questions which answers the statement of the problem specified in the previous discussion. Note that in the discussion, we marked our participants in the following pattern: students from 1 to 5. This is to protect their privacy or anonymity throughout the study.

A. Participation of Students in Synchronous and Asynchronous Classes.

A.1 The student's participation in Synchronous learning using educational apps.

The response of the participants revolves on how they participate in this New Normal Learning. However, there are students who explained about their participation in both synchronous and asynchronous classes. Student 1 indicated that, "When it's synchronous, I just join in Google meet or Zoom meetings while when it's asynchronous, I just do the activities that my professor has given." Followed by Student 2 states that, "Through a fixed website given by our university which is the Canvas that provides both asynchronous and synchronous participation."

A.2 Ways of responding with their instructors.

Furthermore, some students acknowledge the Asynchronous Classes. They elaborated their goals when responding to their instructors, like Student 3 explained that, "By simply listen to our professors /teachers in that way I can participate by learning what are the lessons they are teaching so that if there's a good chance that my teachers ask a further questions, I can answer it." Same with Student 4 saying, "By answering or doing the tasks assigned by our teachers and responding to the questions posted or asked by our teachers during asynchronous classes."

A.3 Knowledge improvements

Last but not the least, there is a student who gave an explanation of how they participate, and how their participation improved their knowledge like what Student 5 said. "As a student, I communicate and listen to understand and improve my knowledge as I cope with the new learning system."

In Davidson's study, their supportive data suggests that students liked both modes of discussion when they were surveyed. In terms of the (asynchronous) discussions, the majority of the students gave positive responses to the statement, "I like threaded discussions." Some students commented positively on the convenience factor associated with asynchronous discussions. The majority of the students also were positive about the statement "I like small group chats" (50 percent agree and 7 percent strongly agree). Their study focused more on threaded discussions and in some of the respondents' comments, they stated that the chat discussions were sometimes difficult to follow, but still enjoyed them. Furthermore, students like them, which do not support the assumptions by developers of Web-based instruction. When sharing their computer experience level, most participants stated that they had experience using mobile gadgets, although some stated that they had little experience using the Internet at the beginning of the course. However, by the end of the course, they indicated that their on-line skills had increased. Because we [Tanner] reviewed discussions of the last weeks of the course, we do not believe that computer skills were a factor in their study.

B. Issues encountered by students regarding New Normal Learning.

B.1 Internet Connection Problems,

The answers of the participants in the previous question about New Normal Learning have affected students' life from private and public schools. Since they are not used to this new normal, they experienced some difficulties or issues like the unstable Internet or Wi-fi connection. Here in the Philippines, we do not have the fastest internet, so problems with W-ifi connection are expected. Student 1 said, "I always experience losing internet connection and having technical Problems, Network issues, and some noise in the midst of online discussion." Student 2 had also the same issue but it was detailed and spoke out the effects of unstable connections, "An acting internet connection is one major hindrance that everyone faces in this prime period of pandemic and a lot of misunderstanding because of different levels of comprehension."

B.2 Students having a hard time in the New Normal Learning.

These learners from both public and private sectors are obviously having a hard time. Student 3 added that, "Honestly speaking as a student, this New Normal Learning

is a difficult one for us. Since we have to learn by our own knowledge and depend on our module so that we can answer it, but most of the time as a student, we still need professional help by understanding what those studies meant. So as far as my experience this would be my difficulties in this new normal learning.” A student from a public school which is Student 4 indicated that, “As one of the students in public school, the school is overpopulated to even have daily zoom classes to help and teach them with what they should or should not do.” They also had difficulties on how they can receive such instructions from their teachers. Lastly, “It's harder to learn. I always get unmotivated. Sometimes, our internet connection is getting slower and disappearing. I still prefer face-to-face classes but we have no choice but to study by the new normal in education,” shared by Student 5.

Other similar studies show that the strongest correlation between learning environment and self-determined motivation was autonomy, which led to competence, which predicted self-determined motivation. Competence is the most proximal indicator of self-determined motivation, according to recent studies in face-to-face learning settings, and it is best established in environments that promote autonomy (LevesqueTable 4 Results in comparison with Chen and Jang's (2010) study Path relations Chen and Jang's (2010) study. The non-significant relationship between relatedness and competence is the most surprising feature of our results. It's likely that this is because relatedness is less relevant in online learning environments, so it has little effect on students' perceptions of competence. Previous studies in face-to-face learning environments have found poorer associations between relatedness and other basic needs and students' motivation (Cheon et al. 2012; Levesque-Bristol et al. 2010). Any of the things used to determine relatedness in face-to-face environments may not be appropriate in online settings.

C. Synchronous Method: Finding A Way on Fixing Technical Difficulties.

C.1 Restarting of Wi-fi routers.

The participant's response revolves around their opinion on how they cope or how they fix technical difficulties in terms of Synchronous classes. Student 1 seems like they can handle their current situation mindfully as they told us that, “I actually don't have that many problems regarding our Wi-fi connection. If our Wi-fi is getting slower to the point my online classes are lagging, I'll just refresh our Wi-fi by turning it off for a second or minutes then opening it again.”

C.2 Using Trial and Error Method.

However, there's a student who has a tactical approach. According to Student 2, “I use the trial and error method approach to deal with technical difficulties or lack of internet connection.” Student 3: “There are limited ways of fixing

these issues especially to those who aren't receiving or experiencing financial crisis/assistance. But to secure a student's internet connection one way or another: moderation or decrease of utilization of a certain web feature can save a lot of data and it can even provide a faster connection, “as Student 3 explained. Student 4 indicated that, “I rely on my parents and their income so we can maintain a good Wi-fi connection or have extra money for loading my phone for mobile data usage. If in case they cannot provide me with any of these on a daily basis, I will have to miss classes and ask my classmates once connectivity is back.”

C.3 Asking of students to their instructors for consideration.

Some students expressed how they feel or their frustrations regarding the difficulties. “Oftentimes, this occurrence is the most difficult in this part of new normal learning, mostly in synchronous methods. So in order to fix this problem, I'll message my prof/teachers so that they can know that my accessibility is lost and they will give me time to fix it,” as Student 5 responded.

According to their study [Sirkiä, T., & Haaranen, L.], they were looking forward to using the server for more courses that will take advantage of the online learning activities provided by the server, as the integration results have been promising. Their approach has implications for learning analytics and research in smart learning content, as well as benefiting learners and instructors by making online learning experiences reusable. Because of the architecture, behavior records from students from multiple institutions are stored in the same format in a single location, regardless of protocol. This makes it simple to create multi-institution research projects with a variety of learning activities. Furthermore, the content types themselves decide what information to log, meaning that only the necessary data for a given content is saved, along with any possible user data.

6. CONCLUSIONS

In conclusion, all synchronous and asynchronous learning have some beneficial and detrimental impact. Both have distinct advantages for various types of people, particularly students. The perception of learning is different depending on the student. Most students are used to traditional modes of study, which are interactive and real-time. This explains why, despite the difficulties of online classes, some students prefer synchronous learning. It gives off a more familiar feeling in which they are learning “live and/or real-time”. Asynchronous, on the other hand, is favored by the other students because of its convenience. Thus, to address these different preferences of the students in online classes, a mix of synchronous and asynchronous classes would be the best mode of learning. The results also suggest that some students often encountered technological difficulties. It illustrates that it is a negative impact of both asynchronous and synchronous learning. In all these kinds of

struggles, students become more capable of being inventive. Lastly, students who are facing the new standard learning become more knowledgeable about their circumstance, which enables students to cope up with the new learning system

7. RECOMMENDATIONS

The future researchers may give recommendations based on the conclusion of the study, which we recommend some students to use educational apps like YouTube or to watch at some educational channels using television at home. Watching and learning to the educational channel is a very cheap way to participate in this situation because it doesn't require a wifi connection. Usage of educational apps like YouTube is also highly recommended. It requires the internet but the students can easily find the lessons that they need to learn and the videos are also downloadable up to 30 days. If students can acquire data, the more they can understand each lesson. Simply because there's a lot of learning even without the WiFi connection. Recommending both public and private schools to build a connection between the two, just to make the learning system more easily. If there's no internet connection, just find cheap books that can help to advance read before the synchronous class. It requires more tactics to get away with this kind of situation. Future researchers can recommend these conclusions for the student's to have the source of knowledge and to acknowledge the perceptions of each of their co- students in this New Normal learning.

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