

## E-LEARNING PROGRAM IS IT A NEW HYBRID FROM OF EDUCATION?

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### **Abstract**

Since e-learning was introduced as part of the higher education landscape, many universities have adopted e-learning in their learning designs. However, developing e-learning requires internet technology skills, learning design, and high mastery of substance, so e-learning development becomes complicated and expensive for some universities. Because of this, many universities have started researching and experimenting with hybrid Universitas Terbuka (UT), has been designed to provide distance higher education (PTJJ). UT has organized hybrid education. Hybrid education in this study combines face-to-face education, distance education with media outside the network, and education with online media. So far, most of the hybrid education described in the literature uses the flipped classroom model. Other e-learning models are also often applied in the curriculum. Distance education is in dire need of management support. Several studies report the importance of adequate institutional support in implementing hybrid education policies and their benefits from a curricular perspective. Institutional support and effective employee engagement will improve organizational performance. This study explores the opportunities that arise from the use of e-learning in the learning process. This paper presents the policy implementation of a hybrid education model and a framework that describes the e-learning hybridization initiative with conventional education as a two-factor continuum, namely: (1) institutional support for the use of e-learning and (2) aligning curriculum content between e-learning and hybridization programs. In addition, hybrid education suggests indicators to measure the impact of these initiatives at the education and university level.

Keywords: Hybrid Education; Organization performance; Public service organizations; Employee engagement

### **1 INTRODUCTION**

Hybrid education may be a method that uses technology to form a range of learning environments for students. lecturers victimization hybrid instruction by choice incorporate technology tools to boost student learning and answer completely different learning preferences.(Shetu et al., 2021) In hybrid rooms, personal activities are usually combined with technology-mediated activities to permit much active learning in personal settings and more aware orientation as students study outside the classroom. E-learning often results in a discount in face-to-face time, as classroom activities are replaced by time spent outside the standard classroom (Porter, Graham, Spring, & Welch, 2014). For example, one variety of hybrid pedagogy is to 'transform' teaching so that student's expertise the most lecture part of a way as school assignment then uses class time for a lot of active learning activities. A typical hybrid education is one hour per week face-to-face

with self-paced study hours (amount varies supported tutorial performance) consisting of technology-enhanced activities during which students will participate outside of sophistication. Hybrid learning environments are almost like ancient lecture rooms. In this, they each involve the presence of lecturers and students, both educational ideas are based on learning objectives and outcomes, and each embodies activities styled for student learning for several instructors who design student-centered e-learning supported student learning objectives. Although learning objectives are aligned with assignments and assessments, there are many similarities between the principles designed for hybrid instruction, and therefore the principles want to produce courses. Ancient (Coates & Mahat, 2014). Modalities for human activity with students and exchanging info could include an amendment to accommodate new technologies; however, serving students learn can stay a fundamental part of the core of hybrid education.

Since the appearance of e-learning, several establishments have joined the wave of e-learning, which has resulted in massive volume of learning. However, manufacturing e-learning has been verified to be an advanced and big-ticket activity for educational activity institutions (Pérez-Sanagustín, Hilliger, Alario-Hoyos, Kloos, & Rayyan, 2017) Scenery. Therefore, the elite university chiefly leads the e-learning development process, whereas different institutions see the initial price of e-learning as an obstacle and therefore the ought to notice an alternate commit to make the most of e-learning (Ng'Ambi & Bozalek, 2015)

To utilize E-Learning, the planet of education has begun to explore and experiment with hybrid learning initiatives that aim to integrate regionally made and third-party E-Learning into the info (Njenga & Fourie, 2010). during this context, the hybrid construct is known broadly, together with learning initiatives, strategies, or models desegregation E-Learning or E-Learning-related technologies into ancient curricula.

Most current studies on hybrid education initiatives have centered on e-learning learning experiences, analyzing the benefits of learning compared to other traditional approaches (Arpaci, 2019). However, the scope of innovation has distended traditional lecture rooms on the far side, thanks to the varied hybrid initiatives offered by universities growing by investment in E-Learning (Castro, 2019)

Many authors have begun to review the impact of hybrid models supported E-Learning, explaining that hybrid models are enforced (Bruggeman et al., 2021), or examining student learning outcomes between initiatives hybrid associated ancient approaches (Weng, Liu, & Chuang, 2019). However, it is very little connection from an institutional perspective till recent years, wherever indicators of the success of hybrid initiatives have evolved from student

satisfaction to student support, cost, and energy (Weber-Main et al., 2019). However, some indicators inform the institutional benefits and threats of desegregation E-Learning into the educational info (Shetu et al., 2021)

Thus, there is a requirement to gather and analyze additional information regarding the rising opportunities to implement E-Learning-based initiatives in hybrid education. This paper presents a Hybrid Education (E-Learning) framework, which helps perceive however existing E-Learning is reused and incorporated into the educational process. This paper additionally discusses indicators that may be thought about to live the impact of incorporating hybrid education into the curriculum from an academic and institutional perspective. In particular, the contribution of this paper is threefold:

1. Presenting a literature review on E-Learning-based hybrid initiatives within which existing E-Learning is with success incorporated into the info of various institutions.
2. Organizing these initiatives in keeping with the E-Learning framework to facilitate their comparison; and
3. Provide researchers and decision-makers a collection of indicators for understanding the results of hybrid initiatives.

Finally, we tend to illustrate the E-Learning framework however is applied through a series of guiding inquiries to anticipate what kinds of hybrid initiatives can be enforced by reusing existing E-Learning.

### **1.1 Benefits of E-learning as a hybrid education teaching and learning method**

One of the only valuable elements of the hybrid education technique is its alignment with totally different educational models that supply learning activities specifically designed for various students. In differentiated instruction that is predicated on the principles of e-learning for learning. Lecturers contemplate students' learning preferences, past experiences with the topic matter, and current interests to ultimately interact with students with their knowledge. The appliance of e-learning principles to learning environments has exaggerated student engagement (J. Chen et al., 2016) persistence (Alfaro, Rivera, & Luna-Urquizo, 2019), in hybrid classrooms, varied activities, each within the college and in the school. Alternatively, online will provide learning techniques that best suit their learning preferences and facilitate them to keep having interaction throughout the educational process.

Hybrid education is a further method that lecturers will make sure that students engage with learning content by incorporating online learning communities, synchronous and asynchronous discussions, and varied online collaboration ways that encourage students to interact with the

materials, their instructors, and their peers in an exceedingly kind of ways (Tarus, Niu, & Yousif, 2017). To enhance active learning within the room through e-learning models, hybrid education offers opportunities to extend student engagement and extra support and online resources to enhance the educational experience. For example, besides providing online lecture recordings, lecturers extreme also give websites, pictures, additional short videos, and readings for college kids to explore course content further. These online resources, once properly organized, will stimulate students' curiosity and inspire them to explore the fabric severally (Shetu et al., 2021).

In addition, the hybrid learning surroundings permit students to line their own pace. Students could have many selections regarding once they can study, a more comprehensive type of study materials to use, and a more comprehensive vary of learning experiences they will opt to participate in (Hasibuan & Nugroho, 2017). In addition, by putting course elements corresponding to recorded lectures online, students may review some course content multiple times if they do not comprehend it the primary time. It is essential to assist students to assimilate this more freelance learning environment than expect them to thrive while not direction, organization, and help from lecturers (W. Chen, Niu, Zhao, & Li, 2014). ). Though some lecturers have expressed concern that the employment of technology within the room could be a sign of faculty member replacement, several believe that hybrid lecturers and their interaction with and mentoring students in hybrid lecture rooms are essential elements for student retention and success (El Mabrouk, Gaou, & Rtili, 2017). Van De Vord (2010) claims that "the sheer quantity of data, in text, audio, images, and graphics, on the market online, combined with a scarcity of oversight and regulation, [in addition to] low information accomplishment skills" may be compared to "the world' shark-infested waters. "For students. Though students in today's faculty lecture rooms are getting |more and a lot obsessed with the net as a tool for learning, they will not have the talents to navigate the data, resources, or tools on the web with success. The forceful increase within the information on the market online conjointly the varied technologies available to assist students to learn has also created the transition of information, media, and digital accomplishment from services offered solely by college and university libraries to the responsibility of each lecturer (Xu & Zammit, 2020). Hybrid education can be a helpful environment for students to learn more about assessing the credibility of online information, familiarize themselves with online resources and research tools, and learn and use new technologies in a facilitated environment (Mittelstrass, 2010).

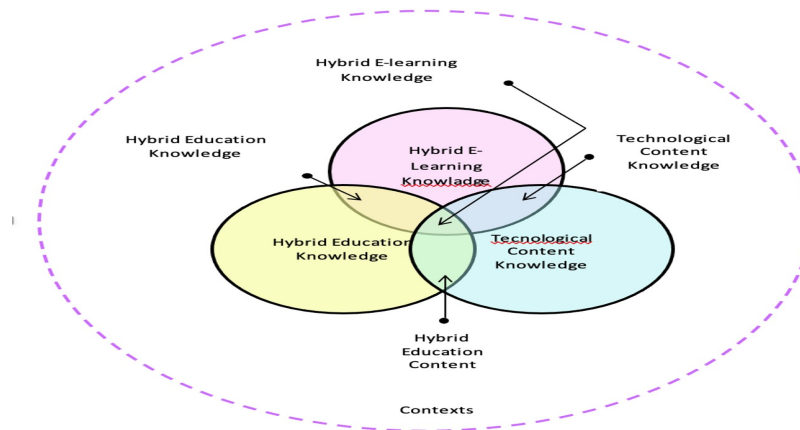
## 1.2 Best Practices of Hybrid Education Design

The migration path from e-learning to group action online learning environments, tools, and resources often begin with the idea that classroom styles, assessment procedures, and alternative methodology that usually add ancient lecture rooms can stay the same. However, in most cases, this is often not the most straightforward method for hybrid students. Group action attainment and technology practices into traditional classroom learning designs to boost learning result in substantial changes. In particular, the transition to mixed classrooms often needs a shift from Lecturer-centered ways and techniques to student-centered methods and techniques (Burrola-Mendez, Goldberg, Gartz, & Pearlman, 2019), and magnified student autonomy independence at intervals in the classroom. (Hino & Kahn, 2016). The university helps students learn outside the classroom. It represents one of the best practices of hybrid academic style: orientating activities and teaching within the classroom and freelance learning and assignments outside the varsity. A common mistake in planning a hybrid course is that it creates activities and classroom experiences outside the school that's connected to, however not expressly connected to, students in the numerous classroom (Green & Green, 2018).

The contender practice in hybrid course design involves acutely aware use of technology. A study by Gironzetti, Lacorte, & Muñoz-Basols (2020) suggests that a clever balance between education and technology is required once universities decide; however, hybrid education ought to be designed, delivered, and supported; however, this might be easier aforesaid than done. Indeed, it is clear that "the inclusion of technology in education additional complicates teaching" (Boelens, De Wever, & Voet, 2017) even if it enhances student learning. Adding new technologies can be a challenge for both faculty and students if the technology is not chosen intentionally or if training in new technology is not integrated into the learning process.

Knowledge Technology Content and Education ideas are provided as a framework to assist lecturers to perceive however best to set up technology integration within the classroom. This model breaks the assorted relationships between learner knowledge. Content and technology to help educators higher assess their strengths and weaknesses (see Figure 1). This model will promote the mixing of teaching and technology in pedagogy environments because it aims to extend lecturers' participation in technology choices that affect student learning. because of "technology and education are typically seen as areas ruled by totally different teams of people" – i.e., technologists versus lecturers: The model also emphasizes the

necessity for lecturers to be trained in schoolroom technology, so technology is often utilized in the classroom. one in all the most objectives of the analysis are to "destroy the false duality between education and technology."



### 1.3 The Hybrid E-Learning Framework

The organizer and consistently analyzes the implementation of E-Learning-based hybrid initiatives as a time of two factors: (1) required institutional support (x-axis) and (2) alignment of hybrid initiatives with curricular content (y-axis) (Fig. 2). The framework assumes that E-Learning used as part of a hybrid initiative is readily available (either created by the same institution or by a third party).

We tend to outline institutional support because of the infrastructure, services, and human resources required to support the employment of E-Learning for learners taking part in a very hybrid initiative (Porter, Graham, Bodily, & Sandberg, 2016). We tend not to embrace any prices or investments in created E-Learning as a result of it are sometimes separated in terms of decision-making in establishments. Low institutional support implies that the agency invests minimal effort in providing infrastructure, services, and human resources to launch hybrid initiatives (Weber-Main et al., 2019). High institutional support means that the institution invests excellent effort to supply infrastructure, human resources, and connected services to assist students in hybrid initiatives. For example, providing free and open study areas for residential and non-residential students to figure on E-Learning needs much less institutional support than the standard room model, which can need most teaching effort and the infrastructure typical of face-to-face teaching (Tuweb) practice.

The alignment of program content shows the closeness between the establishment's present learning syllabus and the existing E-Learning syllabus. A high level of alignment implies that E-Learning is aligned with info content and is employed solely as a complement in hybrid

initiatives. However, the high level of alignment implies that E-Learning is at the center of the hybrid initiative. That is, the content of E-Learning is wholly aligned with the curricular content of existing courses. Initiatives at the intermediate level take sides indirectly victimization E-Learning, for example, as a reference textbook, because of the content is not aligned with the present learning content. However, E-Learning will still support certain aspects of the training syllabus. In some cases, and if establishment policy permits, the institution might acknowledge E-Learning within the style of credits, or as a part of the ultimate grade of a course in the curriculum, among alternative ways of recognizing learning (Arpaci, 2019; Nissenson & Shih, 2016).

The framework characterizes hybrid initiatives with varying degrees of institutional support and curriculum orientations through these two factors. In Figure 1, we present the four reference models as circles placed at the four corners of the frame.

1. The learning-as-a-service model (low on the 'X' and 'Y' axes) is typical of a hybrid initiative in which students use e-learning voluntarily and as a supplement to the curriculum, however, without alignment directly with the course content in the curriculum. Use e-learning to expand students' knowledge. In this model, participation in e-learning assists students with content that is traditionally not covered in any curriculum but helps with updating concepts.
2. E-learning as a substitute model (high on the 'X' axis and low on the 'Y' axis) is typical of a hybrid initiative where e-learning replaces (or is used to replace the traditional model) Expand curriculum), aligning e-learning content with learning methods. However, it does not provide educational or institutional support for the physical infrastructure or local teaching services or support.
3. Learning as a driving model (high on the "X" and "Y" axes) is typical of hybrid initiatives where traditional learning is organized around EL learning in the curriculum, which has a high level of support from lecturers and Institutions required. The e-learning content is fully coordinated with the course content of the hybrid curriculum.
4. Learning as a value creation model (high on the 'X' axis and low on the 'Y' axis) is typical of a hybrid initiative in which the institution offers all the necessary support to help students learn to be successful. However, the e-learning content does not follow the learning content of the curriculum. E-learning is seen as essential, but it can help to acquire additional knowledge or develop cross-curricular skills.

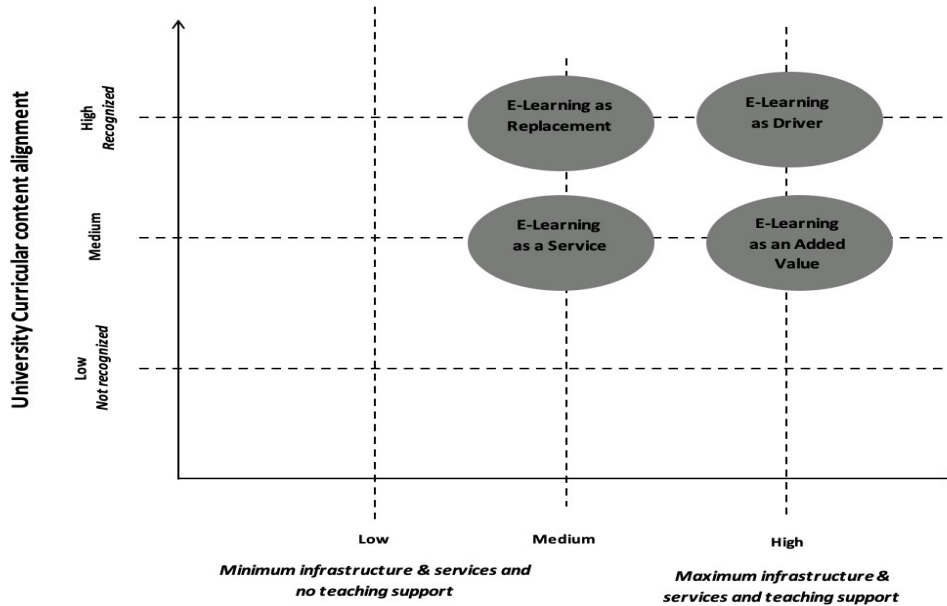


Figure :1 University Support

## 2 METHODOLOGY

### 2.1 Participants

Lecturers and students informed this study of an open university also took information from three universities that used e-learning as a comparison, namely Makassar State University, East Indonesia University, and Yogyakarta State University.

### 2.2 Data Sources

Data informing this study consisted of 120 classroom observations conducted over six months, 11 focus groups with participating students, and personal interviews with 100 participating lecturers/tutors. The online class observation lasted for six months, monitored from Universitas Terbuka Learning Assistance Center (PBB). For universities that become comparisons, in-depth interviews with lecturers and students are carried out. Analyzing two successful hybrid initiatives. In each case, we tend to describe the indications accustomed to analyzing the impact of the initiatives and how these indicators facilitate decision-makers to replicate aspects that require thought of for future experiences. Specifically, we describe each of those two cases by respondent four guiding queries that may reference alternative establishments using the model: Q1: University Goals. What are the most goals that the establishment desires to realize by implementing this hybrid initiative?

Q2: University support and indicators. What institutional support will the agency supply to implement this hybrid initiative, and what are the relevant, essential indicators?



Q3: University info Curricular content alignment and indicators. How are these hybrid initiatives aligned with the course curriculum, and what are the critical relevant indicators?

Q4: University Lessons learned. What lessons have been learned in terms or conditions that must be met for this hybrid initiative to figure at the institutional level?

### **3 FINDINGS AND DISCUSSION**

#### **3.1 Indicator related with Hybrid Education**

We have identified a set of indicators in the literature that can describe hybrid education-based initiatives in terms of learning experiences, benefits to the teaching process, and need for institutional support (Table 1). While the importance of each of these sets of indicators may vary depending on contextual factors and constraints, their combination can affect the profitability of any hybrid initiative. Decision-makers need information from different indicators to determine how they affect the combination of indicators.

Offers e-learning with traditional teaching methods. In Table 2, we try to classify the different indicators presented in the literature and align them with the four reference models of the e-learning framework. This table suggests indicators that can be used to measure each dimension of e-learning and clarifies which indicators are the most important in the four framework reference models. However, each institution must discuss which indicators are relevant according to the goals and expectations to be achieved with the model.

For example, Tuweb's reduced course time is a significant incentive to use e-learning as a boost when there is a link between Tuweb and existing e-learning components; For this reason, the Tuweb learning time indicator in Table 2 is marked "\*\*\*," which means that it may be more relevant for higher education decision-makers if they decide to reuse the e-learning as a guide. Indeed, in the classroom (Livingston, Summers, 2019), reducing Tuweb's lesson time to deliver content may allow lecturer efforts to encourage active learning. In addition, aspects such as the acquisition of learning, the level of articulation with Tuweb and the online components, and the pedagogical support of the lecturer in the implementation of orientation models of flipped classroom initiatives for e-learning can be taken into account (Bruggeman et al., 2021). In comparison, traditional teaching examples are not always geared towards existing e-learning; as in the case of using e-learning as a service, Tuweb time may be less critical as an indicator of the benefits of education (Shetu et al., 2021). A service model can envision a more critical use of online content by learners. For this reason, the interaction model indicators in Table 2 for the eLearning as a service model are marked with a "\*\*\*," while frequency is not considered an

important indicator. They can also be critical indicators such as student learning achievement (typically assessed as the final test score) or a mechanism provided on the platform to help students who do not receive direct lecturer advice.

Indicators of learning experience and pedagogical benefits will enable higher education decision-makers to anticipate the outcomes of hybrid initiatives in terms of curriculum alignment. The alignment of the e-learning content can determine this dimension with the course syllabus by the number of credits that students receive through their participation in e-learning and the increasing perception of students of the quality of teaching and learning. Perception of faculty. Regarding the need for institutional support, the hybrid educational framework does not take into account institutional strategies and structural markers (Porter et al., 2016), assuming that existing e-learning is reused in institutions that have established e-learning assuming that existing e-learning is reused in institutions that have established lines guidelines for e-learning and infrastructure production, considering that the critical support needs are relevant in determining the cost of the different hybrid models. For example, learner support mechanisms in the form of mentoring may be more necessary to support learners to learn with e-learning as a service model, while other educational materials with e-learning approaches such as engines may be more relevant. Measuring student learning outcomes will be essential in e-learning as a surrogate or driver, as e-learning is at the heart of the methodological approach.

*Table 1: Indicators that are relevant for all E-Learning bases initiatives*

<b>Benefits for Students</b>	<b>Benefits for the lecturer</b>	<b>University support requirement</b>
Region	Student Perceptions about teaching	Infrastructure needs
Student Satisfaction Level	Faculty self-perception	Infrastructure needs
Retention (level of completion)	Face-to-face time (Tuweb)	Learning mechanism
Study advantage	faculty development	Technical support
The use of e-learning content by students (interaction patterns)	Faculty technology literacy skills	Education support
Online experience	Articulation between Tuweb and Tuton	Faculty incentives
Online knowledge	Credit acknowledgment	

*Table 2: Indicators whose relevance varies depending on the hybrid education-based model*

<b>Hybrid Education Dimension</b>	<b>Indicators</b>	<b>E-Learning as a Services</b>	<b>E-Learning as a replacement</b>	<b>Relevance</b>	
				<b>E-Learning as Added Value</b>	<b>E-Learning as Driver</b>
<b>Alignment curriculum content</b>	Learning Benefits	**	*	*	**
	Patterns of interaction between	**	*	**	*

	students and lecturers				
	Tuweb time (face to face)	**	*	*	**
	Tuweb and Tuton articulations	**	*	**	**
	Credit acknowledgment	**	**	*	*
	Study advantage	*	*	**	**
<b>University support</b>	Student support	*	*	**	**
	mechanism	**	*	**	*
	Technical support	*	**	*	*
	learning support	*	*	*	**
	Faculty incentives	*	**	*	*

### 3.2 Analyzing hybrid education

#### 3.2.1 Analyzing E-Learning as service

In 2021, 17,072 new students will be admitted to Universitas Terbuka (UT) every year. They come with different levels of knowledge. For most of these students, subject knowledge is often more minor than required for a bachelor's degree. Over the past few years, UT has offered interactive learning modules for new students to address this issue. If students are admitted to an open university, they must attend eight sessions of e-learning, while students in the master's and doctoral programs have 12 sessions and must attend classroom teaching using the Tuweb method four times. In each session of material that provides open discussion for students, which students answer through interactive modules and other references, students can review their responses if the instructor scores below standard. For assignments, students are allowed to load according to a predetermined schedule. Students must take a final exam to assess their progress in the content of their respective course materials.

**(Q1) University Goals.** This strategy is one way to increase student readiness in participating in e-learning. There are several limitations in e-learning that need to be overcome, namely: (1) the low level of participation. Some students from areas outside Java and Bali have difficulty participating in e-learning, with the main reason being limited access to e-learning; and (2) lack of personalization. UT students have different backgrounds and understandings of teaching materials, so they require different learning treatments. Not all students need to cover the same topic. To overcome this limitation, UT provides space to discuss with tutors through LMS. The E-learning model does not follow the same design model as the conventional learning model. E-learning content and learning strategies are provided in a standardized manner. Universitas Terbuka encourages new students to take lessons through tutorials via the web (Tuweb) and online tutorials (Tuton) to study subjects effectively. Tuweb and Tuton for S1 students are optional, while for S2 and S3 students, they must participate in activities. The purpose of this e-learning initiative

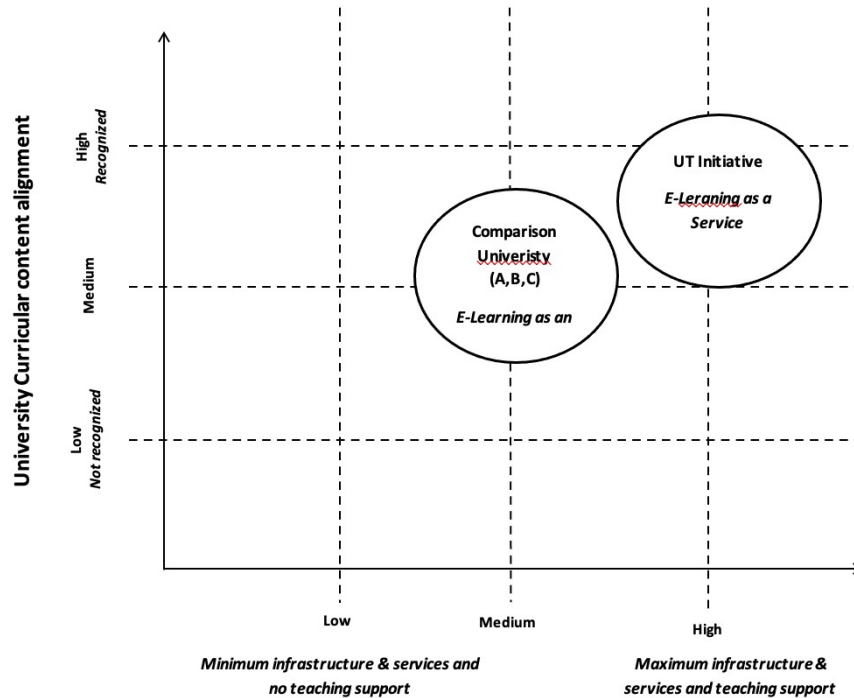
as a service is to achieve two goals, namely: (1) to provide study assistance to students in understanding course content before exams; and (2) as a form of UT's academic accountability to students.

**(Q2) University support and indicators.** Very supportive in the form of investment in the procurement of hardware, software, human resources, training, maintenance, and development of e-learning platforms. One indicator is the need for infrastructure. In this case, the institution offers the Open edX platform through ICE and Moodle for regular UT students. ; Both edX and Moodle platforms require technical support from full and part-time technicians to maintain the platform. UT also offers programs to new students to facilitate registration on the e-learning platform as part of the course introduction process, and UT (provides all services offered by the university to new students who pay tuition fees). Educational support in the form of tutorials, assistance to students. The tutorials and orientation for new students are coordinated by the faculty, the Learning Assistance Center, and 39 regional UTs and overseas student services.

**(Q3) University Curricular content alignment and indicators.** Alignment and indicators of the content of university programs. During the pandemic, online learning has become a very effective and efficient medium. Therefore, under this Alignment and Indicators of University Program Content initiative, only learning outcomes and interaction models are used as indicators of the direction of program content. They use e-learning content. 80% (N = 80%) of the students participated in the e-learning activity, considering the institutional analysis. Up to 80% of this sample are active in online learning and have a higher participation rate than the others. This analysis showed that students interacted with the course more before the exam (80% of course interactions per day) than during the make-up course (an average of 60% of interactions per day). Second, the student's learning outcomes were analyzed to see if their use of online learning was affected. The analysis showed that students who were active in online learning before the exam performed better, but no significant effect was seen on students who were required to take the final exam.

**(Q4) University Lessons learned.** To manage the initiative, the following institutional requirements are required: (1) have an e-learning platform capable of collecting information on students; and (2) include registration steps in the induction process to ensure that all learners can register for online learning. In addition, institutions have learned that more should be done to increase adoption rates: (1) more support is needed for commercialization; (2) More efforts should be made to harmonize curricula and make these

courses compulsory. This minimal tutoring initiative is classified as "learning as a service" (Fig. 3). First, focus on the curriculum as online learning caters to all significant subjects where new learners need other support, like tutors or institutions.



### 3.2.2 Analyzing E-Learning as an added value

Currently, the university implements an e-learning system. At Universitas Terbuka, e-learning is the primary means of interaction between Lecturers and students, with e-learning consisting of a presence system (Tuweb) and an online learning system (Tuton). This program is developed in 8 sessions for undergraduate programs and 12 sessions for master and doctoral programs. Meanwhile, other comparison colleges use a variety of typical digital applications. The hybrid they mean is combining Zoom, WhatsApp's, Google classroom.

(Q1) University Goals. Several vital aspects lead to a low success rate in e-learning. The first problem is that the students' skills using the e-learning system are lower than required, which does not allow them to follow it. This is partly due to the high dropout rate in the first semester or a drop after the first few weeks. Therefore, students taking courses based on e-learning need to strengthen their basic digital skills to meet the challenges of e-learning.

The second problem identified by the teacher is that students use little, or no references provided as a remedial form. Books and modules are generally not very interactive, while students need time to understand much theory, especially since it is learning. In this context, the third problem

is that class time is not limited, but the internet difficulties in some areas prevent students from completing assignments, discussions, or exams. Therefore, the primary purpose of using e-learning is to improve the process of teaching and learning face-to-face courses without promoting the content.

(Q2) University support and indicators. Lecturers must provide their students with comprehensive support. Hybrid education is a solution for universities during the pandemic. The e-learning system offers full support for students. Thanks to the combination of the Tuweb and Tuton systems, e-learning is highly interactive. Students must be familiar with e-learning. E-Learning cannot be implemented in real-time because it must be in a good and reasonable network condition. In similar universities, e-learning is still limited to managing learning materials and various features; This is different from open universities that use e-learning as a learning medium.

Q3) University Curricular content alignment and indicators. Today, e-learning is increasingly recognized to solve education and training problems. E-learning is an innovative approach to deploying well-designed, student-centered interactive learning environments that facilitate learning for all time, using the properties and resources of various digital technologies, if the learning materials allow for open and flexible learning and learning environment. The three main components of online learning work together to promote the importance of learning and reciprocity, namely (a) pedagogical models or ideas; (b) education and learning strategies; and (c) educational tools or online learning technologies such as the Internet and network-based technologies. This certainly implies the need for learning experiences designed and developed to facilitate students' practical and efficient acquisition of knowledge and skills. In the blended learning strategy model, a Lecturer must creatively combine various existing approaches, methods, and means to optimize learning effectiveness, efficiency, and attractiveness. There is no best approach, method, or means of communication; the best one adapts to the existing conditions and needs. Experience in compiling or combining different things is a critical factor that distinguishes good or great Lecturers/educators/Lecturers/lecturers/Widyaiswara from Lecturers who are not great or good.

(Q4) University Lessons learned. The university wants to implement e-learning, namely (1) learning design; (2) multimedia components; (3) internet equipment; (4) storage of computers and equipment; (5) service and connection providers; (6) standard resource/program management, software, and resource planning; and (7) connectivity services and applications.

Learning in educational technology is interpreted as an effort to manage the environment intentionally so that someone trains positively under certain conditions. A good learning program must meet the criteria of attractiveness, usefulness (effectiveness), and usefulness (efficiency). Based on this description, it can be concluded that the learning process is essentially a process of change that occurs in a person through the experience. Changes that occur in learning include changes that are knowledge (cognitive), skills (psychomotor), as well as those related to (affective) values and attitudes obtained from interactions between students and learning experiences and resources. While learning is a process of facilitating learning through learning experiences designed and developed according to the needs and characteristics of students. The learning designs are very diverse.

Learning design is often connoted simply as a lesson plan or as a collection of teaching units that are considered a curriculum. Instructional design is a prominent subfield of educational technology. Learning design begins with recognizing implementation problems first, never if learning can solve all problems. If learning is the most critical solution, the design process can begin. The learning design approach always considers the learner's perspective rather than the content perspective.

The learning strategy used in e-learning is combined. *Blended learning* is a learning process that uses various approaches. The approach taken can use various media and technologies. With blended learning, the learning process can combine various physical and virtual (virtual) resources. The blended learning strategy can be applied under agreed conditions. Blended learning should be seen as a pedagogical approach that applies various learning approaches rather than being seen from the size of the face-to-face and online delivery system.

E-learning must combine wisely, relevant, and appropriate between the potential of face-to-face with the potential of information and communication technology that is proliferating today to enable (1) the most educational shift in the learning paradigm. -focusing on a new student-centered learning paradigm; (2) increased interaction or interactivity between students and Lecturers, students and students, students/Lecturers with content, students/Lecturers with other learning resources; and (3) the occurrence of convergence between various methods, media, learning resources, and other relevant learning environments.

Learning strategies in e-learning, especially in the use of blended learning strategies of various learning approaches and multimedia options, where educators and students can combine

creatively. These approaches include (1) a physical synchronous approach, namely direct learning, where educators and students carry out the learning process at the same time and place. Some examples are lectures and lectures, field trips, workshops, hands-on practices, and others; (2) the virtual synchronous approach, meaning that learning occurs directly, educators and students carry out the learning process at the same time (real-time) but take place in different places from each other. Some examples are learning through chat, virtual classroom, videoconferencing, and audio conferencing; (3) independent asynchronous approach, meaning that the learning process does not coincide and place with each other. Students have the autonomy to choose and determine what to learn, how to learn it, where to learn it and when and how to demonstrate learning success (assessment).

#### **4 CONCLUSION**

This paper presents an e-learning framework, which aims to explain the efforts of various higher education institutions across Indonesia to reuse e-learning and integrate it as part of the traditional curriculum. Providing a systematic way to define the space for online learning. Blended learning is based at least on existing e-learning from an organizational perspective. The hybrid education framework establishes two key dimensions to describe this space: alignment of curriculum content and institutional support. Based on these dimensions, four models based on hybrid border reference education are proposed: (1) E-learning as a service, (2) E-learning as a substitute, (3) E-learning as a driver, and (4) E-learning as an added value.

On the one hand, these models are a natural extension of how higher education institutions view traditional housing activities and are established: universities and departments decide what educational activities are needed to support programs. They create and institutional support. Some of these activities are closely aligned with the course content in the curriculum, and some may incorporate a learning experience, which requires some degree of institutional support.

To show how the e-learning framework works, we have classified several hybrid initiatives presented in the literature. Interestingly, some initiatives cannot be categorized into the four boundary reference models, demonstrating the utility of defining the framework as an interaction of two axes on which the model can move vertically and horizontally. In addition, we also present two successful case studies from two different institutions and rank them according to the framework. These initiatives are measured in terms of indicators to understand their impact. In addition, compared to other frameworks, the E-learning framework offers a classification of



initiatives that differ from the learning objectives they pursue, facilitating the analysis of institutional implications.

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