

## POTENTIAL OF ACCURATE ONLINE LEARNING PLATFORM INTEGRATION IN UNIVERSITY

**Ervan Sidharta<sup>1</sup>, Susanti<sup>2</sup>, Dylmoon Hidayat<sup>3</sup>**

<sup>1</sup> Master of Hybrid Education Technology Program, Faculty of Education, Pelita Harapan University Plaza Semanggi, Jakarta 12930 (021)-25535161

<sup>2</sup> Director of Education at IPEKA Christian School, Komplek Daan Mogot Baru Jakarta 11840 (021)-29669111

<sup>3</sup> Associate Professor at Faculty of Education, Pelita Harapan University Plaza Semanggi, Jakarta 12930 (021)-25535161

Email: [ervan.sidharta@gmail.com](mailto:ervan.sidharta@gmail.com); [susanti.kowinto@ho.ipeka.sch.id](mailto:susanti.kowinto@ho.ipeka.sch.id); [dylmoon.hidayat@lecturer.uph.edu](mailto:dylmoon.hidayat@lecturer.uph.edu)

### Article History

Received: 10 Oktober 2021, Accepted: 13 Desember 2022, Published: 25 Februari 2023

### Abstrak

Pada abad ke-21, teknologi berkembang dengan pesat, dan di tengah pandemi COVID-19 dimana pembelajaran jarak jauh menggunakan jaringan internet, teknologi pendidikan dalam bentuk platform pembelajaran daring memiliki potensi yang besar. Universitas menjadi sebagai institusi pendidikan bertugas menjadi motor penggerak inovasi. Integrasi platform pembelajaran daring yang akurat penting untuk memastikan para mahasiswa, dosen, sampai universitas itu sendiri merasakan manfaatnya. Studi literatur ini mendeskripsikan bagaimana mengintegrasikan platform pembelajaran daring secara akurat beserta potensi positif dan negatif sebagai akibat keakuratan tersebut. Ditemukan bahwa dengan mempertimbangkan tujuan dan strategi pembelajaran, juga kemampuan setiap dosen dan mahasiswa, pembelajaran dapat menjadi efektif, kreatif, interaktif, kolaboratif, bermakna dan bernilai. Para lulusan juga diperlengkapi dengan keterampilan abad-21 dan menjadi warga digital yang baik. Tanpa integrasi yang akurat, kegiatan pembelajaran akan menyita waktu sia-sia dan membuang-buang modal yang digunakan. Para dosen dan mahasiswa juga tidak dapat menunjukkan kinerja maksimalnya dan bahkan dapat berujung depresi. Universitas pun hanya menghasilkan mahasiswa yang hanya pintar secara intelektual tanpa kecerdasan emosional yang baik. Platform pembelajaran daring bergantung pada internet dan memiliki banyak fitur yang perlu diintegrasikan secara akurat untuk mendukung pembelajaran.

**Kata Kunci:** platform pembelajaran daring; integrasi; potensi

### Abstract

In the 21<sup>st</sup> century, where technology develops rapidly, and during pandemic COVID-19 where distance learning relies on internet, online education technology in form of online learning platform has very big potential. University as education institution has the role to be the motor of innovation. Accurate integration of online learning platform is important to make sure all students, lecturers, and even the university itself to experience the benefit. This literature study aims to describe the accurate integration of online learning platform together with its potential caused by the accuracy, both positive and negative. It was found that by considering the learning objectives and strategies together with the capabilities of the students and lecturers, learning can be effective, creative, interactive, collaborative, meaningful, and valuable. The alumnus also equipped with 21<sup>st</sup> century skill and become a good digital citizen. Without accurate integration, learning activities will just waste the time and modals spent. Lecturers and students cannot perform optimally and can lead to depression. University also potentially only produce alumnus who are good intellectually but without good emotional intelligence. Online learning platform relies on internet and has a lot of features that must be integrated accurately to support learning.

**Keyword:** online learning platform; integration; potential

## INTRODUCTION

In the 21st century, especially during the pandemic Covid-19, Indonesia has gone through big changes in the way how lesson is delivered, where face-to-face learning cannot be held anymore as normal. By government regulation, due to some factors like dropping out, decrease in performance, violence against the children and external risks, learning method in Indonesia change from full distance learning and now in the transition to be limited face-to-face learning or being called as hybrid learning. By data, in average of 22% learning in Indonesia will be hybrid learning, while 78% will still be full distance learning, either online or offline (Kemendikbud, 2021).

Darma, Karma & Santiana (2020) emphasize the key element of hybrid learning or can be called e-learning blended which is the once-in-a-time existence of the lecturer with the help of digital communication. While Haiyudi (2021) emphasizes distance learning or remote learning as the students learning from home. This distance learning can be held online or offline, based on whether Internet is used for learning. Purbojo, et al. (2020, pg.9) explain that online learning is a process of learning which utilize information and communication technology (internet) so that the execution will not be limited by distance or time. It can be said here that both hybrid learning and distance learning, especially online distance learning, rely on technology. There are a lot of internet-based technology that can be used so that learning objective can be achieved. This study will focus on the learning in university level, facilitated by internet.

By nature, education technology exists to support learning with the purpose of improving performance (Januzewski & Molenda, 2008, as cited in Huang, Spector, & Yang, 2019). However, with teaching and learning strategy that is not accurate in integrating the technology, or not optimal in implementing the technology, this technology can give unwanted impact, which is making the process of learning to be difficult. Online learning platform is one of main education technology used to support learning such as delivering lesson, assessment, or assignment (Gunawan, Suranti, & Fathoroni, 2020). Rustaman (2020) also emphasizes how online learning platform enable interaction and collaboration between students and lecturers. Nayak, et al. (2020, as cited by Kant, Prasad, & Anjali 2021) explain how online learning platform is essential for flexibility, interactivity, and ease in learning anytime anywhere.

Recent studies, like ones that are done by Gunawan, Suranti, & Fathoroni (2020), Simanullang & Rajagukguk (2020), Ismanto & Cindarbumi (2021), and Buchal & Emmanuel (2019), proved that online learning platform have a lot of features that can indeed help improving students' performance. Each learning platform has different features which can be optimized. Each university usually will give options which learning platform that will be used. However, during the implementation, often observed how lecturer did not optimize its integration. Study done by Fitriyadi (2013) prove how not all people can experience the maximum benefit of this technology, like some unfortunate people, whose resources, knowledge, competency, implementation strategy, and professional development in technology are still lacking.

Study about accuracy in educational technology, especially online learning platform, is very important because digital technology is the main element affecting the success of a lesson, which can be determined by whether or not the learning objective can be achieved. Putrawangsa and Hasanah (2018) also emphasize the importance of education technology, where in the era 4.0, digital technology-based learning offers huge effectiveness, efficiency, and attractiveness.

While there are many studies like mentioned before that talk about how online learning platform can improve performance, either in process or outcome, there is still no study or few studies that talk about the positive and negative potential of online learning caused by the accuracy of its integration. Only few people research about how the inaccurate integration can give negative impact

or not-optimized positive impact in learning, especially in university level. These factors make this study unique.

This study is considered new and relevant as pandemic COVID-19 is experienced by all people, including universities, and the government regulation about distance learning and hybrid learning is still new by 2021. University is higher education level that has the most relevance as the learning progress in university is dominated and based on online learning platform, such as LMS Moodle, Microsoft Teams, Google Classroom. Even after the impact of pandemic COVID-19 is not significant anymore, and face-to-face learning can happen, technology-based learning using online learning platform will still be implemented. Darma, Karma, & Santiana (2020) also supported this by emphasizing study in university level should have moved from a face-to-face conventional learning to a learning utilizing online technology. The question is whether or not the university ready to implement it. After more than one year learning, one observation done by the writer is that some university students are being critical and voice their opinion about how they are not satisfied and even confused with the not accurate or optimal implementation of the online learning platform.

Therefore, this study will discuss how to integrate online learning platform accurately to optimize the potential and avoid the negative impact that can happen. Some questions guiding researchers in this study are: (1) How to accurately optimize online learning platform integration in university level? (2) What are optimal potentials that can be experienced by the users of online learning platform, especially lecturer and student? (3) What are potential negative impacts that can be experienced if online learning platform is not integrated optimally in learning in university level?

## **METHOD**

Based on its nature, this study can be categorized as a literature review with the aim to explore the potential of online learning platform caused by the integration accuracy. This research was done by gathering qualitative data from previous research published in either journal or proceeding, and some concepts from books. This method does not use numeric calculation, but focus on the relevant, recent, and updated research. Indrawan & Yaniawati (2017) explain one of important things done in qualitative study is that the researcher does the exploration using trusted information sources. In other words, this literature study is using qualitative descriptive approach, where the researcher will be the main instrument, where all data and theories will be collected and investigated by the researcher himself (Sugiyono, 2017).

In this study, a social situation is determined to be an online learning platform that is used in university level. Where the actors here are both the lecturers and students. The result of this study has transferability if there are similar important elements, such as online learning platform and university level. In the progress of data collection and discussion, the researcher used snowball sampling, where due to undecided number of sources when researcher did this research, the small sources being used, as time goes by, become bigger and bigger in number due to unsatisfaction of the researcher of the information found (Sugiyono, 2017; Indrawan & Yaniawati, 2017). The study result will be presented descriptively, explaining the details found that are related with the focus of the study, and in the end will be interpreted with personal view of the researcher, making sure that the research questions are answered, even with subjectivity due to the nature of the research being a qualitative research. (Indrawan & Yaniawati, 2017)

## **DISCUSSION**

### **Accurate integration of online learning platform in university level**

Online learning platform integration strongly depend on how the lesson will be conducted and delivered, or in the other words, the teaching and learning strategy. This is because the integration of online learning technology is not the end or the target, but more to the resource or technology

used to help the educator, in this case a lecturer, and the learner, in this case is the university student, to reach the learning objectives. Dhika, Destiawati, Surajiyo, & Jaya (2020) explain that technology, including internet-based ones, is only a supporting resources used in class to help the educator and the learning. This means, the key indicator to determine how to integrate online learning platform accurately lies on the target and the process of the learning itself.

To integrate an online learning platform accurately means that the question of “what” and “how” should be answered after determining and understanding learning objective and the teaching and learning strategy. Learning objective refers to what does the lecturer wants the students to achieve by the end of the class. Teaching and learning strategy refer to the process how the class will be conducted, from the beginning to the end, including the process from opening until assessment.

Understanding learning objectives means understanding the performances that are expected from the students to demonstrate, both in knowledge and skill. Some questions that are relevant here are: “What is the outcome expected from the student?” “How can the lecturer assess the students’ performance?” “How can the students monitor their progress?” “What features relevant to the objectives that want to be achieved?” “What skills that expected to be nurtured through the feature usage?”.

Teaching and learning strategy also include the approach to learning. Some questions that are relevant here are: How does the lecturer want to deliver the material? How does the lecturer want to facilitate communication, like discussion, in the class? How does the lecturer want to upload the materials so that the students can get it? How far the dependency of the students is expected in the class? How can the assignments are assigned with full awareness? How transparent are the assessment? How far the lecturer and students will rely on the online learning platform? Chatib (2009, as cited in Hutubessy, Triswantini, & Asnur, 2021) describes four levels of educators, which are medium teacher, good teacher, great teacher, and excellent teacher. Being a great teacher means being able to formulate his learning from various of sources and make it in form of digital modules, where this technology-utilizing skill is very important and suited to the characters of the teacher and learner. Two approaches of learning that can be implemented in keeping these in mind are active learning or authentic learning (Purbojo, et al., 2020).

Another point to consider in integrating online learning platform as technology education is the capability of the user, in this case is both lecturer and students. Prayogi & Estetika (2019) highlight that in maximizing learning, it is important to nurture the digital competency of the educator and learner. Blyznyuk (2018, as cited in Prayogi & Estetika, 2019) highlight some forms of digital competency which are information, communication, educational content creation, security, and aducational problem solving. Hutubessy, Triswantini, & Asnur (2021) describe some facts where in this 21<sup>st</sup> digital era, every people that graduated from university are expected to be able to handle and utilize technology to its potential. This means, the capability of using online learning platform should be considered properly when educating the students in university level, nurturing them so they can be productive in the industry. By understanding the digital literacy and how fluent one person is in learning and using digital technology, a university can give a good advice of online learning platform selection range. Three strategies exist in keeping the learning as an active learning are Product Based Learning, Project Based Learning, Cooperative Learning.

Fitriyadi (2013) emphasizes one point that is very important when integrating ICT, or in this case the online learning platform, in Indonesia context. Highlighting Indonesia as a country that emphasize religious and social values, other than knowledge and skill, it is explained how an education that emphasize on value is important. EQ is being said to be a big factor that can determine

the success of someone. This means, accurate integration cannot only looking at the end target and the process of learning, but has to consider the value in it. This can be said, a holistic education is very important.

Another point worth mentioning that have big role in determining accurate way in integrating the online learning platform is internet factors. Thorp & Goldstein (2010) emphasize how internet is one main factor that create a fundamental change in the way knowledge is created, in the other word, become the catalyst of university-based innovation. Purbojo, et al. (2020) explain that lecturers have to pay attention at the internet connection quality and the hardware availability in designing their lesson as this is related to flexibility and accessibility.

By nature, as a learning platform that relies on internet, the usage of internet bandwidth cannot be ignored. Hubbard & Bailey (2018) and Johnson (2020) support this by reminding that in selecting and using online learning platform, other than steps in integrating it, it is very important to be aware of technical aspects, including internet quality we are relying on. Selecting the best online learning platform is challenging, and almost impossible to only choose one that is the best out of all. There will always be problem in an online learning platform.

### **Optimal potential of online learning platform due to accurate integration**

There are a lot of online learning platform exist to be used by education institutions. This is supported by Zhang, Tian, & Song (2021) who explain how internet technology give birth to a large number of online learning platform, where if being integrated properly will result in improvement of effective of learning process. Accurate integration due to strong understanding of learning objective and the learning strategy will result in an optimal and effective class. Pei & Wu (2019) put this by emphasizing that the effectiveness of online learning will be guaranteed by the strong understanding and evaluation of digital online learning materials, learning goals and students' characters and performance.

Other than effective learning, good communication and engagement between lecturer and students will also occur. Effective lesson delivery, assignment and assessment are probably some of the main potential lecturers and students are looking for. In the end, the performance of both lecturer and students are at stake. Schlechty (2005) explained that innovation like technology, in this case online learning platform can students' performance, that can be the assessed in form of the learning objectives, that usually used what Bloom has in its taxonomy, both in low level and higher order thinking skill. Learning experience with accurate online learning platform integration his far bigger potential compared to a learning that is not. (Horvat, Dobrota, Krsmanovic, & Cudanov, 2015, as cited in Hutubessy, Triswantini, & Asnur (2021).

Effective class refer to the class-related factors, like activities, materials, assignments, and assessments, are all designed with the target in mind. Where everything will be done to achieve the objective of the lesson. Online learning platforms are developed with many great features in it, where if being utilized properly in its integration, it will lead to a creative way of lesson delivery, widen, and broaden knowledge, and enabling collaboration (Dhika, Destiawati, Surajiyo, & Jaya, 2020).

Nowadays generation profoundly impact the way how learning took shape within classroom. In a university, with availability of online learning platform, material can be delivered and accessed easily (Thorp & Goldstein, 2010). Students can even get most updated materials from their lecturers quickly, helping the lecturers and the students to get closer to achieve learning objectives. Easy accessibility will enable the students to learn not only effectively, but also efficiently, such as learning anytime the students have time, even probably using mobile devices (Hutubessy, Triswantini, & Asnur, 2021).

Communication is an important part in education, especially university level, which the lesson does not depend on one-way delivery from lecturer to students, but more to two-way dialogue between lecturer and students. Not only that, in most of university, lecturer will play part as facilitator in class, meaning the students are the ones who must be proactive in the class for learning (Darma, Karma, & Santiana, 2020). Online learning platform will be the one enabling this. The accurate integration will make the communication happen smoothly in two-way direction. Even Thorp & Goldstein (2010) also put an emphasis on how within a great learning, teachers learn more from the students than the students learn from them, and innovation in technology will enable this to happen.

The students will also be actively engaged in class through many features in the online learning platform that is used. Schlechty (2005) describe how innovation can lead to engagement if being used properly and effectively. It is said that within a class, engagement in activities, tasks and experiences would lead to learning. Online learning platform will be able to facilitate these all these. Some elements of being involved are explained, starting from getting students attention, making them committed to the task or activity, until being assessed. Not only these, collaboration, that is one very important factor of learning that is also one of the key in 21<sup>st</sup> century skill, is explained as one of the benefits in using online learning platform like LMS, learning management system. This will result in a learning where everyone is being participative (Oliveira et al., 2016, as cited in Dhika, Destiawati, Surajiyo, & Jaya, 2020).

Accurately selecting the needed online learning platform for the university provide flexibility for the lecturers while optimizing the potential of lecturers. Not only that, but another benefit can also be seen through how the students can learn through different kind of technologies and nurtured to be a good digital citizen. This means, the requirements of the industry that alumni should have once graduated described by Hutubessy, Triswantini, & Asnur (2021) will be fulfilled. Purbojo, et al. (2020) added alumni's character that are expected to be nurtured to be creative, active and innovative.

Number of online learning platform used in a university should come along with the consistency of the time to use those platforms. This will result in satisfaction of the students regarding the richness of the technology exist in the university. A new way of learning, which is utilizing this online learning platform can be something that gives students different learning experience that may potentially raise students' learning motivation (Dhika, Destiawati, Surajiyo, & Jaya, 2020).

Being able to accurately integrate an online learning platform and utilizes all its features will result in ability in tracking and analysing students' performance in every course, assessment, discussion, and other activities (Darma, Karma, & Santiana, 2020). This means that the lecturers can make sure they understand what the needs of the students are and how to help them to achieve the objectives of the lesson. Other than that, there are studies done by Sicat (2015) and Joshua (2015) that shows how accurate integration of the online learning platform result in increase of motivation in learning and effectiveness in the blended learning. Permana, Kudsi, Iriantara, & Barlian (2021) also shows that explain that another potential is discipline-shaping, like in submitting work on time.

One point worth emphasized is explained by Darma, Karma, & Santiana (2020), regarding how university should be able to have the lecturers and students under its wing wanting to innovate. Because learning in university, should be able to adapt quickly with the rapid change that is happening and the university must become the motor of innovation. Internet have existed, and now university should utilize it to its optimum potential. Zhang, Tian, & Song (2021) in their study in the university level prove how university students who are capable of using online learning platform

use it more often as they feel that the ease of use and cost will help them in getting better learning experiences and grades.

### **Negative potential of online learning platform due to inaccurate integration**

Inaccurate selection of online learning platform, or inaccurate integration due to lack of understanding of learning objectives and the learning strategy will lead to half-baked practice in using an online learning platform. Ability and awareness of the lecturer and students in using the features exist in an online learning platform will result in an ineffective and not-creative class. Both too many online learning platform or the unification have its own drawbacks. This will give negative impact to both lecturer and the student.

Inaccurate selection of what platform suitable for the lecturer will result in the lecturer can only use the very minimum features of the platform. While on the other hand, for students, this will lead to unsatisfied, not-useful, and not-meaningful learning experience. Some of these can be expressed in a way how the students are disengaged in the learning, not being active in communicating nor socializing as student. In the end, one of the key questions in determining the success of a class, whether learning objective is achieved, will be answered with just two letters, "no". Below are some explanations.

Every online learning platform has its own uniqueness, strengths, and weaknesses. This can be seen from how many features the platform has. While it is not a negative impact, it must be mentioned that when a lecturer or the students cannot optimize all the features that he needs in the class, the class will not be able to run optimally. Suprpto (2018) also support this by saying human resource, in this case the capability in using online learning platform, is one of the most challenge that can be found in most learning process.

Inability in utilizing the relevant features will result in an ineffective class. Ineffective class here refers to a class filled with activities that not necessarily aimed to achieve the learning objectives, resulting in an ineffective time-consuming activities. Inability in utilizing the platforms' features due to lack of awareness can result in a monotone and not-creative class, where the approach to learning will keep using the same feature and pedagogy. Zhang, Tian, & Song (2021) put an emphasis on this by saying how university students look at online learning platform from the point of view of fun learning process. Schlechty (2005) described how inaccurate use of technology within class, in this case an online learning platform, will result in retreatism and rebellion. Retreatism is where students withdraw from an activity or task while rebellion is where the students overtly reject the activity or task given to them and wanting it to be replaced with some other preferred one.

Permana, Kudsii, Iriantara, & Barlian (2021) explain that when the educator cannot optimize the platform by utilizing the features needed for his class, the lesson will not be able to be delivered as he wanted ideally, which happened a lot in class that puts heavy emphasis in practical lessons. Without being aware of the existence of features he needed, he will not be able to formulate lesson that is effective in helping the students achieving the objectives. Xia and Li (2018) described how their study found that some educators only use online learning platform in its minimum potential, which is just to enrich content, while the content delivery remain traditional. The biggest factor that cause this is the fear of students getting distracted with unrelated things while using online learning platform.

In selecting an online learning platform, the main issue to be addressed is not about the number of the platform, however, it is more about how the platform can keep updating and address many problems occurring in the online learning. Otherwise, learning experience will not be optimal, due to inability to keep up with the rapid change happening. Other than that, there are important things

to be considered such as flexibility and the cost to pay in using an online learning platform. The basic idea highlighted is regarding whether the user, in this case lecturer and students, can make the most of it (Kant, Prasad, & Anjali, 2021). In the end, if these are ignored, the potential of online learning system selected to be integrated in the class will be wasted.

Lack of capability in using the online learning platform will result in the individuals with this problem being left behind in the class (Hutubessy, Triswantini, & Asnur, 2021; Pei & Wu, 2019) and moreover, if the student is not active in learning and keeping quiet. This will result in the students unable to perform optimally and demonstrate what they understand. This is one serious problem which Magson, et al. (2021) addressed. During online distance learning, where technology like online learning platform is heavily relied on, the most common problem being reported is technology related, inability to understand the material, inability to ask teacher to explain the work, and the problem related with motivation. These can lead to depression, which is a big problem. This inability, to make everyone to at least understand and able to utilize the platform in the minimum standard, must be addressed properly and solved even before the class begins. Digital literacy is a very important factor, that without it, both educator and learner will be unable to utilize even the most modern technology (Fitriyadi, 2013).

Ignoring education that nurture the values, will result in someone with a good intellectual knowledge, yet not-so-good characters. This will lead a problem in the future of the person in industry, where character will have about 80% determining value in whether the person can success (Fitriyadi, 2013). Sanjaya (2011, as cited in Suprpto, 2018), also emphasize that to make sure the a class is meaningful, the success of a class cannot be measured only by looking at the intelectual achievement, but also whether the learning process is filled with educational values.

Internet bandwidth usage should be considered seriously. Some online learning platforms that have a lot of features in it, may probably result in using a lot of bandwidth. This is a serious problem, especially during distance learning that not everyone is blessed with equal digital access, in this case, good and stable internet access, including huge bandwidth in it. Limited bandwidth that can be used by either lecturer or students can result in loss of internet quota, and in the end, the cost that must be paid cannot be overcome by the outcome they achieve. Within a study done by Hutubessy, Triswantini, & Asnur (2021), some data shows how some students cannot fully comprehend the lesson material due to the limitation of external aspect like internet that is limited or not quite good. Suprpto (2018) also support this by mentioning that one challenge that educators still have nowadays is being limited by the facility, in this case like internet. Pei & Wu (2019) also mention that limited cost and access to internet can limit the learning and result in low-quality online learning, not to mention the possibility of possibility of technical problems.

## **CONCLUSION**

Online learning platform is one of technology development that if being integrated accurately in the university, will benefit all stakeholders, such as the lecturers, students, and even the university itself. This benefit can be experienced when the online learning platform is selected properly, and the users are trained to have the capability to use it optimally. To accurately integrate the platform, it is essential to keep the target in mind and what kind of teaching and learning strategy that should be designed to achieve the target, as the online learning platform will have role only as a support and resource in the learning. Accurate integration should also be holistic and consider factors such as internet, as online learning platform relies on internet. Benefits of accurate integration of online learning platform is mainly about how the objective of the lesson can be achieved and the learning process can be fruitful. With accurate integration, the engagement, excitement, communication, collaboration, and motivation will blossom and increase in the learning. These benefits not only



perceived within a class, but also are more personal and everlasting, such as polishing characters, discipline, and 21<sup>st</sup> century skill that is needed in industry, especially once the students graduated from university, and enter the working life. In this digital era, they can also be a good digital citizenship. Without accurate integration of this online learning platform, the users cannot experience the optimal benefit of the technology, but they will experience negative impact of it. These can be in form of ineffective and not-creative learning process, which lead to dissatisfaction of the students, expressed in retreatism or rebellion because the activities designed by the lecturer and the time and other costs that must be paid by the students are wasted. Without accurate integration, that considers educational values, a university will only produce alumni good in intellectual, but not in characters. Inability of a university in understanding lecturers and students' ability in integrating the online learning platform can also lead to a serious problem like inability to perform optimally and this can lead to depression.

## REFERENCES

- Buchal, R., & Emmanuel, S. (2019). Using Microsoft Teams to support collaborative knowledge building in the context of sustainability assessment. *Proceedings of the Canadian Engineering Education Association (CEEA)*.
- Darma, I. K., Karma, I. G., & Santiana, I. M. (2020). Blended Learning, Inovasi Strategi Pembelajaran Matematika di Era Revolusi Industri 4.0 Bagi Pendidikan Tinggi. *PRISMA, Prosiding Seminar Nasional Matematika, 3rd ed.*, 527-539.
- Dhika, H., Destiawati, F., Surajiyo, & Jaya, M. (2020). Implementasi Learning Management System Dalam Media Pembelajaran Menggunakan Moodle. *Prosiding Seminar Nasional Riset Dan Information Science (SENARIS) 2020, Vol.2*, (pp. 228-234). Pematangsiantar.
- Fitriyadi, H. (2013). Integrasi teknologi informasi komunikasi dalam pendidikan: potensi manfaat, masyarakat berbasis pengetahuan, pendidikan nilai, strategi implementasi dan pengembangan profesional. *Jurnal Pendidikan Teknologi dan Kejuruan, 21 (3)*, 269-284.
- Gunawan, Suranti, N. M., & Fathoroni. (2020). Variations of Models and Learning Platforms for Prospective Teachers During the COVID-19 Pandemic Period. *Indonesian Journal of Teacher Education, 1(2)*, 61-70.
- Haiyudi, & Art-in, S. (2021). Parents' involvement in learning assessment during remote learning in pandemic era. *JKTP: Jurnal Kajian Teknologi Pendidikan, 4(1)*, 108-117.
- Huang, R., Spector, J. M., & Yang, J. (2019). *Educational Technology: A Primer for the 21st Centuries*. Singapore: Springer.
- Hubbard, M., & Bailey, M. J. (2018). *Mastering Microsoft Teams: End User Guide to Practical Usage, Collaboration, and Governance*. New York: Apress.
- Hutubessy, E. D., Triswantini, E., & Asnur, M. A. (2021). Eksplorasi Perencanaan Pembelajaran Bahasa Jerman Berbasis Moodle dengan Integrasi Keterampilan Abad XXI. *Brila: Journal of Foreign Language Education, 1 (1)*, 43-54.
- Indrawan, R., & Yaniawati, R. P. (2017). *Metodologi Penelitian: Kuantitatif, Kualitatif, dan Campuran untuk Managemen, Pembangunan, dan Pendidikan, 3rd ed.* Bandung: refika ADITAMA.
- Ismanto, & Cindarbumi, F. (2021). Analisis Efektivitas Pembelajaran Kalkulus Berbasis MS Teams pada Masa Pandemi Covid-19. *MAJAMATH: Jurnal Matematika dan Pendidikan Matematika, 4 (1)*, 91-103.

- Johnson, A. (2020). *Online teaching with zoom: a guide for teaching and learning with videoconference platforms*.
- Kant, N., Prasad, K. D., & Anjali, K. (2021). Selecting an appropriate learning management system in open and distance learning: a strategic approach. *Asian Association of Open Universities Journal*, 16 (1), 79-97.
- Kemendikbud. (2021). Keputusan bersama menteri pendidikan dan kebudayaan, menteri agama, menteri kesehatan, dan menteri dalam negeri tentang panduan penyelenggaraan pembelajaran di masa pandemi coronavirus disesase 2019 (covid-19). Jakarta: Kementerian Pendidikan dan Kebudayaan.
- Magson, N. R., Freeman, J. Y., Rapee, R. M., Richardson, C. E., Oar, E. L., & Fardouly, J. (2021). Risk and Protective Factors for Prospective Changes in Adolescent Mental Health during the COVID-19 Pandemic. *Journal of Youth and Adolescence*, 50 (1), 44-57.
- Pei, L., & Wu, H. (2019). Does online learning work better than offline learning in undergraduate medical education? A systematic review and meta-analysis. *Medical Education Online*, 24 (1), 1-13.
- Permana, D., Kudsii, I., Iriantara, M. S., & Barlian, U. C. (2021). Inovasi pembelajaran dengan model blended learning di masa pandemi covid 19. *Vocational: Jurnal Inovasi Pendidikan Kejuruan*, 1 (1), 31-47.
- Prayogi, R. D., & Estetika, R. (2019). Kecakapan Abad 21: Kompetensi Digital Pendidik Masa Depan. *Jurnal Manajemen Pendidikan*, 14 (2), 144-151.
- Purbojo, R., Sihole, R., Adriana, R., Christiani, L., Hartono, C., Krisanti, E., . . . Adi, Y. (2020). Panduan Pembelajaran Daring: Dosen, Ver:1.0. Tangerang, Banten, Indonesia. Retrieved from [http://repository2.uph.edu/1552/1/Panduan\\_Pembelajaran\\_Daring\\_%28Dosen%29%20small.pdf](http://repository2.uph.edu/1552/1/Panduan_Pembelajaran_Daring_%28Dosen%29%20small.pdf)
- Putrawangsa, S., & Hasanah, U. (2018). Integrasi teknologi digital dalam pembelajaran di era industri 4.0: Kajian dari Perspektif Pembelajaran Matematika. *JURNAL TATSQIF: Jurnal Pemikiran dan Penelitian Pendidikan*, 42-54.
- Rustaman, A. H. (2020). Efektivitas Penggunaan Aplikasi Daring, Video Conference Dan Sosial Media Pada Mata Kuliah Komputer Grafis 1 Di Masa Pandemi Covid-19. *Jurnal Ilmu Sosial dan Pendidikan*, 4 (3), 557-562.
- Schlechty, P. C. (2005). *Creating Great Schools: Six Critical Systems at the Heart of Educational Innovation*. San Fransisco: Jossey-Bass.
- Simanullang, N., & Rajagukguk, J. (2020). Learning Management System (LMS) Based On Moodle To Improve Students Learning Activity. *Journal of Physics: Conference Series*.
- Sugiyono. (2017). *Metode Penelitian Kombinasi (Mixed Methods)*. Bandung: Alfabeta.
- Suprpto, H. A. (2018). Strategi pembelajaran kewirausahaan berbasis teknologi informasi (ti) terhadap peningkatan minat mahasiswa menjadi wirausaha. *Didaktis: Jurnal Pendidikan dan Ilmu Pengetahuan*, 18 (1), 61-73.
- Thorp, H., & Goldstein, B. (2010). *Enignes of Innovation: The enterpreunal university in the twenty-first century*. United States of America: The University of Noth Carolina Press.
- Xia, Y. X., & Li, Z. C. (2018). The influence and risk of education platform on middle school students' Education under the background of "Internet +". *3rd International Conference on*

*Modern Management, Education Technology, and Social Science (MMETSS 2018)* (pp. 4-7).  
Zhuhai: Atlantis Press.

Zhang, L., Tian, Y., & Song, S. (2021). Research on the influence of college students' self-directed learning behavior based on online learning platform. *Journal of Physics: Conference Series*, 1-11.