Postgraduate Student Readiness Entering Cloud Class Era

Danny Meirawan*, Eka Prihatin, Enjang Alinurdin, Ratu Dintha IZFS
Educational Administration Departement
Universitas Pendidikan Indonesia
Bandung, Indonesia
*dmeirawan@gmail.com

Abstract—**Covid 19 is to trigger any learning organizations to change academic service strategy in various education aspects both formal and informal. Cloud class is a choice for almost all higher education in order to still implement the learning process. UPI Postgraduate School as well uses this strategy and is mixed by other strategies; the priority is that it can still implement the learning process and it can still achieve learning goals. But, student readiness to use this strategy is seen as an interesting issue; this research aims to determine student perception in using cloud class. This research used quantitative approach by open questionnaire to all magister and doctoral postgraduate program students in Universitas Pendidikan Indonesia, using incidental sampling. There were 112 respondents, namely 25 respondents for doctoral programs ang 87 respondents for magister programs. Results of the research stated that 63% of the respondents stated that the learning process through online learning is ineffective with the reasons and its obstacles and 37% of the respondent's state that it is effective, but it must be completed by facility supports and though this strategy is perceived to be ineffective by greater obstacles than its benefits, but it is reliable to be tested in a trial by improving facility and infrastructure as well as it must optimize quality of teaching.**

Keywords—cloud class, postgraduate students, teaching and learning process, strategy

I. RESEARCH GAP

Covid 19 is a global disaster triggering all the world to change strategy in facing it, also for education world, in which elementary school, junior and senior high school levels in various countries, it is using cloud class to face this pandemic [1] . The academic service in Universitas Pendidikan Indonesia as well is conducted by cloud class, also by its teaching and learning process, it is conducted by depending on lecturer innovation, so it uses various strategies in one scheme namely cloud. But it is necessary to inquire student perception as education customers in enjoying this cloud class model learning, certainly by facility prepared by the university in a gradual manner which is adjusted to the level of need.

Cloud class or more said as virtual class or virtual learning is a learning conducted in an online or online manner so the learning process can be done anywhere and anytime, in this case, students can join the class and receive any learning materials prepared by teachers in an online manner using HP or Laptop as well as internet media [2]. There are many strategies that can be used in this could class; among others are Edmodo, sevima edlink, google classroom, schoology, class dojo and others. In UPI, many use conferences by SPOT, zoom and google meet, WA group as well as other groups depending on lecturer choice in making strategy innovation and learning media. Certainly, the success of this teaching and learning process depends on lecturer innovation ability in choosing appropriate strategy and media [3–5] so students will not have any obstacles to join the learning process and it can be enjoyable.

A learning strategy is considered to be appropriate if teachers and students agree to state that this strategy is enjoyable, has no obstacles and easy in access [6]. So, in this research, researchers wish to determine student perception on the learning strategies and media used by lecturers in teaching and learning process. This is to facilitate the institution to prepare and perfect appropriate learning facilities so that UPI in any conditions can still survive always being a leading and outstanding university.

Also in this condition, Covid 19 also means to give chance for UPI to widen its wings and strengthen its image in global community. It is because this era can be a trial for learning strategies to bring UPI in a broader scope. This cloud class model can be a part of strategy plans of UPI development in this current era and in the future, by this cloud class, UPI can serve its learning to its customers in all Indonesia regions and throughout the world, because by feasible cloud class, it can be participated by students from throughout the world [7].

In the future, this cloud class model is predicted to be a trend in education, because by not ruling out student perception on this model, it can complete friendly media provision and facilities for the students [8], this model gives perfect benefits for its users. Simply, (1) UPI students are given an option to take lessons whether it is offline or online; (2) if offline, students already understand the consequences and the benefits; (3) if online, (a) students do not spend direct and indirect costs, except for the internet. Such as boarding, transportation, meals

and others); (b) it can be followed by students from various regions, they only need to attend lectures according to the Bandung timetable so that it will absorb prospective students who have problems with funding to attend offline class, this should also support the government policy for 16 years compulsory education; (c) it is open to prospective students from various countries around the world, certainly by modifying the translation program directly in the software according to the selected language and having a lecture agreement according to the Bandung timetable, this concept design can be further developed which there are a number of benefits namely (c1) prospective students do not have any requirements to master English or Indonesian because they can click on the language which they are fluent in (direct translation program to the selected language); (c2) the cost of education in Indonesia is cheap compared to other countries; (c3) UPI has a name and ranking that can compete with universities from other countries; (c4) the lecturers are not required to have the ability to have multiple languages sufficiently in the language understood by the students and will be immediately translated by the program into the selected language; (c5) certainly, UPI network is wider worldwide and others.

II. METHODOLOGY

In this study, the methodology used to describe students' perceptions on cloud class is very simple, namely through a quantitative approach using an open questionnaire via google form. The research site is the Postgraduate School of the Indonesian Education University Jl. Dr. Setiabudhi No 229 Bandung, West Java. The location of the Indonesian Education University can be seen in Figure 1.
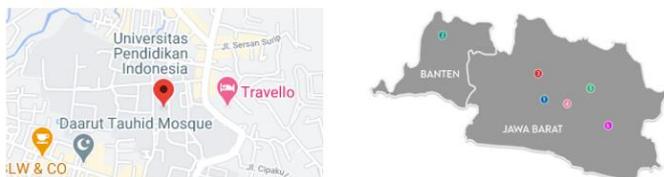

Fig. 1. Universitas Pendidikan Indonesia.

The questionnaire was distributed to all UPI graduate school students to determine students' perception on the cloud class by seeing the obstacles and benefits as well as the opportunities and improvements made by UPI. There are 112 respondents who returned and filled out the questionnaire namely 25 students from doctoral program and the remaining were students from master programs. Seeing at the gender aspect, there are 87 female students and 25 male students with an age ranging between 23 to 43.

III. RESULTS AND DISCUSSION

The results show that 63% of the respondents stated that online learning was less effective and 37% of the respondents said it was quite effective and could be followed, with the following details:

Question 1 related to students' perception on online learning conducted in this covid-19 era, all respondents stated that this learning model is less effective, by a number of reasons, among others are (1) they grasp and understand the learning materials less maximally; (2) there are many obstacles in term of access, mainly in rural area; (3) the online learning is perceived to be certainly boring. The delivery of learning materials would be less maximal since there is no direct interaction with the lecturers; (3) the online learning previously used manual attendance but no by the development of facility, the attendance is by online by Google form. Certainly, there are always obstacles in the use of network and quota; (4) the success level of online learning is influenced by main factors namely IT tools and internet network; (5) if the learning materials can be understood, then the practice is not easily understood; (6) it spends more costs, and it still pay costs for facility though the facility in campus cannot be used in this pandemic era. Meanwhile for the respondents stating that this model is quite effective, by the reasons that (1) there are many positive benefits; one of which is the video can be repeated...; (2) it is effective if the internet stable from the aspects of technique and technology; (3) there are big challenge in the implementation of online learning. One of which is the academics are not accustomed to use the online learning system; (4) it can be an appropriate solution to prevent the spread of COVID-19. Though, there are still many people who are not accustomed to use this system, including myself.

Question 2 related to any arising obstacles faced in the online learning/meeting, in this case, the respondents stated that it is about (1) signal problem; (2) explanation of the materials is not as clear as face-face learning; (3) it is difficult to discuss directly and clearly; (4) any assistance given by the government or campus cannot be distributed evenly, so there are still many students who complain that they still must spend greater budget for the quota; (5) not all students having adequate gadget or laptop to access the online learning; (6) it needs considerable quota; (7) they do not master how to change the background especially for webinar events or tests which must be adjusted to the event provisions; (8) they are difficult to interact directly with friends; (9) Server of UPI online media such as Spot is sometimes difficult to access; (10) There can be misunderstanding in comprehending materials given in online learning by the lecturers (less effective)"; (11) there is less string emotional closeness; (12) student maximal and best ability seems to be less visible. Since the relationship is only by online; (13) there are more chances for miscommunication between lecturers and students "; (14) learning sources; (15) there is difficulty in term of practical course; (16) during the learning process it is less comfortable.

For question 3 related to the perceived benefits in joining online learning/meeting, it is as follow: (1) More relaxed; (2) Can be done at home, it can also be easier when on assignment, it is not necessary to go to campus; (3) Fostering motivation to learn about information technology; (4) Can be done while working; (5) More relaxed when lecturers and students interact; (6) Can be followed anywhere and anytime; (7) Can meet face to face when using zoom or Google meet, speed up delivery of

assignments given by teachers, students will not be bored at home; (8) no need to wear nice clothes to go to campus; (9) Many webinars are free so it is easy to add knowledge; (10) can encourage educators to be more creative and innovative in bringing online classes to life .. so that new ideas can be implemented; (11) Still get adequate subject matter; (12) No need to go far to face to face; (13) Can have a lot of time at home; (14) Whenever and wherever; (15) Help to prevent transmission of the Covid 19 outbreak; (16) there are many digital materials such as video, MS. Word files, pdf, and others which the materials can be repeated; (17) flexible time and place; (18) Feeling safer such as keeping your distance; (19) the presentation made into a video can be repeated; (20) Gain experience; (21) It is easier; (22) Indonesian education is more advanced, learning time is shorter than face-to-face; (23) know how to interact far or away; (24) adjust the hours of study as desired.

Then, question 4 related to the most appropriate online method to be used, the respondents' answers among others are (1) by zoom meeting, since it can be done face-to-face though there is sometimes unstable signal; (2) provision of assignment which is literature study which can be done by many people; (3) the online learning method cannot only done by one method for example by learning models of web course, web centric course, or web enhance course; (4) assignment method uses Google classroom; (5) assignment method by Spot UPI is a supplement; (6) it can use learning video, or crossword puzzle in material presentation; (7) the on-time meeting room, if late, it is maximum for 10 minutes; (8) it depends on the way the lecturer delivers the materials; (9) Systems with easy-to-understand methods; (10) preferably face to face but still adhere to Health protocols; (11) Savable learning videos so that they can be played back at a later time; (12) upload the video on YouTube because by using YouTube, the lecturer can explain clearly without any sound breaking such as in zoom or other applications and if the students forget about the content, they can open the video again (13) So that it can be understood and grasped by the students, especially online, it is expected that the lecturers will make learning videos according to their respective subject matters accompanied by sample questions (if mathematic material is calculation). After finishing making the video, the link can be sent to the students, and make sure that the video size is not too large. So it will not spend many quota and can be opened on the cell phone. The benefits of the instructional videos can be learned in a repeated manner by students.

Question 5 related to students' responses on the learning or meeting taken by UPI, there is only 37% of the respondents stating agree meanwhile, 63% of the respondents stating disagree with the reasons (1) learning is not only about receiving materials, the students also need discussion with peers; (2) it can deliver the learning value maximally; (3) in a postgraduate class, it may only contain around 15 people, it may still be maximized offline by implementing health protocols, considering the active period of college is only 2 years, so as to make it easier during the research process; (4) face-to-face meetings are more fun because it can exchange information and thoughts when working on assignments or lectures; (5) there will be no interaction between human resources in the educational process, which is an important part of transferring the process of personality education (role model); (6) it is more boring when studying from home, and there are more assignments and lack of social interaction which makes students lazy; (7) there are a lot of knowledge that should be obtained, because of any aforementioned obstacles, and if it is just a virtual meeting, it will be very ineffective and it is often difficult to understand the knowledge provided by the lecturers; (8) It cannot be done considering the students from engineering and nursing department since they require practice; (9) offline lessons are also needed so that the campus building is useful, the lecturers have at least direct interaction with students, and students maintain good relationship with their friends; (10) it must be accompanied by free data package, and free campus facilities; (11) there is no real spirit and valuable experience if it is only done by online; (12) there is no certainty that students take online learning seriously and it is not certain that the materials presented to students can be understood and grasped by all students. Different from learning directly, students can ask the lecturers directly if they do not understand; (13) it is a concern that the knowledge gained will not be delivered or received optimally, especially if the subject requires direct practice.

Question 6 related to students' response if the online and offline learning are used alternately in the learning or meeting in UPI (please express the ideal percentage (%) of offline and online), respondents' answers are as follow: (1) online 60% and offline 40% ; (2) 40% online, 60% offline; (3) online 70 : 30 offline; (4) 70% offline 30% online; (5) online = 50%, offline = 50%; (6) So far, the online learning has only been a concept, as a technical tool, not as a way of thinking, as a learning paradigm. In fact, online learning is not a method for changing face-to-face learning with digital applications, nor is it burdening students with piled-up tasks every day. Online learning should encourage students to be creative in accessing as many sources of knowledge as possible, producing work, improving broad insights; (7) online meetings cause a lot of stress for parents and students; (8) It is possible to go online in one Week only two days; (9) In my opinion, online and offline learning alternately are considered less effective because they spend more time and money; (9) online 45% while offline maybe 55%.

The last question namely the 7th question is about the most urgent need required by UPI so the online learning can be an appropriate means for all activities both learning/meeting and others, the respondents' answers are as follow (1) Because there are different obstacles faced by each student, UPI should be able to overcome the obstacles of each student if it wants to apply effective online learning; (2) it should maximize lecture services properly even during a pandemic, for example about digital libraries, digital letters, quota assistance and of course face to face online; (3) it should provide each room with a face shield, wet wipes, dry wipes and hand sanitizers; (4) The UPI Spot Server is maximized in its implementation; (4) it should provides equal internet quota assistance to each student, even

though the nominal is not large; (5) there must be free internet quota; (6) it can reduce semester costs; (7) Transparency in information; (7) Facilitate students in terms of academic information so that students can complete their studies on time and the quality can still be maintained; (8) develop communication between lecturers and students; (9) Health Protocol; (10) Strong signal and adequate communication tools; (11) meetings with students who come from outside the city; (12) A capable computer and internet network; (13) We must have the courage to take steps to make online learning an opportunity to transform our education. All lecturers must be able to teach remotely which incidentally must use technology; (14) E learning and others; (15) Readiness of materials or modules given by lecturers for student learning materials, and provision of quota facilities for lecturers and students; (16) Lecturers make learning videos according to their respective subject matter, which the video size is not too big and the link is shared with the students.

Based on the research results, though there is 63% of the respondents stating their objection but, it can still be solved by maximizing their needs which can be seen to be able to support and smoothen the online learning. As expressed by a number of researchers such as Murphy [9] who objected that in this covid era, high education should non-activate their activity regarding transmission of the virus. Murphy thought that the education can be done by e-learning by referring to health procedure standard. As well, Barnes et al [10] in United Stated in facing the Covid, Western Governors University (WGU) designed a list of regulator of all districts, relaxation of student teaching requirement, the program is delivered online, students can complete tasks and teaching and learning process in traditional classrooms, parallelism between teachers and teacher, teachers and students, students and students, to evaluate whether the host school's virtualization was still meeting the needs of the student teacher and if not, then to shift the student teacher to a different placement that was more virtual-friendly. So this research has differences in exploring students' opinions on the learning method to be used during the Covid 19 era.

It turns out that for UPI students in particular and students in Indonesia in general, as well as students in various countries for higher education, they need more careful, excellence and professional solution to make this cloud class learning model the newest method for learning in higher education. As stated by Sharfuddin [11] that Covid 19 encourages the world to make changes to the economy, social, education and health aspects where no one comes out of this crisis without losing something. It is about how a new thing will threaten the old strategy which is considered a safe zone, but in reality it is natural, because a new thing will be a transitional period experienced by anyone, moreover, the world of education as a very large world, having different personal goals, with heterogeneous customers in terms of gender, age, ethnicity, level of education, ability, teacher competence, leadership and many different things in managing education.

And it turns out that in addition to online learning, there are many strategies that can be used to improve the quality of education [12] namely how we build, maintain and improve national and global relations through dialogue to improve the quality of understanding of our study program. These opportunities can be anticipated to solve any shortcomings with online learning, so that any arising problems and obstacles from this method can be overcome and vice versa it can provide opportunities for anyone to apply it into innovations that can increase public, customers, user trust and others about educational qualifications and competencies.

Also for complaints of practical problems as the obstacle of this learning model [13] suggested a laboratory model design that can be used during this pandemic era without reducing the quality of offline practice. Here, this is the role of lecturers and institutional support to turn the problems faced into opportunities that can be developed, namely by creating new innovations related to academic services and teaching and learning processes including practical strategies as the obstacles and problems faced during this era; all of which can be resolved without reducing the quality of the practice itself.

IV. CONCLUSION

Referring to the students' perceptions in responding to this cloud class learning model, there are more students who think it is less effective so that it must be mixed between offline and online with different percentages, but not a few say that if mixed, it requires more funds because there is transportation, boarding and meal costs that are always added whenever it is done offline.

And positively, this data and information can be used as materials for self-evaluation for institutions to solve common problems faced by the students and an analysis of alternative solutions for their solutions, as well as analyzing any available opportunities in each problem faced by students to be executed as the advantage of higher education in order to survive in every change.

REFERENCES

[1] S. Van Nuland, D. Mandzuk, K. Tucker Petrick, and T. Cooper, "COVID-19 and its effects on teacher education in Ontario: a complex adaptive systems perspective," J. Educ. Teach., vol. 46, no. 4, pp. 442–451, 2020.

[2] X. Kang and W. Zhang, "An experimental case study on forum-based online teaching to improve student's engagement and motivation in higher education," Interact. Learn. Environ., pp. 1–12, 2020.

[3] E. Prihatin, D. Meirawan, A. Suryana, R. IZFS, and A. Komariah, "Synchronization of Strategic Plan and Implementation in Legal Entity State University through Good University Governance," Int. J. Psychosoc. Rehabil., vol. 24, no. 04, pp. 2442–2458, 2020.

[4] E.P. Ghunu, meirawan, "How Indonesiaan Principals create and improve teachers self efficiency," Int. J. Innov. Creat. Chang., vol. 5, no. 3, pp. 685–707, 2019.

[5] E. Prihatin and N.M.S. Ghunu, "Shocking Assignment , New Innovation Of Learning Strategies For Higher Education In Improving Student's Blended," vol. 7, no. 10, pp. 2915–2919, 2020.

[6] O.K. Esentürk, "Parents' perceptions on physical activity for their children with autism spectrum disorders during the novel Coronavirus outbreak," Int. J. Dev. Disabil., pp. 1–12, 2020.

[7] C.A. McAfee, "COVID-19 brings a new urgency for advance care planning: Implications of death education," Death Stud., pp. 1–6, 2020.

[8] D. Hilton, A. Levine, and J. Zanetis, "Don't Lose the Connection: Virtual Visits for Older Adults," J. Museum Educ., vol. 44, no. 3, pp. 253–263, 2019.

[9] M.P.A. Murphy, "COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy," Contemp. Secur. Policy, vol. 41, no. 3, pp. 492–505, 2020.

[10] R. Barnes, R. Hall, V. Lowe, C. Pottinger, and A. Popham, "Lessons from an online teacher preparation Program: flexing work experience to meet student needs and regulators' requirements in the United States," J. Educ. Teach., vol. 46, no. 4, pp. 528–535, 2020.

[11] S. Sharfuddin, "The world after Covid-19," Round Table, vol. 109, no. 3, pp. 247–257, 2020.

[12] T. Heyang and R. Martin, "A reimagined world: international tertiary dance education in light of COVID-19," Res. Danc. Educ., pp. 1–15, 2020.

[13] V. Van De Heyde and A. Siebrits, "Digital laboratory report writing, assessment and feedback in the 21st century for an extended curriculum programme for physics," Res. Sci. Technol. Educ., pp. 1–32, 2020.