

Inhibiting Factors of Online Learning in The Faculty of Education, State University of Jakarta

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Abstract-Less than 20 lecturers have had accounts and developed learning from a total of 104 lecturers. The quantity and quality of faculty of education lecturers who develop network-based learning at <http://fip.unj.ac.id/hylearn> are still very low. It is very unfortunate that the facilities provided and the eight departments within the faculty of education are social science groups, which in scientific studies have characteristics to be developed in the online learning format. Seeing the problems that have been conveyed, the researcher will conduct research that seeks information about the inhibiting factors for the faculty of education lecturers in developing online learning. The method used is a survey method which will produce data on inhibiting factors for lecturers when developing online learning. The location of this research is in the faculty of education, State University of Jakarta, while the data source for this development research is the lecturers.

Keywords: *Online-Learning, hybrid-learning, Inhibiting Factors.*

I. INTRODUCTION

Currently artificial intelligence (AI) that converts data into information has made it easy and inexpensive for people to get it, the UNJ Education Faculty as an Educational Institution must be prepared to face developments in digital technology. These changes include changes in the learning process that affect the work procedures of higher education as one of the sources of these conveniences. In facing these challenges and changes, the world of higher education needs to make arrangements to remain capable of carrying out various roles, namely education and lecturers, development, and dissemination of knowledge. One of them is by intervening in innovative learning methods in the curriculum. This innovation is very important to be implemented in the curriculum given the introduction of the industrial era 4.0 so that the demands of this era are speed and accuracy. It is feared that graduates cannot be absorbed by the industry if the curriculum used cannot meet the needs of the current industrial era. One of the learning interventions carried out is the development of network-based learning for students and lecturers at <http://fip.unj.ac.id/hylearn>. For the online learning platform used is Totara LMS and the network-based curriculum used is blended learning.

According to the definition, the Lecturer is a professional educator and scientist. Transforming, developing, and disseminating science, technology and art is the main task of a lecturer. Lecturers carry out their duties through education, research, and community service called "Tridharma Perguruan Tinggi". The Faculty of Education has as many as 104 permanent lecturers who work full time and status as educators. The description of permanent lecturers in the Faculty of Education in accordance with the Higher Education Data Base (PDDIKTI) on November 16, 2018 is as follows:

Table 1. Distribution of lecturers in the Faculty of Education, Jakarta State University

No.	Unit (Faculty/Study Program)	Highest Education			Total
		Doctor/Applied Doctor/ Subspecialist	Master/Applied Master/Specialist	Profession	
(1)	(2)	(3)	(4)	(5)	(6)
1.	Edu. Technology	0	11	-	11
2.	Pendidikan Luar Biasa	4	14	-	18
3.	Edu. Management	4	3	-	7
4.	Pendidikan Luar Sekolah	4	5	-	9
5.	Pendidikan Guru Pendidikan Anak Usia Dini	2	12	-	14
6.	Bimbingan dan Konseling	1	9	-	10
7.	Pendidikan Guru Sekolah Dasar	6	23	-	29
8.	Magister Bimbingan dan Konseling	6	0	-	6
total		27	78	-	N_{DT}=104

Currently at the UNJ Faculty of Education there are 90 lecturers who already have Lecturer certificates. This shows that 87% of the lecturers of all lecturers in the Faculty of Education have met professional requirements as educators. With this amount, of course, it is expected that lecturers will always develop themselves, one of which is learning that utilizes Information and Communication Technology.

However, the quantity and quality of lecturers who develop network-based learning at <http://fip.unj.ac.id/hylearn> are still very low, as seen from less than 20 lecturers who already have accounts and develop learning from a total of 104 lecturers. This is very unfortunate considering that eight study programs in the Faculty of Education are study programs in social science studies, which have the characteristics to be developed in an online learning format.

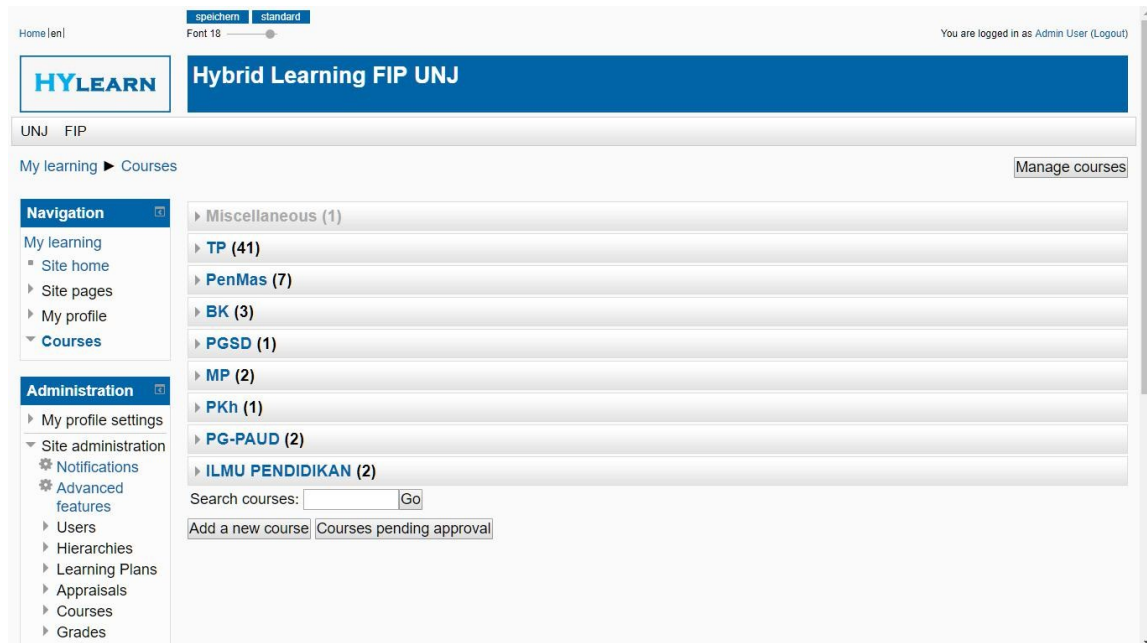


Figure 1. Number of online courses developed by each study program at the FIP UNJ

First name / Surname	ID number	Email address	City/town	Country	Last access	Edit
AIP BADRUJAMAN			DKI Jakarta	Indonesia	207 days 1 hour	✕ ⚙
anan sutisna			DKI Jakarta	Indonesia	94 days 7 hours	✕ ⚙
apriila putri wijayanti			DKI Jakarta	Indonesia	6 days 9 hours	✕ ⚙
Arief Ramadhan			DKI Jakarta	Indonesia	3 days 20 hours	✕ ⚙
Azizah Muis			DKI Jakarta	Indonesia	218 days 20 hours	✕ ⚙
Budi Santoso			DKI Jakarta	Indonesia	218 days 8 hours	✕ ⚙
Deesi Rahmawati			Jakarta	Indonesia	236 days 8 hours	✕ ⚙
Diana Ariani			jakarta	Indonesia	60 days 2 hours	✕ ⚙
Dumy Mumy			DKI Jakarta	Indonesia	119 days 22 hours	✕ ⚙
Eveline Siregar			DKI Jakarta	Indonesia	3 days	✕ ⚙
Hana Alodianada			DKI Jakarta	Indonesia	90 days 5 hours	✕ ⚙
Hilma Fitriyani			DKI Jakarta	Indonesia	218 days 21 hours	✕ ⚙
Ika Lestari			DKI Jakarta	Indonesia	219 days 1 hour	✕ ⚙
jaenal mutakim			DKI Jakarta	Indonesia	123 days 10 hours	✕ ⚙
Kunto Imbar			DKI Jakarta	Indonesia	86 days 4 hours	✕ ⚙
Niken Pratiwi			DKI Jakarta	Indonesia	219 days 1 hour	✕ ⚙
Noval Kurniawan 1515153807			Jakarta	Indonesia	116 days 4 hours	✕ ⚙
retno wildyaningrum			jakarta	Indonesia	6 days 1 hour	✕ ⚙
risa santosa			Jakarta	Indonesia	254 days 6 hours	✕ ⚙
Sofia Hartati			Jakarta	Indonesia	5 hours 6 mins	✕ ⚙
Sri Koeswantonno W. Papa Tono			Rawamangun	Indonesia	17 days 14 hours	✕ ⚙
Wening Cahyawanlan			Jakarta	Indonesia	110 days 11 hours	✕ ⚙
Winda Dewi Listyasari			DKI Jakarta	Indonesia	219 days 1 hour	✕ ⚙
Zara Larasati			DKI Jakarta	Indonesia	6 days 3 hours	✕ ⚙

Figure 2. The frequency and quantity of lecturers in online learning is still low.

A study is needed to find information about factors that might be an obstacle for the Faculty of Education lecturers in developing online learning based on the problems previously stated.

II. LITERATURE REVIEW

DIGITAL NATIVE AND DIGITAL IMMIGRANTS

The characteristics of students who have a tendency in technology and students who are included in the digital native criteria are the consideration of the development of this network-based learning in the UNJ Faculty of Education. Characteristics of Digital Natives as 'opportunistic' and 'omnivorous' people who enjoy something in an online environment (want to get information quickly); choose to collaborate from one person to another (networked); multitasking; able to work process in parallel; choose something in the form of an interactive image compared to the text; enjoy working as a 'games'; expect an award, be satisfied with something that is instantaneous; access randomly using hypertext. Hypertext environments emerge with the development of the internet so that they affect different ways of using information. The internet facilitates the difference in accessing information for an individual with the same information but with a different process (Mardina, 2011). The characteristics of the generation of Digital Natives such as this are opportunities and challenges for lecturers in improving the quality of lectures, including designing appropriate learning strategies and achieving learning goals from each subject. Meeting the needs of students as digital natives is certainly not easy, especially when viewed from the characteristics of lecturers who are at odds with students. If UNJ Faculty of Education students are included in the digital natives category, then the UNJ Faculty of Education lecturers can be categorized as Digital Immigrants.

To overcome the obstacles, the first thing to know is to know the distribution of lecturers who are in the category of digital immigrants, by knowing the level of lecturer position as a digital immigrant, the lecturer can understand their steps or needs in adapting to technology.

Digital Immigrants fall into the following three major groups:

Avoiders: We have all met avoiders among the digital immigrants. They prefer a lifestyle that leaves them relatively technology-free or with minimal-technology. They tend to have landlines, no cell phone and no email account. They do not Tweet or Facebook, and what is highly illustrative for this group is that they do not see much value in these activities.

Reluctant adopters realize technology is a part of today's world and they try to engage with it, but it feels alien and unintuitive. This group is widely diverse and probably includes most of the digital immigrant group. While they may have a basic cell phone, they do not text if they can help it. They may use Google occasionally, do not have a Facebook account, check their emails intermittently and perhaps have surrendered to online banking. This group is defined more by its cautious and tentative attitude towards digital technology rather than by its willingness to use these technologies.

Enthusiastic adopters are the digital immigrants who have the potential to keep up with natives, due to their ease, capacity, and interest in using technology. They may be high-tech executives, programmers, businesspeople and others who embrace technology and immerse themselves in the Internet culture. This group sees the value of technology and does their best to make use of it. Some members of this group - very few - are of the Bill Gates variety, and have a knack for these things despite their status as digital immigrants. Members of this group text, use Skype, have and use a Facebook account (recognizing that this is the best way to interact with their kids in a favored medium and connect with old friends), check email regularly, and are excited about new gadgets and tech developments. They may also keep a blog, and they have a website if they are in business (Dabbagh and Bannan, 2005).

Online Learning there are differences in the implementation of face-to-face learning and online learning. In general, the differences in the two patterns will be described in the table below¹:

Table 2. Face-to-face and online differences

Type of role	Lecturer Role	Student Roles	Learning Environment
Traditional Role Face-to-Face	Managers, Experts, Subject-Material Experts, Controllers, Information Providers, Designing Learning Objectives, Timekeepers	Listeners, recipients, new people, passive, trust the lecturers to assess learning	Objective, Directed or Teacher centered, Structural use
Supportive Roles in Online Learning	Sources, co-participants, moderators, facilitators, trainers, monitors, advisors	Problem solvers, explorers, researchers, collaborators, goal makers, moderators, facilitators, participants	Constructivist, learner centered, emphasizes collaborative learning, uses general learning strategies, without or adaptive in relying on lecturers, interdependent

Adapted from "Pedagogic Roles and Dynamics in Telematics Environment," by C, McLoughlin and R, Oliver, in *Telematics in Education: Trends and Issues* (p.39), edited by M. Selinger and J Pearson, 1999, Kiddington, Oxford, UK: Pegamon Press

Online learning environments have developed rapidly, which makes students study individually. Internet connections and universal browser protocols such as the World Wide Web (WWW) have made learning activities and information sharing more collaborative.

In Online learning Concepts, Strategies, and Applications according to Dabbagh and Bannan (2005) the definition of online learning is as follows:

Online learning is an open and distributed learning environment that uses pedagogical tools, enable by internet and web based technologies, to facilitate learning and knowledge building through meaningful action and interaction.

From the definition by Nada Dabbagh stated above it can be concluded that online learning is an open learning environment by considering aspects of learning where it is possible to use internet and web-based technology to facilitate the learning process and build meaningful knowledge.

Khan (1997), the definition of online learning is an *online instruction as an innovative approach for delivering instruction to a remote audience, using the Web as the medium*. From the definition proposed by Khan (1997), that online learning focuses on the learning process that utilizes the web as a medium.

Some experts suggest several benefits of internet learning activities such as:

1. Increase the level of learning interactions between students and lecturers or instructors.
2. Enables learning interactions from anywhere and at any time.
3. Reach students with quite extensive coverage.
4. Simplify the improvement and storage of learning methods.
5. makes it easy to get references needed by students related to subject matter.

From the definition of experts it was concluded that online learning is a learning environment that uses Internet, intranet, and web-based technology in accessing learning materials and allows learning interactions between students or lecturers anywhere and anytime.

III. METHOD

This article uses a literature review approach to support the argumentation on inhibiting factors of online learning. By considering the development of digital native and digital immigrants theory in online learning and constraints in online learning. These theories form the basis of the author to try to answer any potential or obstacles to the implementation of online learning.

IV. DISCUSSION

Constraints in Online Learning, According to Ariani by quoting maguire (2005), As a learning system, online learning is not independent, all aspects have a role in its development. Therefore, in practice it must be ensured that these aspects go according to the plot. The following are some aspects that are of concern in the application of online learning (Ariani, 2018).



Figure 3. Concerns in implementing Online Learning.

Table 3. Possible Constraints that must be overcome in the Implementation of Online Learning (Carliner, 2008)

ASPECT	SUB ASPECT	POSSIBLE PROBLEMS
Time	The drain of time	Will Online Learning require more time and investment than preparing and conducting face-to-face learning?
	Equitable workload	If you implement Online Learning, will the additional work done by the lecturer be recognized?
Resource	Funding for design and development	Who will do the work of developing Online Learning, and how will these people be compensated?
	Benefits for additional work	Will it be paid for additional work in the development of online courses?
	Media	Who will pay for the additional media needed for Online Learning?
Support	Administration	Do policy makers fully support Online Learning?
	Peers in the Community	If there is a problem in the Online Learning development process, where can the lecturers find the resolution support?
	Technical Support	What help is available for Online Learning students and institutions? Is it available 24 hours in 7 days? If not, when is it available?
	Training	Is there training available for designing and developing skills in implementing Online Learning? Can the training schedule be in accordance with daily activities?
Knowledge	Tech skills	Do lecturers have the technical skills needed to develop and teach the Online Learning program?
	Learning Design	How do lectures with Online Learning patterns differ from traditional learning? Does the lecturer have the ability to design learning for the Online Learning process?
	Facilities and Management	Are lecturers to be facilitated and managed properly if doing Online Learning?
Quality	Lack of student interaction	How students can feel comfortable with new patterns of interaction with lecturers, fellow students and learning material
	The presence of lecturers	How do students benefit from lecturers as instructors and experts in their fields? How can lecturers get physical compensation for non-existence there in class, but still carry out Online Learning?
	Learning Experience	Learning Experience Does Online Learning prove to be a learning experience equivalent to traditional learning? What can be done to make two equivalent methods in learning outcomes?
	Assessment Method	How do I minimize fraud and deception when learners work from different locations?
Student skills	Tech skills	Do students have the technological skills needed to work online?
	Reading skills	Do students know how to use and evaluate information from a website?
	Learning options	What should the lecturer do when students are reluctant to go online and prefer to take face-to-face learning?
	Learning Skills	Are students mature enough to study the material available in Online Learning and complete work responsibly
	Motivation	Are participants motivated to learn from a distance and find activities that are relevant and meaningful?
Career	Job Safety	How does participation in the Online Learning affect the job security?
	Distraction from the preparation of the research agenda.	Does the time lecturers provide to develop Online Learning can disrupt the routine work agenda?
	Term of office and promotion.	Does Online Learning help with positions and promotions?
	Institutional rewards.	What rewards and incentives are available for those who are active in developing Online Learning and those who are not?

Cont. Table 3. Possible Constraints

ASPECTS	SUB ASPECT	POSSIBLE PROBLEMS
Technology Base	poor infrastructure	What types of infrastructure are available at the institution?
	Technology Access	Do students have access to internet connections and other technologies needed?
	Technology Reliability	How reliable is the technology available at the institution?
	Change of Needs	How do you follow changes in needs and standards related to learning technology?
Ownership and Control	Copyright	What can the lecturer claim for the effort to make Online Learning and use it?
	Sharing learning and scientific products	How can lecturers control the distribution and publication of the resources they make? What access can you have to get resources (material) made by others?
	Technology Transfer	How can lecturers participate in the transfer of promising technology into valuable products?
Integrity, Privacy and Humanitarian Issues	Supervision and privacy	What control do lecturers have to find out who entered and observed the online class?
	Security	What threats might be encountered? How can this affect my work?
	Plagiarism	How can lecturers prevent plagiarism and avoid that in developing subject matter?
	Quality of life	What are the effects on life when doing Online Learning? How to keep these things managed wisely, and avoid being controlled by technology?
Possible Incentives or Motivators for Participation	Intellectual Challenge of Work Innovation	Are lecturers ready to do something innovative and pioneering with Online Learning?
	Building resilient resources	Can you leave a lasting legacy for others through contributions to Online Learning?
	Work flexibility - Habit changes	Will Online Learning provide an alternative in doing assignments? Will Online Learning ease teaching assignments in class
	Flexibility of work schedule	Will Online Learning provide more flexibility at work?
Support and Recognition	Co-workers	Will colleagues pay attention and support Online Learning activities? Will lecturers enjoy respect and appreciation?
	Work Tops	Is Online Learning a priority for employers? does the support provide tangible benefits?
	Profession	Can Online Learning affect professionalism?
Student Needs	Involvement of students with technology	Can students do online learning that cannot be done in face-to-face learning?
	Expand access	Can students reach the learning target?

V. CONCLUSION

Lecturers as Digital immigrants are not born with computer skills. From the term "native", it is clear that digital natives are more tech-savvy than digital immigrants. student nowadays, is different compared to adults. The finding out how digital immigrants learn with the accessibility of technology is crucial. The Faculty of Education - UNJ should be more sensitive in recognizing what might be Inhibiting Factors for lecturers in developing online learning.

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References

Association of Indonesian Internet Service Providers 2017, Survey of Internet Use.
Arief Furchan, Introduction to Research in Education (Surabaya: Nas business, 1982).

- Ariani, D. (2018, February 21). Components of Online Learning Development. *Innovative Learning Journal*, 1 (1), <https://doi.org/https://doi.org/10.21009/JPI.011.09>.
- Dabbagh, N., & Bannan-Ritland, B. (2005). *Online learning: Concepts, strategies, and application*. Prentice Hall.
- Ibnu Hadjar, Basics of Quantitative Research Methodology in Education, (Jakarta: PT Raja Grafindo Persada, 1999).
- Khan, B.H. (1997). Web-based instruction (WBI): What is it and why is it? In B.H. Kahn (Ed.), *Web-based instruction* (pp. 5-19). Englewood Cliffs, NJ: Educational Technology Publications.
- Mardina, R. (2011). Potensi Digital Natives Dalam Representasi Literasi Informasi Multimedia Berbasis Web Di Perguruan Tinggi. *Jurnal Pustakawan Indonesia*, 11(1).
- Zur, Ofer. (2011). On Digital Immigrants and Digital Natives: How the Digital Divide Affects Families, Educational Institutions, and the Workpl