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In Search of Quality Education: The E-learning Implementation as the Impacts of the Covid-19 Pandemic

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Abstract

The appearance of the disease epidemic induced by Novel Coronavirus (COVID-19) leads to some changes in life aspects, including in the learning process in the Education unit, particularly in colleges. The e-learning model is one of the models implemented in Garut University to prevent coronavirus transmission. This research aimed to describe an e-learning activity conducted by Garut University during the pandemic. The research method used was survey to examine the positive and negative effects of online learning activities. The technique of collecting data used was an online questionnaire via WhatsApp with 181 students. The results showed that e-learning activity conducted by Garut University had not been conducted effectively for students, lecturers and the campus itself as e-learning system provider. Lecturer performance was the complained factor by students, but generally lecturing ineffectiveness was due to all academicians' unpreparedness for dealing with the changes of learning system from face-to-face to online method.

Keywords

change management, online learning, pandemic effect, physical distancing

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Introduction

In some recent months, the world is surprised with a health phenomenon of the incidence of epidemic induced by virus called Novel Coronavirus (or new type of coronavirus, thereafter, called COVID-19) by scientist or also called Wuhan influenza virus. WHO has released this 2019-nCov infection status as the outbreak phenomenon (Rothan & Byrareddy, 2020). Like other viruses spreading rapidly, coronavirus is considered highly infectious, transmitted from human to human (Dong et al., 2020). It is characterized with the high case number reported in short period at global scale. Although statistically it has achieved the fatal mortality rate, this virus novelty is very worrying, and moreover there has been neither specific therapy nor vaccine for eradicating it (Rothan & Byrareddy, 2020). This development of disease incidence rate is reported continuously, and so far the confirmed case occurs mostly in China, as the location of disease origin, followed by Thailand, Japan, South Korea, Singapore, Nepal, Vietnam, France, India, United States of America and Indonesia (Tang et al., 2020).

The prevalence of coronavirus in Indonesia now leads the government to organize some measures to cope with it through many policies. For example, Ministry of Education and Culture of Indonesia decided the authority of learning process organization implementation in high education (college) to be handed over to individual rectors. Most campuses in Indonesia have announced the organization of lecturing using online-based lecturing system to anticipate the COVID-19 among college students. This policy is conducted to restrict or to minimize the transmission of COVID-19.

In the more worrying condition due to this COVID-19 effect, e-learning is considered the solution to bridge the implementation of the learning process in college. In this online lecturing, students are not required to go to campus routinely. Online lecturing (e-learning) is also a means of interactive learning. Lectures and students can communicate using social or interactive media (Samir Abou El-Seoud et al., 2014). Lecturers can deliver lecturing material in file, video, and text. As such, the students can get learning material in the form of file or reading material from corresponding lecturers, send question to the lecturer of the course, send contact to other students, see information from the corresponding lecturer, and take examination at the time specified (Al-Mukhaini et al., 2014).

Recently, the use of social network is a phenomenon developing in both academic and non-academic lives (Kalpana & Mahajan, 2018). The use of social network equips and improves teaching process in traditional classroom. For instance, YouTube, Facebook, Wiki, and Blog provide a large volume of materials on various subjects. Therefore, students can open one of these tools for further explanation or clarification. Virtual tools such as Google Classroom, Zoom, and Moodle can help students keep connected to their classmates and lecturers in a participative environment. This tool helps the material taught be accessible to all users anytime and anywhere (Al-Mukhaini et al., 2014).

Unfortunately, based on Ratnadewi (2019), there is a significant gap between the performance of the e-learning system and the acceptance of the e-learning system in various educational institutions in Indonesia. Although e-learning can be as a learning solution in the

pandemic era (Dhawan, 2020), some academics consider it a new source of difficulty in the teaching process (Almaiah et al., 2020).

The Government of Garut Regency also assigns all education activities, including lecturing, to be conducted online. Garut University as the only one university in Garut Regency is also responsible for implementing the online learning. It consists of 7 faculties. The teaching learning activity is managed independently by each faculty with centralized instructions. Google classroom was used on 16-29 March 2020, and then Learning Management System (LMS) was used as an improvement of the learning system. Online learning is held in accordance with the schedule and monitored by academic staff and IT staff of each faculty. Both students and lecturers are asked to use the email recommended by the campus thus the lecture process can run in an integrated manner with the academic system.

The transfer of learning methods creates pros and cons among the academic community. The facilities and infrastructure have not been able to fully support e-learning activities. Based on the explanation above, how the implementation of e-learning system at Garut University. Thus, this study aims to describe the e-learning activities carried out at Garut University. The implications of this research can be used as an illustration of the performance of learning activities by the management of Garut University and become a consideration for reviewing learning methods by lecturers at Garut University.

Literature Review

Policy implementation is an activity that is seen after a proper direction has been issued from a policy which includes efforts to manage inputs to produce outputs or outcomes for the community (Khan et al., 2016). Implementing online learning policies has resulted in mixed responses from academician (Dhawan, 2020). Although e-learning as a technology is the best option to maintain the continuity of the teaching and learning process during the Covid-19 pandemic, it must be understood that e-learning is not always well received as students receive conventional learning. It could be that students do not accept, dislike, or even reject e-learning. Although several studies have stated that e-learning can significantly improve student learning outcomes, the results of these studies have not been able to measure the level of acceptance and the use of e-learning, especially during the Covid-19 outbreak (Amir et al., 2020).

Research related to the acceptance and use of e-learning is necessary because, in general, the success or failure of the application of technology, including e-learning, will depend on the acceptance and use of each individual (Zalat et al., 2021). Therefore, it is necessary to investigate the factors that can affect the acceptance and use of e-learning by students. Online learning depends on the e-learning infrastructure provided by educational institutions, always e-learning service providers (Garad et al., 2021). Many aspects need to be considered in using e-learning applications, starting from planning, and measurement of student needs, support systems, teacher competencies, material design, appropriate platforms, learning environment, and evaluation of student learning outcomes. Three main aspects of e-learning are developers, educators, and students. E-learning will be successful if

there is access and technology, guidelines and procedures, maximum participation of students, applied collaborative learning teacher, and interaction (Amir et al., 2020).

E-learning can bring new circumstances to the learning development methods with open content, i.e. learning material can be used concomitantly. Students can attend the lecturing anywhere and anytime, as long as they have internet connection (Panyajamorn et al., 2018). In online system, students keep having a "face-to-face" schedule and the lecturer that has been planned. Therefore, in e-learning application not only students are required to master certain skill, but a lecturer is also required to have some competencies to make the e-learning program he/she organizes running well (Suanpang et al., 2004). Rosenberg in Sanderson (2002) categorizes three basic criteria existing in e-learning. Firstly, e-learning is a network enabling it to improve quickly, store or redisplay, distribute, and share learning and information. Secondly, e-learning is sent to the user through computer using standard internet technology. Thirdly, e-learning focuses on the broadest learning perspective, learning solutions surpassing the traditional training paradigm. Most previous studies on the effectiveness of e-learning have found interesting facts. A study of Suanpang et al. (2004) found the method affecting the effectiveness of learning. It examined the effectiveness by comparing two (interactive and non-interactive) and traditional (class instruction) methods. The result of research showed that e-learning in interactive mode is better than that in non-interactive mode.

This information technology-based learning model using e-learning contributes to the change of learning culture in its learning context. Meanwhile, the advantage of e-learning is, among others, that students can attend the lecturing anytime and anywhere they want as long as they have good internet connection, and can save transportation cost (El-Seoud et al., 2014). The learning materials can be selected according to students' ability level and want, and debriefing is flexible in nature in the lecturing process, as it can be conducted through chatting with either lecturers or classmates. E-learning model, as aforementioned benefits the students very well, but on the other hand some students residing in rural areas found some constraints related to it. In addition, e-learning still faces another problem, i.e. most students decline to shift from the use of traditional class to the training guided by computer in virtual classroom (Sanchez-Gordon & Luján-Mora, 2016).

Methodology

In order to achieve this research's objective, the research used survey. Singer and Couper (2017) state that a researcher can adapt open-ended questions to several functions in a quantitative survey. Open questionnaire is the technique used to explore e-learning phenomenon as unplanned lecturing system with the users of e-learning service. The questionnaire was given to 181 Garut University students from 7 faculties when the government obligated all face-to-face lecturing activities to be eliminated temporarily. The sampling method used in this study was random cluster sampling, where the student population was divided into faculty clusters and taken randomly from each cluster.

The distribution was 35% (63 people) of the respondents were from the economics faculty (fekon), 20% (36 people) from the mathematics and natural sciences faculty (fmipa), 13% (24 people) from the faculty of Islamic education and teacher training (fpik), 12% (22

people) from the faculty of social and political sciences (fisip), 11% (20 people) from the faculty of agriculture (faperta), 5% (9 people) from the faculty of engineering, 3% (5 people) from the faculty of communication (fikom), and 1% (2 people) from the faculty of entrepreneurship (fkwu).

The questions presented to the respondents were "what is your opinion toward online learning at Garut University?" The distribution of the open-ended questionnaire was carried out through the WhatsApp platform during March 2020. Open-ended questionnaires were used to obtain more detailed answers from respondents by expressing what they thought in their own words. The first stage of data processing was making verbatim and then inputting the entire range of possible responses. The next step was making classification based on coding. This research used the inductive coding method, where the researchers know a little about the research subject and conducts heuristic or exploratory research (Adu, 2019). The coding results were calculating the frequency and presented in a graph using Microsoft excel tools.

The data that had been processed is then tested for validity using a member check. Member checks can be implemented after a period of data collection is complete or after obtaining a finding or conclusion. The implementation technique was to go to the data provider individually to the data provider, or through group discussion forums. In the group discussion, the researchers conveyed the findings to a group of data providers. In the group discussion, there were data that were agreed upon, added, reduced or rejected by the data provider. After the data was mutually agreed upon, the data givers were asked to sign to make it more authentic and as evidence that the researchers had done a member check.

Findings and Discussion

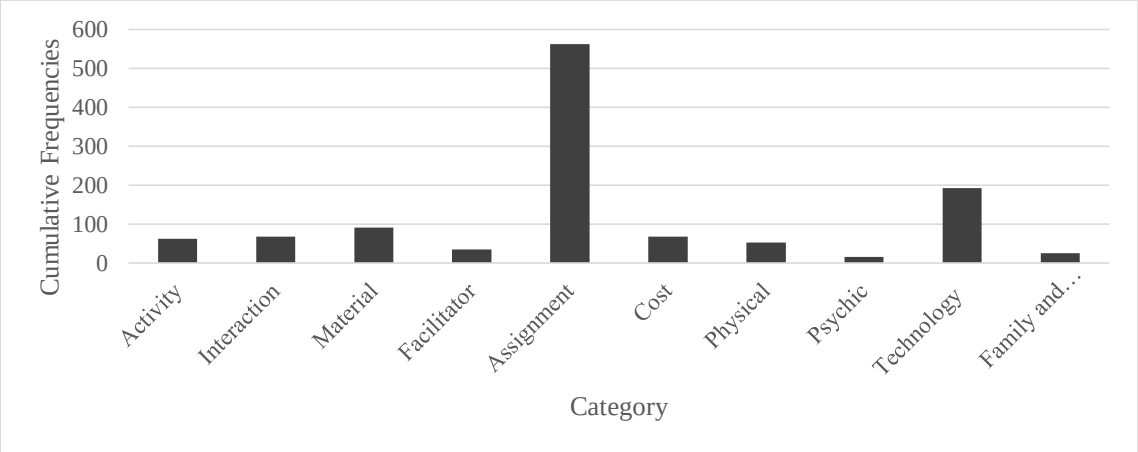
Based on the coding results, 48 issues with a cumulative total of 1,169 appeared related to online lecturing activity in Garut University. Generally, respondents stated that online lecturing using media and system specified by campus is not effective yet (98%), despite some respondents seeing its positive side (2%). Respondents coming from regular class (84%) had fewer problems compared with students coming from employee class (16%). Marital status, family situation, and occupation status made working students encountering more complex situation.

About 48 issues appeared from the result of exploration, divided into 10 categories: lecturing activity, interaction during lecturing, lecturing material, facilitator, assignment, cost, physical, psychical, technology, and family and environmental. Assignment category got most responses (562) and psychical effect was the least one appearing (16). The distribution of issue and frequency related to online lecturing in Garut University is presented in Table 1 and visually the proportion of online lecturing issue is presented in Figure 1.

Table 1. *Distribution of issues and frequencies related to online lecturing*

Category	Issue(s)	Frequency	Total
Activity	Assignment proportion	16	62
	Online attendance	12	
	Discussion	20	
	Flexible	11	
	Internet café	3	
Interaction	Face to face habits	39	68
	Conformity of concepts	16	
	Visual needs	2	
	Miscommunication	10	
	Monotonous	1	
Material	Material availability	2	91
	Material understanding	38	
	Material Quality	11	
	Material presentation	27	
	Material delivery	13	
Facilitator	Creativity	3	34
	Innovation	4	
	Empathy	15	
	Responsive	2	
	Coordination	9	
	Attitude	1	
Assignment	Direction	180	562
	Technical Collection	10	
	Timing	175	
	Weight	180	
	Media	13	
	Tolerance	4	
Cost	Internet quota	54	67
	Transport	11	
	Tuition compensation	2	
	Tiredness	12	52
Health	Sore eyes	40	
Psychic/Mental	Stress	7	16
	Hard to sleep	2	
	Bored	6	
	Antipathy	1	
Technology	Literacy	2	192
	Radiation	6	
	Network	102	
	System reliability	55	
	Device condition	15	
	Device availability	2	
	Device memory	2	
	Media selection	8	
Family and Environmental Support	Pocket money	8	25
	Tolerance	1	
	Protest	1	
	Focus	10	
	Disturbance	5	

Figure 1. *Distribution of response categories to online lectures*



Lecturing activity

The academic activity held in lecturing class in the form of lecture, discussion, role play, quiz, and assignment. The lecturing time is determined according to the varying credit value of respective courses, at least 2 credit points and at most 3 credit points in Garut University. Generally, the lecturing is dominated with lecturing activity and discussion, but during online lecturing, students cannot feel the lecturing circumstance. It is confirmed by a student (1) stating that,

> "…. I think this online lecturing system is ineffective, as most lecturers give assignment only without explaining the material …"
>
> "…..I think, this online lecturing is ineffective as it tends to give more assignment than to explain the material,…" (Student 2)

The students also expect that discussion activity keeps running in online lecturing, thereby can solve the unclear assignment problem. Some respondents said (Student 3),

> "…online application feature is appropriate but ineffective because students work on the assignment and read the material only without the explanation of less understandable material and without visual discussion between students and lecturer…"
>
> "… Online lecturing is not merely about assignment, but it can open discussion forum or debriefing, and then discuss Coronavirus taking more tolls over times…" (Student 4)

Another issue is the problem of incriminating online presence; campus instruction states that "the assignment submission conducted by students is the evidence of their

presence in the lecturing". The point of instruction incriminates the students; it is in line with a student (5) stating,

> "…. thereafter, the lecturer gives assignment with the scheduled deadline and with the assignment being the parameter of presence…"

> "….In the presence of online lecturing, the lecturing time actually becomes more flexible, so that it is unnecessarily adjusted with the lecturing hour…" (Student, 6)

Considering the result of interview with some informants, it can be seen that the implementation of online lecturing is still less effective because the lecturing material is received by students not as obviously as that using face-to-face lecturing in the class. In addition, online discussion activity is ineffective. E-learning and new technology in the changing education process is an important innovative segment in college (Ghareb & Mohammed, 2016). Most students decline to adapt from traditional classroom to computer-led or virtual training (Sanchez-Gordon & Luján-Mora, 2016). Hayashi et al. (2020) said that social attendance evidently has an effect on virtual learning environments. Online discussion helps students answer the question in appropriate manner (Ghareb & Mohammed, 2016). Online discussion media used today are varying; learning management system (LMS) (Safont & Calvís, 2010), Kahoot (Alamanda et al., 2019), zoom (Sayem et al., 2017) and google meet are alternative media to be used. WhatsApp is also considered as effective as lecturing discussion media in some campus (Amry, 2014).

Social interaction

A reciprocal relation that can be established well between students and between student and lecturer during the lecturing process, but in online lecturing the students cannot interact socially and directly with others, thereby lowering their learning spirit and motivation. It is confirmed by a student (7),

> "…. I attend online lecturing not vigorously, because I cannot see my friends. Meanwhile in face-to-face lecturing we can discuss and work on the assignment while joking…"

> "…. learning motivation is lowered, without the presence of classmate directly the learning is not great as we cannot debate in working the assignment in group…" (Student 8)

> "… it is boring, usually in the face-to-face lecturing, students can express their opinion and share anything from lecturing material to personal matter freely with the lecturer…" (Student 9)

This condition makes the interpersonal communication not running, thereby generating some problems, as suggested by a student (10),

> "….online lecturing is less effective, not great, not passionate, stressful and very rigid, in the direct learning in the classroom, the lecturer usually explains the material

> while giving real and clear example and even with joke, rekindling the class circumstance, debriefing can run openly, so that harmonious interaction is established…"

The findings on interaction in the learning above is in line with Janse van Rensburg's (2018) study, in which poor interaction with classmates and instructors makes students feeling intimidated. It is important to implement collaborative learning in order to create meaningful social learning and interaction (Rezaei, 2017). Morel (2018) suggested that an effective interactive lecturing should be equipped with multimodal competency including classroom space, gaze, and movement accompanied with spoken and written language, the attendance to regulation and supervision in order to lead active activity in the class.

Although the use of Google Classroom is considered as effective in more flexible learning process in several campuses in Indonesia (Alim et al., 2019). However, it is has not been considered as representing the definition of lecturing interaction by students in Garut University. It is because the Google Classroom feature has not been used maximally by facilitators.

Laws et al. (2015) has developed Interactive Vignet Video (IVV) adding interactivity and presentation by means of combining web-based video activity. Zoom application has not been applied to online lecturing in Garut University, but it needs to be considered to be an alternative learning media. Zoom has evidently improved students' participation through virtual tutorial from comfortable location (Sayem et al., 2017). The finding shows that the use of Google Classroom is effective with some limitations: (1) not all students get the account given by lecturer because they have no smartphone, (2) limited Wi-Fi availability in the campus, and (3) students have inadequate cellular data package during online discussion and even some of them submit their assignment using their friends' account.

Cost

The cost is particularly related to purchase internet quota. This condition is understandable because many students use wifi facilities on campus for learning or other purposes. This category is a problem in the implementation of online learning, in view of the socio-economic conditions of parents of students at Garut University who are mostly at the middle level. The addition of internet quota purchases is a burden for students. This condition is a problem that also has an impact on the implementation of online lectures. Cost becomes the controversial issue among students, as suggested by a student (23),

> "…. the cost for purchasing quota becomes a distinctive burden to me, because my family's economic condition is only on average level, and online lecturing will increase our economic burden…"

> "….I usually spend only …. to buy internet quota for 1 (one) month… but in the presence of online lecturing it increases. (Student 24)

> "….campus should give compensation for quota purchasing…" (Student 25)

This condition is understandable because many students use WIFI facility in campus for learning or other purposes. It is also confirmed by a student (26),

> "…. direct learning will save more money than online learning, because students can use internet facility for free and joyfully in the campus…"
>
> "…..the WIFI in campus has broad bandwidth, so we can download anything fast…" (Student 27)
>
> "…. hopefully this corona pandemic will end quickly, because online learning is not student-friendly, it takes more money for buying quota, therefore our pocket money is reduced…" (Student 28)
>
> "….to me and the condition with average economic condition, the quota cost becomes substantial burden…" (Student 29)

This cost category becomes an issue in online lecturing implementation, recalling the social-economic condition of student's parent in Garut University belonging to medium level. The increased expense for internet quota burdens the students. This condition becomes an issue impacting on the online lecturing as well. Responding to cost issue, as aforementioned, podcast methods is feasible to consider by facilitators because Bolliger et al.'s (2010) study found that students are fairly motivated with the method. Additionally, the use of podcast is more efficient and simpler than online tutorial method like zoom or Google meet or YouTube video.

Health

Online lecturing requires the students to keep connected to computer and smartphone android. Both computer and cellular using intensities are higher. Stress, sleeping difficulty, tiredness, boredom, and sore eyes are things that students felt in doing online learning. It is stated by the students (30),

> "….my eyes will be poignant and watery if I use computer for a long time…"…..working on the assignment using computer almost every day is tiring, particularly the eyes become less healthy and poignant….
>
> "… online lecturing makes me tired and even often headache such as dizziness… "(Student 31)
>
> "… It really makes me think hard; because of so many assignment, I often have dizziness…" (Student 32)
>
> "… hopefully this Covid-19 pandemic ends immediately, so that the lecturing can return to the normal one… because online lecturing makes me tired physically and mentally…" (Student 33)

Technology use

Online lecture requires the students to be technology-literate; recalling the implementation of e-learning in practice needs technology help, particularly internet technology. Internet connection or online connection is absolutely necessary to access learning process and lecturing material. Internet connectivity problem due to technical and unstable power supply problems can inhibit the online learning activity (Esewe & Adejumo, 2014). Internet technology use is a determinant of online lecturing, but in fact not all students can access internet because of such constraints as less supporting connectivity, as suggested by a student (37),

> "…. I live in rural areas and cannot be connected to internet ..."

> "...I have no personal computer and my smartphone is incompatible to online lecturing, so I am always left behind in the lecturing…." Student (38)

> "...the network connection is unstable; the server is often in trouble…" (Student 39)

Limited internet network or connection is the factor affecting the e-learning implementation. Computer set is determinant of the optimum online lecturing implementation. The successful e-learning program in information technology (IT) requires the users to be equipped with certain computer specification affecting information (Hayashi et al., 2020). Software availability, training for facilitator, collaboration between facilitator and learning media provider, self-efficacy perception, and teaching concepts affect the use of technology in lecturing (Gil-Flores et al., 2017).

The environmental condition

Environmental condition, either family or social environment, is determinant of online lecturing implementation. This attempt of preventing coronavirus requires the students to implement the lecture at home (stay at home) obligatorily. This condition of course needs support from many parties, particularly family members. We need quiet circumstance at home, to make the learning process running smoothly without disturbance. The condition of the family environment has an impact on the implementation of e-learning, both positive and negative impacts, therefore good cooperation from all family members is needed so that all activities can run optimally. It is confirmed by a student (43),

> "….lecturing at home (home lecturing) has an advantage as it can be more relaxed, but classroom lecturing is more effective because my little brother often disturbs me when I attend lecturing at home…"

> "…..my little brother is also studying at college, so I should share the computer with him, while online lecturing should be on time…." (Student 44)

> "….home lecturing makes me less focusing because of noise and disturbance coming from other family members who are watching TV…" (Student 45)

Family environment condition affects the e-learning implementation, either positive or negative effect; therefore, good cooperation is required from all family members so that all activities can run optimally. Learning environment plays an important role in creating individual's inherent potency (Lawrence & Vimala, 2012). Self-esteem is considered to be able to mediate social support and academic achievement and to explain social relation and emotional fatigue (Li et al., 2018).

Materials

During pandemic, in Garut University lecturing material is delivered using various applications, from Google classroom to video conference through Google meet and Zoom. Material availability, material understanding, material quality, and presentation form delivered by lecturers are responded to differently by each of students. A student said (11),

> "….. online lecturing used zoom is less preferred, because adequate internet quota should be available…"

> "….. learning material during pandemic is better to be sent via WhatsApp in the form of power-point file…" (Student 12)

> ". I prefer lecturing in the classroom using power point, because lecturer explains the points in detail, so that we can understand it better…" (Student 13)

> "… that is right… the material delivered using power point is more understandable; then lecturing runs more vigorously…. Much writing is no longer needed…" (Student 14)

> "…. I think the material delivered using power point is better, despite inadequate explanation sometimes due to the use of small font…" (Student 15)

So far the use of power point slide is used by nearly all facilitators in Garut University. The use of Slide Power Point is used very popularly in many campuses. The delivery of PowerPoint slide material can improve students' attendance and participation in the class, but it does not impact on the performance during examination (Babb & Ross, 2009). However, the delivery of material before the lecturing process makes the lecturing time ends more quickly than the time allotment.

The use of learning video is considered as an effective means of delivering course content and provides the attendance circumstance in the virtual teaching environment (Scagnoli et al., 2019). The video lecturing format most commonly used is voice-over slideshows and standard recording using digital video camera. Nevertheless, the use of podcast can be an attractive consideration material to the students as the users (Bolliger et

al., 2010). Preparing a successful learning video-based lecturing needs an instructor to make its format, content, and activities accompanying it appropriate so that the content delivered can be accepted effectively by students (Inman & Myers, 2018). Lecturing material can also be delivered through virtual lecturing session using zoom and Google meet. Modern technology gives vital aid to achieve the standard learning instrument quality desirable (Sayem et al., 2017)

Psychic/Mental issues

The change of learning method from face-to-face (conventional) to online one suddenly due to the appearance of coronavirus pandemic of course affected overall learning processes. Such the change can be felt by lecturers, students, and all academicians. The change occurring affecting them not only physically but also psychically. Lecturers and students complain with it because they have not been accustomed with online lecturing. It is confirmed by Student (34),

> "…. direct learning (classroom lecturing) is more joyful…. many views can be seen and it is pleasant, while online lecturing requires us to express opinion continuously using internet, it is boring…."

> "…. this corona pandemic condition makes me stressed, because many assignments sometimes should be done until late night as they should be submitted immediately…" (Student 35)
> '... I am tired of doing the assignment continuously, the lecturers formerly delivering the learning material in the classroom now change it into assignments, and eventually I have insomnia, dizziness, and nausea …" (Student 36)

Stress, insomnia, fatigue, saturation, and sore eyes are grievances often told by students in attending online lecturing. Some studies have been conducted on the effect of many lecturing assignments on physical health of students (Law, 2007; Benner & Curl, 2018). Moreover, among students with double role as students and workers, physical and mental health factor is associated with conflict of role, leading to higher fatigue risk. Improving students' life quality has been the main focus of educational institution (Li et al., 2018). Such disorders as stress and lowered sleeping quality are important factors contributing to students' poor learning and well-being (Pascoe et al., 2020). The management of faculty should evaluate the assignment weight received by students because fatigue can lead to inefficient teaching-learning process (Li et al., 2018).

Assignments

The implementation of online lecturing during pandemic time changes some forms of assignment to students. Because there is no face-to-face meeting in the classroom, in the end of material delivery the lecturers often give assignment with written instruction sent through google classroom. Students often complain about this assignment, as each of the courses gives an assignment at the end of each meeting. A student complained (19),

> "… ouch!!!... Why must all lecturers give assignment?… The lecturing makes us busier with online teaching method…."

> "….a longer time should be given to the deadline of assignment submission, because we have a large number of assignments…" (Student 20)

> "…sometimes the instruction of assignment is not clear… and we cannot ask information about it directly …" (Student 21)

> "… the tolerance to assignment submission deadline is expected to be given wisely, because we have a lot of assignments to do…." (Student 22)

Many facilitators design assignment based on what they consider as good rather than on evidence (Rezaei, 2017). The assignment given should be adjusted with pandemic condition. Lecturers of Garut University should avoid assignment in group in which the students' infrastructural capacity has not been adequate. Rezaei (2017) also explains that the assignment in group and the design of collaborative environment are not always easy and conducted successfully. However, such condition can be improved when facilitators and students understand how to design and to do online group work.

Facilitators

An online learning process requires facilitator (lecturer) to contribute actively, and to have creativity and responsiveness to situation and condition. Interaction with an effective communication is important to learning process. Online lecturing, according to students, does not exert positive and significant effect. A student stated (16),

> "…online teaching-learning process feels more rigid, as interaction with lecturer cannot be done freely…" (Student 16)

> "…. the organization of online lecturing is often inhibited by situation and condition, sometimes it is difficult to coordinate with friends, because they are difficult to contact due to no signal and etc…" (Student 17)

> "… information from lecturer cannot be received directly, because the signal is bad in their residence…" (Student 18)

This condition is the constraint often faced during teaching-learning process. Facilitator's creativity, innovation, and attitude are the factors need to be improved to support the successful learning process. New technology will not change educators' role, but significantly affects the need to implement various teaching approaches in a very different technology environment and organization (Sukmawati & Nensia, 2019). Esewe and Adejumo (2014) stated that the lack of skilled educators affects negatively the good online teaching standard. Unfortunately, the policy of online lecturing organization is often not accompanied with

guidelines for online teaching so that facilitators often find constraints in designing and evaluating the lecturing (Santos & Boticario, 2015). To optimize the role of ICT as an innovative factor in learning activity, teaching model modification should be made; facilitator role, class organization problem, teaching-learning process, and interaction mechanism (Sangra & Gonzalez-Sanmamed, 2010). Furthermore, Sangra and Gonzalez-Sanmamed (2010) suggested that facilitators often have no self-confidence to synthesize and to evaluate learning process using ICT.

The guarantee of teaching and learning process is very important to educational institution to maintain its progress (Sayem et al., 2017). From the result of exploration above, a lot of information can be used for evaluating the online lecturing activity, particularly in Garut Regency. There are four significant issues becoming topic of discussion among students, each of which gets more than 100 times: assignment instruction (180), assignment weight (180), assignment time (175), and cellular network (103). From the four basic issues in online lecturing in Garut University, 3 issues come from lecturer: instruction, assignment weight, assignment time, and 1 (one) issue comes from external campus (cellular network).

It indicates that lecturers in Garut University have not been accustomed with online lecturing system and do not have enough preparation for online lecturing activity. Meanwhile, online lecturing system is defined as the lecturing system utilizing internet access as learning media designed and displayed in the form of lecturing module, video and audio recordings, or writing by academician/university. In fact, in practice, the lecturers use this system to give assignment to students. In other words, it cannot be called online lecture but online assignment. It, of course, highly affects the students' satisfaction with campus service during stay-at-home situation. Student's satisfaction results from service quality delivered by university (Deuren & Lhaden, 2017). Djudin (2018) said that teaching method employed by lecturer affects significantly the students' satisfaction, while learning program does not. Susilawati et al. (2019) added that instructor's quality affects an individual's interest in being enrolled in a university. From the two arguments above, lecture is one of the front lines to be considered by university in giving the students the satisfaction that can impact the campus' reputation in the future.

The government's attempts still focus on providing good equipment but have not comprehensively achieved the evaluation stage on online learning effectiveness. The objective of government in implementing stay-at-home and online home learning program during the pandemic is to enable the students to keep doing lecturing activity despite no face-to-face interaction with the corresponding lecturer, so that the pause can be utilized maximally. However, it is noteworthy that the objective of learning is to transfer knowledge from lecturer to students, thereby students can understand what the lecturer delivers, and it can change the students from not knowledgeable to knowledgeable. Another crucial philosophy of education is that the students' mindset in learning is to understand knowledge (science) and then applying it, rather than hunting value (score).

Ideally, the application of information technology-based lecturing model using e-learning contributes to the change of learning culture in its learning context. From e-learning lecturing model, the important components in building the students' learning culture are, among others: (1) students are required independently in learning using a variety of appropriate approaches to enable the students to direct, to motivate, and to organize

themselves in the learning; (2) students can develop knowledge and skill, particularly information technology thereby can facilitate the learning, understand the learning and anything needed in the learning; (3) the availability of adequate infrastructure to support the lecturing implementation.

It is similar with most students' opinion; lecturers also stated that online lecturing has not been conducted effectively in Garut University. Similarly, viewed from the issue aspect, the result of interview with 3 lecturers of Garut University aged 30-40 years stated that lecturing media specified by campus is the main factor leading to ineffective learning. It is confirmed by a lecturer informant (1),

> "…we usually use Google Classroom, but now the Campus has moved to LMS, so we are rather in troublesome because of limited upload quota, while my lecturing material is in video form; I think using the proved media is better at this urgent time"
> It is justified by lecturer informant (2):
>
> "…. Lecturing media should use WhatsApp only, because in addition to the lecturers and the students having been familiar with it, discussion more possibly occurs with it than with Google Classroom or LMS often down. As the proof of lecturing, there is *download chat* facility in WhatsApp to prove that the lecturing occurs at specified time." (Lecturer informant 2)

Meanwhile, for the assignment, lecturers admit that they are forced to give assignment on the campus' instruction, as the evidence of presence the students are required to upload the assignment during lecturing period. It is confirmed by lecturer informant (3),

> "…I personally agree more with the lecturing material discussing the pandemic associated with the lecturing material. However, the campus management asks for the evidence of students' presence, so that I am forced to give assignment."

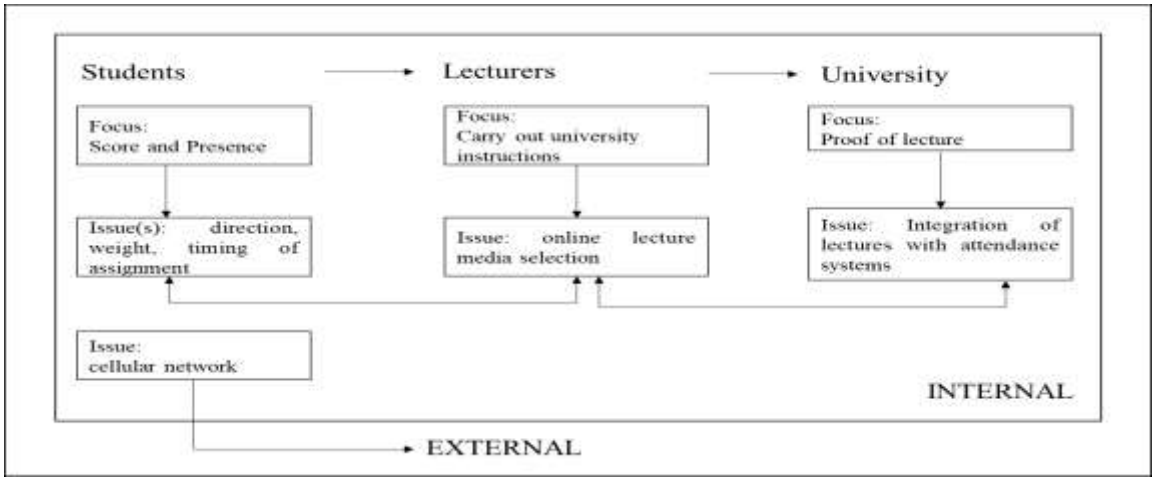
Some lecturers admitted that they give assignment because they have no e-learning material such as learning video or lecturing module, so that they are confused during the lecturing period. It is confirmed by lecturer informant (4),

> "…. Actually, I am rather confused because I have not prepared learning video yet, but eventually I use video from YouTube as the material and then give assignment…"

Lecturers also regret the network and quota problems complained of by students. The more preferred online lecturing media in Garut University are Google Classroom, LMS, and their combination through WhatsApp. Students' economic problem is one reason of why Garut University does not apply video-based zoom in online lecturing. The use of WhatsApp and Google Classroom is indeed more effective for discussing agenda, but the campus' IT operators states that the two applications are connected difficultly to the existing academic system, while LMS can be connected to students and lecturers' presence system. From the elaboration above, the online lecturing effectiveness model in Garut University can be summarized in Figure 2. Students argue that lecturer is the dominant factor leading to

ineffective lecturing. Meanwhile, lecturers argue that campus is responsible for the ineffectiveness of online lecturing media. Viewed from the campus' perspective, it is because it is necessary to record the lecturing activity orderly.

Figure 2. *Online lecturing effectiveness model*



Conclusion and Recommendations

Considering the result of research, it can be concluded that generally, e-learning activity conducted by Garut University had not been effective yet, viewed from students, lecturers, and the campus as the service provider. There were 10 out of 48 categories of issues delivered by students related to online lecturing, in which 3 (three) main issues are relevant to the lecturer performance related to direction, weight, and timing assignment. Meanwhile, lecturers argued that learning media instructed by the campus was not reliable and made the materials and lecturing processes difficult, thereby generating many complaints among the students.

Some recommendations are proposed based on the findings of this study.

- There are should be a consideration for familiar, reliable and friendly behaviours to cellular networks of the learning media for both lecturers and students;
- The lecture attendance recording system is sufficient with the lecturer's report to the academic officers of each faculty with acceptable evidence;
- Besides giving assignments to students proportionally, during the lecture period, lecturers open discussion activities through agreed media, so that students get good directions and explanations;
- Online lectures should not only be held when the government instructs social and physical distancing, but universities need to prepare themselves to follow the development of industry 4.0 where online lectures are one of the challenges;
- Lecturers are given training in several alternative implementations of online lectures through media that allow all lecturers to participate;

- The IT team conduct an online comparative study on which campuses have successfully implemented online lecture systems in Indonesia.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest.

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