



## Implementation of Hybrid Learning in Higher Education

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**Abstract:** This research aims to explore the process of using hybrid learning in higher education in Indonesia and explore the strengths and weaknesses of hybrid learning in higher education. The method for reviewing the literature is carried out by searching and collecting literature studies with the keyword "implementation of hybrid learning in higher education". The search results show that hybrid learning has a positive impact on the learning process in higher education and is effectively implemented in higher education. The impact can simultaneously improve student learning outcomes such as motivation, cognitive skills, communication skills, discipline, connections, representation, and mathematics. In addition, this hybrid learning has strengths such as increased complexity and better understanding of the material, weaknesses such as difficulty managing study schedules and student dependence on devices and networks, opportunities such as reduced digital alignment and connection of more than one learning model, and threats such as workload and there is a gap between learning design and student learning styles. It is hoped that the results of this research can be used by policymakers as a reference in decisions about using hybrid learning.

**Keywords:** Hybrid Learning, higher education

### INTRODUCTION

The current development of information and communication technology has influenced all existing aspects such as economic, cultural, political, social, security, defense, homework, leadership, and even the world of education. In the world of education, the development of information technology has encouraged the emergence of various innovative learning models. Innovation learning models themselves emerge as alternative solutions to overcome various obstacles to traditional learning methods.

The emergence of the COVID-19 pandemic, which has hit almost all countries, has had an impact on several aspects of life, including education. Continuing to carry out lectures

and continuing to implement Health protocols gave rise to the idea of online lectures. This is a concern for educators and people involved in the education sector to be able to keep up with changes in the post-pandemic world of education. Learning from the situation during the pandemic, educators are inevitably required to have insight into technology-based education.

Responding to this need, universities are now implementing hybrid learning courses. Implementing lectures using hybrid learning is a type of lecture that combines two types of lectures face-to-face or offline and also virtual or online, this is as stated by O'Byrne and Pytash (2015) who state that "hybrid learning is a pedagogical approach to learning that combining face-to-face learning with virtual face-to-face learning. This is in line with the opinion of Dwiwogo (2018) who states that "Hybrid learning is a learning model in which there is a combination of face-to-face learning in the classroom and supplemented with learning using technology".

Based on this, it can be concluded that hybrid learning is a type of learning or lecture that combines two types of learning, namely offline face-to-face and online virtual face-to-face. Another opinion regarding hybrid learning was put forward by Thorne (2003) who stated that hybrid learning is "a type of learning that can integrate innovation and technological progress through a learning system that can be done virtually with interaction and participation from traditional or face-to-face types of learning".

Another opinion regarding hybrid learning is expressed by Henry (2013) who states that "hybrid learning is a learning model that integrates innovation and technological progress through online and offline learning systems with interaction and participation from all students." So based on all these opinions it can be concluded that this hybrid learning lecture is a lecture that combines offline and online lectures.

In higher education, hybrid learning offers flexibility and access to educational resources including lecturers, faculty, and course materials. Flexible courses are delivered in a hybrid form to achieve a balance between face-to-face and online learning. One of the conditions that an institution needs to fulfill to implement hybrid learning is that it needs to have a strong online education management system where courses can be given completely online (Abdelrahman & Irby, 2016). Gultom et al (2022) added that a necessary condition that universities must have to implement hybrid learning is the ability to use information technology because hybrid learning is a combination of face-to-face learning and online learning, in addition to the ability to deliver learning material using mixed learning methods. lecturers must have this because success in hybrid learning lies in the role of teachers who master the competencies to manage hybrid learning-based learning.

Fitria (2018) stated that "the implementation of hybrid learning aims to provide opportunities for students with various characteristics with the aim of independent, sustainable and lifelong learning, which in the end will make learning more effective, efficient and more interesting" Based on this, it can also be concluded that this hybrid learning lecture is expected to be able to explore the potential characteristics of students to be able to carry out lectures independently, sustainably, by prioritizing effectiveness and efficiency in achieving the objectives of the lecture.

It is hoped that the implementation of hybrid learning will be a solution for students. Effectiveness in the lecture process is the achievement of lecture targets and is also related to the competency of the courses both in terms of cognitive, affective, and psychomotor, all of which are comprehensive competency targets that students must have based on the courses they are contracted for, other processes in the implementation of lectures, namely efficient, where efficiency itself is accuracy related to time allocation based on the number of semester credit units. To be able to achieve this, the participation of all parties involved in the lecture process is required, namely lecturers, students, and even university leaders.

Based on the description above, researchers are interested in conducting a study in the form of exploring the process of using hybrid learning in universities in Indonesia and exploring the strengths and weaknesses of hybrid learning in universities. It is hoped that the results of this research can be used by policymakers as a reference in decisions about using hybrid learning.

## LITERATURE REVIEW

### Hybrid Learning

Hybrid learning is a term used for a Blended/hybrid learning strategy that has narrowed its meaning, where etymologically the term Blended/hybrid Learning consists of two words, namely Blended/hybrid and Learning. The word blend means "mixed, together to improve the quality to make it better" (Collins Dictionary), or formula for harmonizing combinations or combinations (Oxford English Dictionary) (Heinze and Procter, 2006: 236). Meanwhile, learning has a general meaning, namely learning, so at first glance, it means a learning pattern that contains elements of mixing, or combining one pattern with another.

From this definition, we can understand that hybrid learning is a combination of online learning with face-to-face learning in class. Traditional face-to-face learning is reduced but not eliminated. The combination of the two methods is intended to take the best components from the combined methods. Hybrid learning is designed to integrate online and face-to-face learning activities so that each can strengthen, complement, and support the other and does not treat online methods as a duplication of classroom learning or as an addition.

College:

Law of the Republic of Indonesia number 12 of 2012 article 1 paragraph 6, universities are educational units that provide higher education.

## RESEARCH METHODOLOGY

The method in this research is a literature review. According to Creswell (2017) searching, selecting, weighing, and reading literature is the first job in any research project. A literature review does not only mean reading literature but rather an in-depth and critical evaluation of previous research on a topic. The method for reviewing the literature is carried out by searching and collecting literature studies with the keyword "implementation of hybrid learning in higher education".

## RESULTS AND DISCUSSION

To identify several articles that explain hybrid learning in higher education, a literature review was carried out. This research focuses on student learning outcomes such as cognitive skills, thinking skills, applications used in hybrid learning, and the learning process in hybrid learning. In Table 1, the results of the analysis of articles which are reference articles in identifying hybrid learning in higher education are explained.

Tabel 1. Hasil Analisis Artikel yang Dipilih

No.	Author	Result	Hybrid Learning Process
1	Kamil (2022): Analysis of the Application of Hybrid Learning on Student Cognitive Learning Outcomes	There is an influence of the Hybrid Learning model on Cognitive Learning Outcomes.	This research was carried out in four meetings with a total of 12 hours of lectures with a division of hours namely 4-2-4-2. Three days before learning started, the lecturer created an online group discussion on the WhatsApp and Google Classroom applications. The lecturer sends a lecture contract containing the learning scenario that will be carried out complete with the information needed by students such as the material that will be discussed at each meeting, the online platform that will be used, the textbooks used, and the required

			group divisions. At the first meeting, the lecturer conducted face-to-face learning. The second meeting was held online, namely the lecturer made a learning video for students to study, at the end of this second meeting the lecturer also gave assignments to individual students and collected them on the Edlink platform. Time-limited assignments are collected to train student discipline. The third meeting was held online via an online meeting application. The fourth meeting was held face-to-face
2	Mahrta, Rakhman & Meitiana (2021): Effectiveness of Hybrid Methods (TMa and IK Methods) in Online Learning for Statistics Courses.	The findings show that the hybrid method is significantly effective in economic and business statistics courses. Students prefer lectures using the Interpersonal Collaboration (IK) method combined with the TMa (virtual face) method because they can understand the material quickly and this method is very similar to conventional methods. The theoretical implication of this research is that the hybrid method is better used for online learning methods compared to the IK method. Meanwhile, the practical implication of this research is that teachers can use a hybrid method for courses based on mathematics and calculations because the research results show that statistics courses based on calculations can be effectively implemented using a hybrid method.	The hybrid method used is a mixture of the collaborative interpersonal method (IK) and the virtual face-to-face method (TMa). The application used in IK is Edmodo, while the application used for TMa is Google Meet. In the IK method, lecturers or teaching staff post material and recorded videos to Edmodo, then a discussion or question and answer session is held via the comments feature followed by a quiz at the end of the meeting which is still carried out via the Edmodo application. In the hybrid method, lectures are held face-to-face (TMa) where lecturers or teaching staff deliver material via Google Meet followed by a discussion or question and answer session. At the end of the meeting, there was a quiz via the Edmodo application.
3	Purwantiningsih & Mala (2021): Comparison of Hybrid Learning Model Components in Exacts Courses.	The research results show: 1) learning outcomes in the 3 components of the hybrid learning model, namely face-to-face, online learning, and self-paced asynchronous, have real (significant) differences. 2) the hybrid learning component using face-to-	Students are given material in the form of handouts online and then study it independently if they ask for anything they don't understand during online or offline learning. At the end of the lecture, students are given multiple-choice questions which are done face-to-face within a specified time.



		face is more effective than online or independent learning. 3) To produce good statistics learning in hybrid learning, it is best to use the following composition: 35% face-to-face, 32% online, and 33% independent learning.	
4	Putri, Wardika & Suryati (2022): Effectiveness of Hybrid Learning in Statistics Courses.	The research results show: 1) The use of Elsa supports the learning process using a hybrid learning model. 2) The use of Elsa can be operated easily during learning with a hybrid model. 3) The hybrid learning process carried out went well. 4) The learning process carried out outside the classroom (using Zoom) runs well during the hybrid model learning process. 5) Students who take part in online learning with Zoom have good learning support tools. 6) Universities and students have adequate tools for hybrid learning. 7) Hybrid learning in the Statistics course at the Indonesian Institute of Business and Technology is very effective during the New Norm.	Hybrid learning is carried out online and directly on campus. Online learning uses Zoom and Elsa, namely Moodle-based use to help the learning process. Meanwhile, direct learning is carried out face-to-face in the classroom.
5	Wardhani & Indratmoko (2022): Increasing Student Motivation and Learning Outcomes by Implementing Hybrid Learning.	The conclusion is that students' motivation scores and grades increase after hybrid learning. This indicates that hybrid learning has a significant effect on student motivation and learning outcomes. Apart from that, the use of hybrid learning in the experimental class was better and showed an increase in learning outcomes compared to the control class which used the online learning model.	Hybrid learning is carried out with a composition of 65% face-to-face learning and 35% online-based learning. Online learning is carried out using Google Classroom.
6	Bali & Hasanah (2022): Accentuating	From the results of research regarding	Learning is carried out online and offline. In the first week, learning was carried out



	<p>Student Learning Discipline in Hybrid Learning Mode in the Covid-19 Pandemic Era: Educators' Perceptions.</p>	<p>educators' perceptions of student learning discipline in hybrid learning, educators state that student learning discipline can be said to be a measurable and directed learning discipline with the instillation of good discipline in students which originates from the existence of several supporting factors that can move students to remain Become a disciplined student and be able to obey the rules that have been made by educators by adhering to the dasadharm, the santri consciousness pancake and the santri trilogy. The supporting factors for learning discipline in hybrid learning are the lecture contract at the first meeting, the availability of an internet network, the availability of campus facilities, student self-regulation, student time management, student self-efficacy, and teacher motivation.</p>	<p>online. Educators send material via e-learning media accompanied by giving assignments and holding discussion forums. Meanwhile, in the second week, educators carry out learning, face-to-face (offline) as usual, learning is centered on students, and at the end of learning, educators always motivate students to remain enthusiastic and obey the rules in studying and carrying out assignments given by the educator.</p>
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Based on table 1, it shows that hybrid learning has a positive impact on the learning process in higher education. The impact can simultaneously improve student learning outcomes such as motivation, cognitive skills, communication skills, discipline, connections, mathematical representation, and student learning independence.

An article [4], shows that hybrid learning affects learning effectiveness. Hybrid learning can also improve the ability to represent learning disciplines [6], mathematics [2], statistics [3], cognitive skills [1], and learning motivation [5].

In the article [6] it is explained that instilling discipline using hybrid learning in students can be done by giving time limits during online learning, namely giving limits to material or assignments uploaded to e-learning media. Article [1] explains that the increase in student learning outcomes can be seen from various aspects, one aspect that stands out is due to collaboration, namely, students can work together with other students when discussing in class or online. [2] explained that the increase in student learning outcomes was due to the provision of material explained by the lecturer in a video and sent via the Edmodo application, making it easier for students to understand the material because students could watch the lecturer's explanation video over and over again until they understood.

The results of a review of several articles show that the hybrid learning system is effectively implemented in higher education. The hybrid model has developed over the last

two decades and combined with school closures due to Covid-19, this hybrid learning model has become the most widely used form of learning in schools and universities.

## CONCLUSIONS

Hybrid learning has a positive impact on the learning process in higher education and is effectively implemented in higher education. The impact can simultaneously improve student learning outcomes, motivation, cognitive skills, communication skills, discipline, connections, mathematical representation, and student learning independence. Apart from that, hybrid learning has strengths such as increased flexibility, better understanding of the material, and student's experience of direct and online learning. Weaknesses such as difficulty managing study schedules and student dependence on devices and networks, opportunities such as reducing the digital divide and combining more than one learning model, and threats such as workload and gaps between learning design and student learning styles.

## REFERENCE

- Bali, M. M. E. I., & Hasanah, F. (2022). Aksentuasi Disiplin Belajar Mahasiswa dalam Moda Hybrid Learning di Era Pandemi Covid-19: Persepsi Pendidik. *Jurnal Basicedu*, 6(3), 4210–4219. <https://doi.org/10.31004/basicedu.v6i3.2800>
- Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative, and Mixed methods approaches*. In Sage Publication.
- Kamil, F. (2022). Analisis Penerapan Pembelajaran Hybrid Pada. *Jurnal Inovasi Pendidikan Sains Dan Terapan*, 1(1), 18–25. <https://www.ejournal.unma.ac.id/index.php/cp/article/view/1931>
- Mahrita, A., Rakhman, F. A., & Meitiana, M. (2021). Efektivitas Hybrid Method (Metode TMA dan IK) pada Pembelajaran Daring untuk Mata Kuliah Statistik. *Economics Journal*, 2(2), 56–63. <https://doi.org/10.37304/ej.v2i2.4128>
- Putri, N. W. S., Wardika, I. W. G. W. G., & Suryati, K. (2022). Efektivitas Pembelajaran secara Hybrid pada Mata Kuliah Statistika. *Jurnal Riset Teknologi Dan Inovasi Pendidikan (Jartika)*, 5(2), 123–138.
- Rahmawati, S., Rachmani, N., & Nino, D. (2022). Studi Literatur: Kemampuan Koneksi Matematis Siswa pada Hybrid Learning Ditinjau dari Gender dengan Model Pembelajaran Preprospec Berbantuan TIK. *Prisma, Prosiding Seminar Nasional Matematika*, 5, 423–430.
- Wardhani, R. A. N., & Indratmoko, J. A. (2022). Peningkatan Motivasi dan Hasil Belajar Mahasiswa dengan Penerapan Hybrid Learning. *Education Journal: Journal Education Research and Development*, 6(2), 221–230. <https://doi.org/https://doi.org/10.31537/ej.v6i2.754>
- Yullys Helsa, Rosida Marasabessy, Dadang Juandi, & Turmudi. (2022) Penerapan Hybrid Learning di Perguruan Tinggi Indonesia: Literatur Review. *Jurnal Cendekia: Jurnal Pendidikan Matematika*