

Investigating the Institutional Blended Learning Adoption Framework in Higher Education

Nur Indah Rahmawati

Universitas Sebelas Maret

e-mail: nurindahrahmawati96@gmail.com

Endang Fauziati

Universitas Muhammadiyah Surakarta

e-mail: endang.fauziati@ums.ac.id

Sri Marmanto

Universitas Sebelas Maret

e-mail: marmanto@staff.uns.ac.id

Abstract:

There are limited studies that concern the institutional policies and issues of blended learning adoption. By using a case study, this study explores blended learning implementation and three main issues of adoption. The issues are “institutional strategy, structure, and support that portrayed the stages of the blended learning adoption. The data indicated that the blended learning implementation of learning increases the involvement use of technology by the learner. But there is still no proportionality in the enforcement between F2F and online learning goals and activities. The data were obtained by observation, semi-structured interview, and documentation. Based on the result, the institution under investigation still in stage 1 (awareness/exploration stage) of the blended learning adoption stage. By doing the research on the three participants who adopt blended learning, it can be concluded that the institution has not met the requirements for implementing blended learning at higher stages because many aspects have not been fulfilled and

need to be improved for future implementation. Therefore, the researchers expect that this research can be a reference regarding aspects that must be fulfilled for better implementation.

Keywords: *blended learning, institutional policy, institutional adoption*

1. INTRODUCTION

Education innovations have progressed increasingly simultaneously with the huge expansion of ICTs (Al-Emran & Salloum, 2017; Salloum et al., 2017). In the interim years, it has become increasingly popular with a growing number of higher education institutions which provide at least some blended inventory (Mirriahi et al., 2015). Blended learning is a form of technological innovation in education that is developing rapidly in the present, which is defined as face-to-face learning based on web learning (Anthony et al., 2020). The integration of traditional teaching methods and e-learning methods is the paradigm of blended learning (Wong, 2019). Blended learning incorporates Face-to-Face (F2F) and Online facilitated to assist educators in accomplishing pedagogical objectives in preparing and creating algorithms and logical build in capacities to improve their educational qualities and attain the global structure (Subramaniam & Muniandy, 2019). Furthermore, to enlarge the benefits of both modes in blended learning, the interaction between face-to-face and online experiences needs to be carefully considered to have a better outcome than having either of the two on its own (Paskevicius & Bortolin, 2016).

Currently, many educational institutions implement a student-centered approach. Related to this, blended learning is a form of a method for student-centered that applies the online model blended with the offline model. Blended learning increases students' willingness to independently improve individual learning, facilitates the learner to have their own willingness, trains students to survive real-world skills that help students directly apply academic skills and knowledge in the field of technology (Chang-Tik, 2018). The verification for the advantages of blended learning has been well reiterated: increase versatility for employees and students; individualization; better student performance; reduce the study cost; increase staff and student satisfaction; and enhance collaboration among administrators and pupil (Kim et al., 2016; Lai et al., 2016). Thus, in previous research, the implementation of blended learning can increase student awareness and activeness in learning and provide new learning experiences for students (Ghazal et al., 2018).

By using the blended learning method, students' needs for information and knowledge are offered through access to more information online (Owston et al., 2019). Blended learning shifts from teaching to learning, allowing students to

engage in the learning process more enthusiastically, thus improving their persistence and engagement (Ismail et al., 2018). The prior researches stated the realization of blended learning in accordance with standards and procedures provides more benefits and productivity than relying solely on traditional learning or face to face classrooms.

Moreover, while blended learning provides advantages, many institutions have failed to execute blended learning's teaching and learning effectively because of the issues relating to higher technology costs, weak decisions in making policy, lack of resources, and lack of an understandable approach (Tamim, 2018). This is due to the limited research of institutional adoption that focuses on advocacy, and other reasons might be proficiency, funding, reputation as the answers of why this kind of topic rarely investigated (Smith & Hill, 2019). Consequently, blended learning policies need to be developed by institutions that provide extensive guidance to initiate and disseminate BL approaches for academic activities (Fesol & Salam, 2017).

Explosive expansion in adopting of BL was targeted at enhancing learning outcomes, whereas previous research measured the efficacy of BL by contrasting traditional and online learning (Van Laer & Elen, 2020). Current research primarily regards blended learning as a way of gaining education for teachers and students. Prior research focused on introducing BL to enhance the efficiency of the studying of students and teaching of lecturers. But still, only a few research studied both the blended learning development mechanism and administrators who initiated higher education policies related to blended learning adoption (Porter et al., 2016). The practice is efficient in higher education if the institutional administration commits itself to raising the quality of academic information profitably (Moskal et al., 2013). Learning by technologies is being used as a means for companies to reach a strategic objective (Graham et al., 2013). The institutions that are structured to magnify blended learning services should suggest enlarging of technical facilities and addressing the learner and educator needs (Dziuban et al., 2018). Moreover, the student's motivation to use unfamiliar technology mostly correlated to the integration of blended learning. An interpretation of the survey findings reveals that incorporating blended learning apprehended the simplifying of utilizing and manner towards the influence behavior of students while utilizing the compounding approach for their research (Prasad et al., 2018). The research also found that students were highly inspired internally to participate in unfamiliar technologies.

In view of the above-mentioned studies, further blended learning research is deemed appropriate in order to direct policymakers in the strategic of BL acceptance in higher education. It can be concluded that a study that examines members' advocacy in adopting a blended learning framework in the part of a university which applied blended learning is required.

Hence, this research addressed the following questions:

1. How is blended learning adoption implemented?
2. How do the markers of blended learning adoption related to the institutional strategy, structure, and support?

2. LITERATURE REVIEW

This part provides the related literature of the study. It consists of the underlying theories of blended learning.

2.1 The Notion of Blended Learning

Blended learning is a thought-provoking combination of face-to-face learning experiences with the online experience (Garrison & Kanuka, 2004). From those definitions, blended learning focused on courses that incorporate conventional classes with proper technology. It is a framework that makes possible, through conventional, to teachers, students, the distribution of the contents of learning to be spread in various places and sharing them through an online forum (Williams et al., 2008). Another explanation about blended learning is this method cannot remove the need for Face to Face (F2F) instruction but lets the teacher broaden the connection to practical ways beyond the classroom to ensure successful information with mutual awareness (So & Bonk, 2010). Blended learning delivers inspiring and practical study through multiple asynchronized and synchronized the strategy of teaching, for example: chat rooms, workshops, journals, etc (C. R. Graham, 2014; Moskal et al., 2013).

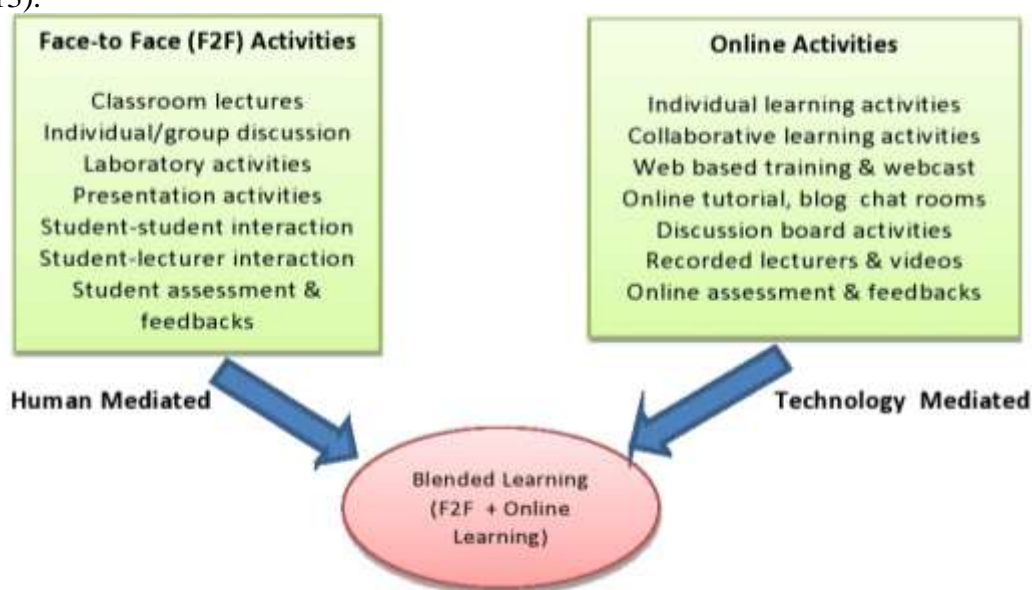


Figure 1: The main elements of blended learning acquired from (C. R. Graham, 2014; Moskal et al., 2013)

The blended learning as a pedagogical model permits the personal pace of the students and their independent time in an engaging and shared atmosphere (Cutri & Whiting, 2018). Therefore, blended learning acknowledges the technical techniques necessary to overcome the weaknesses of conventional face-to-face learning for a modern classroom meeting.

According to Stein & Graham (2014), there are 9 elements that can be considered to realize an effective implementation of blended learning. The elements are “course goals and learning outcomes, the ease of communication, pedagogical and organizational design, engaged learning, collaboration and community, feedback and assessment, grading, the ease of access, preparation and revision (Stein & Graham, 2014).” Goals and outcomes can be coordinated by instructor support map the blended course system (Stein & Graham, 2014). Lessons are distinct chunks of study and evaluations which direct the rhythm of the combined courses day by day or week by week. One or two targets may be a lesson, but seldom more than that. Perhaps a destination is so broad that two or three lessons are learned. The ease of communication clarifies the necessity that teachers use a consistent writing style, clear guidelines and specifications, clearly written duties, and more. The third is pedagogical and organizational design, “Each lesson should begin with an introduction that explains the structure and flow.” Another significant thing to note is their insistence that the workload of both the modes (traditional and online) should be the same (Stein & Graham, 2014). Moreover, learner engagement is a standard metric for determining the consistency of the not engaged learning experience and the long-term inability to be successful (Frankel, 2018). Hence, each phase of the way can be driven by a direct and easy method. It should ensure that the resulting blended course reflects on learning and taking advantage of continuous improvement opportunities.

Without some strategic objective or institutional framework, a blended learning approach to learning was incorporated. The regulation of policy that enables and facilitates blended learning would confirm the determination of a college to boost student learning, but also to maximize side benefits such as admission, sustainability, and prosperity. While many studies have examined the efficiency and profitability of a blended learning method more generally, comparatively few studies suggest higher education institutions (Halverson et al., 2014). The framework aims at recognizing and detailing problems that supervisors can understand to help their organizations effectively adopt blended learning.

2.2 The Model of Blended Learning

Staker & Horn (2012) accomplish the models from prior research about the blended learning models. They develop the four blended learning models, as follows:

1. The Rotation Model

This model can be described as a program that alternates between learning modules, of on a schedule of fixed schedules or under the control of the instructor, for students under a certain course or subject in at least one learning (Staker & Horn, 2012). This model comprises four models classified as: (a) station-rotation, (b) Lab rotation, (c) flipped classroom, (d) individual rotation, and (e) flex model.

a. Station Rotation Model

It is connected to the model called a “station”. The concept is an innovative framework or model in which students share modes of learning in a certain course between the classroom and the subject on a given program or under the guidance of an instructor (Staker & Horn, 2012). The rotation requires at least one online learning station. The use of this model entails flipping between tasks across the entire party, while another one-by-one splits the class into small rotations.

b. Lab Rotation

The rotation model is the model in which students switch from places in brick-and-mortar campus within a certain subject of the course or field at such periods or in the teacher's preference (Staker & Horn, 2012).

c. Flipped Classroom Model

In a flipped classroom, students switch from face to face teacher guided practice to the certain course or topic to a set timetable for the regular everyday school to remote curriculum distribution and teaching on the same subject from a distant position (often at home) at school (Staker & Horn, 2012). The primary source of materials and instruction is technology, which establishes an in-depth, unique classroom for students who do their online assignments only at night.

d. Individual Rotation

Individual rotation is a rotation model in which students turn to independent, set timetables between various approaches to learning within a given course/subject, and at least one is online learning. A teacher or tutor creates individual student schedules (Staker & Horn, 2012).

2. Flex Model

In this model, students are progressing towards a personalized and versatile schedule, and the on-site record instructor distributes content and instruction principally online (Staker & Horn, 2012). Learners or others support themselves on a flexible and receptive basis through programs, including small group instruction and group work, including tutoring. Many applications have substantial support, and some have limited support.

3. Self-Blend Model

Staker & Horn (2012) convey that in order to complement their daily lectures, this model discusses how students chose to take one or two lessons online. Students are given online lessons on or overseas on the campus of brick and mortar. This is distinct from full-time online schooling and the immersive enrichment paradigm because it is not an exercise focused on a school system.

4. Enriched Virtual Model

These models can be defined as an entire school setting in which students divide their time between on-campus preparation and e-campus practice for each subject (Staker & Horn, 2012). The most enhanced education programs began as online courses in a full-time format, supplemented by combined schooling that provides students with brick-and-mortar learning.

2.3 The Framework of Blended Learning Adoption

Graham et al. (2013) deliver the tripartite framework of the adoption of blended learning. The framework consists of the institutional strategy, structure, and support.

1. Strategy, it involves problems related to the main blended learning style. A clear institutional guideline, the formation of an advisory, clear strategy, accessibility of resources and time can allow the organization to determine "if" and "how", for particular (Graham et al., 2013).

2. Structure, "the structure encompasses the focus of technological, pedagogical and the administrative that reinforcing the BL environment. The aspects of structure are governance, models, scheduling, and evaluation (Graham et al., 2013)."

3. Support, it concerns of how an institution promotes the performance of the faculty and the preservation of the combined design of instruction. The aspects of support are technical and pedagogical, and incentives (Graham et al., 2013)."

Porter et al. (2016) proposed the phases which demonstrate how organizations transition to mature institutionalization their interest in BL. The elements within the three dimensions of the framework were also divided over three stages to demonstrate how schools are progressing towards a mature institutionalization from an engagement in blended learning.

1. "Awareness/exploration", this stage is classified by no standardized strategies for BL, by the expertise and minimal encouragement of individual faculty to investigate ways in which BL strategies can be utilized in their classrooms. (Graham et al., 2013). This stage is not defined by an institutional policy with regard to blended learning but by an institutional understanding and minimal encouragement for each faculty to investigate the way blended learning strategies are used in their classrooms.

2. “Adoption/early implementation”, this stage is represented by the acceptance of BL policy and interventions in the introduction of new programs and approaches at institutions (Graham et al., 2013).

3. “Mature implementation/growth”, this stage is assigned by that institutional structure and support is well established (Graham et al., 2013).

3. RESEARCH METHODOLOGY

This study was carried out under a design of case study research to comprehend a current phenomenon. A case study is a qualitative method in which the analyst analyzes a specific case through an extensive, systematic compilation of data containing different sources of evidence, such as interview, observation, and documentation (Creswell, 2018). The basis of the case study was that this study worked to uncover detailed information on a given topic. Qualitative research was used in this study to explore the blended learning practice and determine three main issues of the blended learning adoption framework.

3.1 Participant

This research took place at one of a university in Indonesia. Participants in this study were selected based on several considerations related to the topic of this study. For the purpose of this study, there were three EFL teachers selected with some considerations; the teacher commonly incorporating technologies regularly and conveniently, such as computers, as an aspect of teaching instruction, the teacher has sufficient experience in implementing blended learning more than 4 years in their teaching and more focus on giving and receiving feedback in the classroom.

3.2 Instruments

In figuring out the adoption of blended learning in the institution, this research integrated three data sources, observation, semi-structured interview, and document analysis. The observation is focused on the implementation of blended learning. Observations provided evidence on how the participants implement blended learning in their teaching practice along with the successes and challenges of such. The researchers did the observation in offline and online classrooms. The interviews were conducted with three lectures that encompassed in the process of blended learning practice. The researchers organized semi-structured interview around 30–45 min by phone. Interview guides used by researchers adapted from (Graham et al., 2013) for a structured and guided interview between researchers and participants. The interview did in Bahasa in order to make it easy for participants to understand the field of study and to provide full data, ensure that the conversation is carried out in order to collect information in its entirety. In addition, teachers' documents have also been analyzed to enhance and reinforce information obtained from the interview and observation to gain information about the incorporation of blended learning adoption.

3.3 Data Analysis Procedure

In this part, processes of data analysis presented and carried out on to address the research questions. The obtained data will be analyzed by using descriptive qualitative research. All of the data will be transcribed first to ease the process of analyzing the data. The data were analyzed by utilizing the interactive model proposed by Miles, Huberman & Saldana (2014). Firstly, the data were gathered and obtained using the above data collection techniques; interview, classroom observation, and documentation. Secondly, the researchers listened to the recordings and made transcripts carefully in order to condense the interview material. The raw data then carefully will be coded in the form of a transcript. For the data to be listed, some sections have not been taken into account of the recordings considered to be unsubstantial material. The researcher reduced the collected data by sorting the relevant data and other empirical information and omitting the irrelevant data. Then, the researcher presented the data in the form of brief descriptions and tables that illustrate the analysis of blended learning adoption towards the markers of institutional strategy, structure, and support. The last, the researcher checked the data to the theory and previous studies in drawing the conclusion. Thus, the accuracy of the data checked and confirmed using authentic data obtained by triangulation.

4. FINDING

4.1 Blended Learning Implementation

The blended learning implementation focused on the result of observation and documentation. Offline and online observation notes have been identified with the use of the participatory type of observations as the observer takes part in a blended phase of learning. The findings have been documented during the offline meeting in weekly lectures while online learning has been carried out observed in Google's classroom, Zoom meeting, and WhatsApp group. Learning journals helped lecturers produce content according to the curriculum.

Key aspects of Blended Learning	Observation Notes
Course Goal and Learning Outcome	The teacher provides a complete course syllabus containing learning topics, instructional strategies, course goals at the beginning of the meeting in the offline classroom.
	The existence of online learning is explained orally without being included in the course syllabus.
	Learning outcomes are arranged specific and measurable.

Blended courses actually need to have the same goals and outcomes as a face-to-face and online classroom because only the techniques and approaches that evolve. From the data above, it can be seen that the teacher provides a syllabus course directly to students during the meeting in the offline classroom. This is done on the first day of the meeting to make students understand earlier about what they will learn and what to prepare for one semester.

However, reflected on the observations and documentation, the course syllabus did not explain that learning will be carried out by blended learning. There are only written learning methods such as discussion and lecturing methods. Teachers inform the existence of online learning to support offline learning by explaining directly to students. The explanation was given orally to describe what was written on the course syllabus distributed to students. The teacher explained what topics would be studied, the goals and outcomes for each topic. Even though learning outcomes were clearly written in the syllabus, the teacher gave more explanation about how the assessment will be carried out, so that students understand all the activities in the learning process can be measured properly and clearly.

Key aspects of Blended Learning	Observation Notes
The Ease of Communication	Course syllabus is prepared using a simple writing style, clear and easy to understand.
	The syllabus includes contact details of teacher to assist the students.
	Materials inconsistently indicate when activities or assessments take place offline versus online.

The description of the lesson is better if it is succinct and clearly understood. The writing style should be straightforward, concise, and timely across the course website, but particularly when giving directions. In any method tasks or phases, percentages can be used to signify progression or focus. In the learning process, teachers marked their tasks in the familiar framework with a clear convention; even in the course of the lessons, the specific and appealing presentation online or offline classroom can allow students to know where the engagement was needed.

By linking web pages and websites with other connections, connects or even contrasts, they add dimensions to details. Teachers integrated video or other multimedia into the introductory strategy to address as a perfect way to draw students' interest, to generate their current awareness, and to make them realize how the learning interacts with real life. But sometimes, the teacher did not tell the students from the beginning of the time if there was advanced online learning to continue some of the material that was pending. Finally, students find it difficult to distinguish which material will take place in blended learning and which will take place offline or online only.

Key aspects of Blended Learning	Observation Notes
The Pedagogical and Design of organizational	The teacher gives the assessment after delivering the learning materials.
	The materials are delivered sequences appropriate with what attach in the syllabus
	The learning material is arranged according to the level of difficulty and divided into several parts.
	The teacher gave the introduction of the topic and summarized the material in the end of class both online and offline classroom.

The teacher started with an introduction in each lecture, which describes the structure and the sequence. The instructional course began with a story or case study which offers real-life relevance to the meaningful outcomes of learning. Then, the major students' thinking by putting up a question or challenge. The teacher also offered a summary of the activities appropriate for the lesson by means of numbers to show the learning structure. Then, the teacher informed which lessons that the students would undertake offline and online. Finally, the teacher linked up to the next learning session to have appropriate insights and preparation for the student.

Key aspects of Blended Learning	Observation Notes
Learning Engagement	The engagement was hesitated by the time allocation in offline classroom
	Only few students gave participation in online learning.
	Presentations were designed to engage and support learner attention in offline and online class.

In the process of acquiring in the class, most interaction happened between teacher and students only because when the teacher gave feedback in every assignment and project, so there was a lack of interaction among students. As the impact, students depend on the lecturer too much in giving instruction and direction. They expect more personal feedback to secure themselves from mistakes. On one side, feedbacks are good for them, but on the other side, it does not allow them to think free based on their critical thinking awareness.

There were different cases between offline and online classes. In offline classes, the time available was often limited to provoke student activity because time has been used to explain a subject matter. However, based on the results of observations in online classrooms, especially when students did classes in Zoom meetings, it is very clear that only a few students participated in answering or responding to the teacher. Others just listened and even turned off their camera feature even though the teacher has prepared an interesting presentation that was expected to attract student engagement.

Key aspects of Blended Learning	Observation Notes
Learning's Group and Collaboration	There was a lack interaction in the most interaction between student and teacher in online meeting, but they felt so engaged when giving the opinion in WhatsApp group.
	Students' felt so attractive in following the leasson when they have to discuss with their pairs than gave engagement with the teacher.
	There was students' group discussion divided by teacher for offline classroom.

In the teaching and learning process, collaboration among students and is needed. However, in reality, the implementation. Almost all interactions that should occur in offline classes and online classes are not optimal. Students are more passive to engage in engagement when they have to express opinions or answer questions orally. However, the opposite was true; when online discussions on WhatsApp groups, almost all students were very excited to join the discussion. Always respond to the teacher so that the interaction goes so well. The same thing happened when students were asked to discuss with their group friends; they were so excited and active both in offline classes and online classes.

Key aspects of Blended Learning	Observation Notes
Assessmant and feedback (including the way of grading)	Feedbacks were shared weekly after the students done the task.
	The way of Gradeing assignments were varied.
	Self assessment activities were used frequently throughout the course.
	Offline assessments capitalized on physical presence, immediacy, and student's interaction.

The teacher's assessment approaches to assess the optimal learning performance of students rather than the abilities of students using technology. A student might be a wonderful presenter, for example, but may have a tough time using online technologies to capture a presentation. Feedback from the assessment that the teacher provides will be sent by the teacher via Google Classroom. The teacher explains what the students need to improve and what the students are good enough to do. In assessments, either offline classes or online classes, the teacher did not only focus on assessments in the form of numbers from the assignments students are doing. But the teacher also pays attention to the attendance presentation and also the activeness of the students.

Key aspects of Blended Learning	Observation Notes
The ease of access	All students felt helped by the Whatsapp group
	All students have familiarized themselves with using Zoom meeting and Google Classroom.
	Other supporting applications are also often used.
	Online lectures are sometimes hampered by internet network disruptions.

In learning using blended learning, the ease of accessing websites or online-based learning applications is of utmost importance. Based on the results of observations and documentation, students easily access each online class because they are already integrated into the WhatsApp group. In this group, the teacher informs about online meeting schedules and informs what applications will be used. In this WhatsApp group, teachers and students can communicate intensely. The teacher asked the students if there were suggestions for using other applications that students enjoy learning and discussing to resolve other students' confusion in learning. When they use Zoom meetings, the teacher will send an invitation in the form of a password for entry. Likewise, when they have to collect assignments and discuss them in Google Classroom. Based on the observations, all students seem to be accustomed to using all the facilities that support online learning. But sometimes, at some point, this entry is blocked by an interrupted internet network. However, this is not a big problem because the teacher will understand and try to solve this problem.

Key aspects of Blended Learning	Observation Notes
The Evaluation	A range of information (student performance information, feedback) was used to evaluate how effectively the course design and learning process.

For the need of evaluation for better improvement, teachers looked at the learning outcomes to understand the level of class valuable in the blended course. The student performance results for a blended course will be compared with those for offline or entirely online to find out the equality of appraisals.

4.2 The markers of Blended Learning Adoption

4.2.1 Institutional Strategy

Institutional strategy discusses the design foundations of blended learning. It can be said that this component is the main element in building blended learning in an institution.

NO	The Aspects of Institutional Strategy	Institutional Categories
----	---------------------------------------	--------------------------

1.	Purpose	No formally purpose of blended learning that is regulated by the institution.
2.	Advocacy	BL is approved and advocated by the institution.
3.	Definition	No formally definition is provided by the institution.

1. Purpose

The researchers asked the adopters to find out their purpose for adopting blended learning. The result of the research showed the purpose of blended learning in this institution informally identified. The lecturers who implement blended learning have their respective purpose according to the class they teach and the needs of the subjects they handle. Then, the purpose of implementing blended learning is individual or informal identified by teachers.

“The main goal? The main goal is more to create a variety of learning from the learning process itself; the second is now the era of the use of technology in learning, especially in this pandemic has become a necessity and we adopt technology-based learning without face to face. In fact, during this pandemic, face-to-face learning is transferred to online learning that uses technology.”

“If I was asked about the purpose of using blended learning, the first is to strengthen traditional class. Then, to provide more opportunities for the learner in upholding the technology in terms of learning needs, for example submitting the assignments.”

The adopters were implementing BL with the personal terms employing an electric set of styles addressed to the context of the subject. Besides, they set their own goals for adopting blended learning, and this is indeed freed by the leaders of the institution to all lecturers to have the right to use any learning model. To support these goals, they also use different methods and platforms depending on learning targets and student circumstances, and things. this is not regulated in the institutional regulations.

The participants reported that blended learning improves the student’s motivation and impacts students’ achievement. However, this program was not effective in saving costs, because according to them, students had to budget for other funds to be able to access the internet. This situation is exacerbated by some students who live in areas that are difficult to access the internet, so that blended learning increases expenses for some of them. But behind it all, blended learning still provides a different atmosphere in teaching and helps to achieve learning goals that sometimes cannot be realized if only rely on face-to-face learning.

2. Advocacy

The advocacy in institutional strategy is related to among administrators, faculty, support personnel or staff, and others that may facilitate blended learning implementation. The accomplishment of blended learning will run properly supported by advocacy among faculty members (O'Dowd, 2013; Taylor & Newton, 2013). The findings of this study indicated that the faculty of this institution is not formally involved in the effectuation of blended learning conducted by lecturers in the class. In case the lecturers who adopt blended learning in teaching often carry out sharing or creating group discussion to exchange opinions and solving the problems, but this is done informally. Thus, there is no program specifically carried out by faculty and university related to this matter.

3. Definition

A variety of goals can be appeared by the formal policy of BL's definition, including differentiation of other models for learning objectives. When the researcher asked the participants about how they define blended learning, all participants have the same idea about the blended learning definition. Each of the participants at this institution who adopted blended learning cited a definition according to what they knew from attending a workshop or reading several articles related to blended learning, so it did not come from a definition set by the institution formally.

"So, in simple terms, in my opinion, blended learning is a combination of face-to-face learning with online learning. Therefore, it is called blended learning. In this case, the use of technology is needed to sustain the learning."

"Blended learning is a combination of two or more learning methods. Even though now that means an association of online and conventional learning."

"If we look in the surface at the term "Blended" and "Learning" means a combination of learning. The combination here means combining two or more learning models."

By the data, it can be concluded that each definition has the same idea. It includes the incorporation of online and face-to-face instruction. One participant deliberately extended more detailed definition, which stated that "technology" has a crucial and prominent impact on the pedagogical approach and provides supervision to the class regarding specific portions of hybrid class." Another participant proffered a practical definition by augmenting face-to-face content to online meetings, so they use a platform that can be face-to-face virtually. In this institution, the adopters determined the percentage of teaching that must be done online to qualify as blended learning. Each participant noted the flexibility that can maintain the operation of their blended class with recommended parameters when situations are suitable.

4.2.2 Institutional structure

Institutional structure focuses on the aspect connected with pedagogy, technology, administration of faculty, scheduling, the process of evaluation which strengthen blended learning (Graham et al., 2013).

NO	The Aspects of Institutional Structure	Institutional Categories
1.	Infrastructure	There is an emerging support the infrastructure by the institution.
2.	Schedule	No course catalogue system formally provided in scheduling blended learning.
3.	Governance	No official approval by the institution.
4.	Evaluation	No evaluations formally place in addressing blended learning outcomes by the university administrator

1. Infrastructure

BL setting in the classroom can be established well when the infrastructure for technology relates to digital innovations (Garrison & Kanuka, 2004). The researcher interviewed the informants about whether faculty develop their infrastructure to reinforce BL enforcement.

“We have a pretty good server, right. This means that it can be accessed properly, the institution given technical instructions, provided assistance. Then there is also support in the form of internet access which is just getting better. In the study program, we have three hotspots for students and one for lecturers exclusively. I think the infrastructure provided by the university is good enough.”

“Currently, the university is also constructing a new building that will function as a computer laboratory with more sophisticated and complete facilities. In addition, the bandwidth continues to be improved both in terms of access points and high-speed network.”

The institution has provided fairly good infrastructure facilities and continues to develop physical and technological resources adapted to support the traditional and online teaching, learning process and to realize an implementation of blended learning runs smoothly.

2. Schedule

The findings of the research showed the blended learning course did not systematically classified by the institution in the course catalog system. However, this institution gave a chance to the teachers to indicate blended learning courses

individually in the catalog but did not provide a standardized procedure for arranging all blended learning courses that the teacher adopted. Thus, adopters create their own schedule for when they should use blended learning and use face-to-face learning only. Usually, adopters will provide information to students about their schedules using online learning in addition to material explanations and discussions that cannot take place fully in conventional learning—the scheduling depending on the needs and circumstances at the learning process.

3. Governance

In the implementation of blended learning, there should be a systematic government structure that regulates the approval of the development of blended learning and the parties who approve the system or material that are implemented on blended learning. However, in institutions, there is no official approval or implementation system. Implementation depends only on the adopters of blended learning. Indeed, the institution gives the instructor the right to use any method of teaching, including blended learning. However, officially no one leads or supervises the development of blended learning in institutions. In simply, blended learning in this institution is informally regulated and approved.

4. Evaluation

In the evaluation process, the adopters of blended learning at this institution chose the way to how they evaluate the existing for their blended learning class.

“When we apply the blended learning, our evaluation must also be based on blended learning, so it's useless if we don't, if our evaluation is outside the purpose of blended learning, if we apply it, it will be useless, so we still adjust the essence of the evaluation to the purpose of the blended learning we use. “

The evaluation process is carried out according to the criteria of blended learning. They asked for feedback from students and also discussed with other adopters to pointed out an appropriate evaluation process. The results depicted the implementation of blended learning has a positive effect for learners because the method variations and student motivation have increased, student boredom in learning has also decreased because students are directly engaged, students were also asked to provide suggestions for applications or platforms that are attractive and more current to use in learning.

4.2.3 Institutional support

Institutional support is part of the blended learning adoption which discusses technical and pedagogical support, professional development, and incentives.

NO	The Aspects of Institutional Support	Institutional Categories
1.	Technical Support	Well developed technical support to fulfill the online demands of all stakeholders
2.	Professional Development	The rigorous course development procedure has been introduced and consistently supported
3.	Incentives	No established faculty incentive system

1. Technical support

Current technical support programs and facilities are given exclusively to faculty members with adequate resources. The support of the technical system was also related to pedagogical support. From a technical point of view, this institution provides library facilities that are connected to an internet network and can be accessed by students anywhere, computer laboratories that can be utilized to construct better-teaching activities. Technology services added 24 hours in seven days online help desk for faculty and students. Related to the pedagogical support of this institution, they hold workshops, webinars related to distance learning and course improvement.

2. Professional Development

The development of professionalism of blended learning is carried out by making an independent workshop which is attended by adopters of blended learning and other campus personnel. Apart from the workshop, there was also an offline and virtual group collaboration that discussed the development process of the blended learning course. The university also carries out the development process needed by blended learning adopters, corrects deficiencies in the course, solves problems that occur in implementation, and improves adopters' skills, especially in the field of technology so that implementation is expected to continue to have a good increase. Participants stated that this development process was carried out both formally and informally. The formal process is through workshops which are indeed held directly by the institution from the field of development, while informally, it is carried out by discussing with fellow lecturers while there is a campus break.

3. Incentives

The institutions under research did not choose to formally incentivize faculty and certainly, there were no special incentives for adopters of blended learning.

“For now, there are no incentives provided by universities, faculties, or from study programs. It means that before we follow the regulation before we develop one learning module per semester, there are points that we need for the lecturers' performance reports for each semester, right? But now the points system has not been implemented properly. I don't think too much about incentives.”

This institution gives the teachers the right to implement blended learning. So that blended learning itself is a form of innovation carried out by teachers. Therefore, the institution did not provide incentives to the study program. In addition, the adopters of blended learning do not think about special incentives. They only want to focus on the progress of students and of course the development of the course.

5. DISCUSSION

The choice and organization of learning activities and evaluations contribute with the best mixed learning development to the desired learning outcomes while maximizing strengths and reducing weaknesses both online and offline classroom (Stein & Graham, 2014). This section expands on the analysis of collected data in the preceding section. The results of the study showed that the curriculum used in the study meets a good standard of catalog. However, several things must be improved, including the process of blended learning. Apart from that, blended learning helps students to keep getting learning material when the time allocation for offline learning is limited. The notion of reaching a specific target is an important component of influencing effective, blended learning based on teacher concern for the use of technical incorporation.

The findings of the study affirm (Prasad et al., 2018), who found that technology literacy is one of the difficulties of blended learning. Blended learning was delivered with specific goals and outcomes. It features an optimized framework for analyzing the content and an efficient learning management system. Conversely, some changes are required for engagement, suggestions, and behavior to improve the comprehension of learning. A blended course experience includes offline and online activities and evaluations. Since a significant part of the learning time takes place offline, online navigation was given in the online environment that affects students instantly and properly. The online setting also was provided to students with simple, explicit details, which lays out standards and acts as a guide for the course length. Awareness and understanding of teachers, students, and others in the establishment of a positive mixed learning framework should be an important consideration. From the result of observation and documentation, it can be seen that many interactions between lecturers and students existed in a blending course only because the lecturer offered input on every mission and project, and there was a lack of student contact. As a result, students focus too heavily on the lecturer to provide instruction and guidance. The students need more personal reviews to avoid errors. Feedback, on the one hand, was good for students, but on the other hand, it did not encourage students to think openly depending on their rational knowledge of thought.

The results of research based on the theory of Graham et al.,(2013) showed that this university was at stage 1 (awareness/exploration) of the blended learning adoption. The three main issues under the research indicate that each component of the main issues showed blended learning in this institution was not formally regulated by the institution but submitted to faculty members, especially the teachers who teach—the

findings of the study in line with (Staker & Horn, 2012). From the study, it can be seen that the three adopters of blended learning applied the same models of blended learning, which was the station rotation model because the students rotated on the schedule that has fixed by the institutions. The rotation includes some rotations with the group projects, group tutoring, and all the students joining all the teaching process stations.

According to Porter et al.,(2014) the parties advocates should preferably contribute to BL acceptance and should be facilitated by managerial advocates. If administrators want to incorporate BL enforcement without faculty and student advocates, they would be very vulnerable to what the faculty finds predominantly a leading effort. In institutional strategy, which discusses the whole of the blended learning design. Adopters do have the same idea in defining blended learning, but still the existing definition is derived from the experiences and knowledge of adopters, not formally regulated by the faculty. Similar to the institutional advocacy and the purpose of blended learning, the adopters or administrators informally advocate and informally identified the purpose of blended learning.

The construction of the necessary technical infrastructure is important to blended learning development (Niemic & Otte, 2010). In terms of infrastructure, this institution continues to build facilities both physical and technological to support the course of learning. Internet facilities continue to be expanded in the campus area to make it easier for campus members to stay connected to the internet network. Information services are also provided that can help university members when they feel confused. Even though the infrastructure is good, it still cannot be classified into the third stage because the development that has occurred has not been focused and prioritized for blended learning.

The preparation of blended courses should be organized and conveyed explicitly (Niemic & Otte, 2010) before students are enrolled, which classes are combined. The findings of the study revealed that the scheduling of the blended learning program had been arranged in detail for students in the form of a catalog system equipped with resources that can be accessed by students. This well-designed scheduling system also makes the adoption of blended learning at stage 2. The practice of learning methods at this institution is handled by the lecturers so that the implementation of blended learning in terms of governance is not formally regulated. In contrast, the result entities have not yet entirely fulfilled the standards. The BL implementation guidelines could be creating the framework for the future appraisal (Dziuban et al., 2018; Taylor & Newton, 2013). In course reviews, tests, and findings during the BL implementation, the institutions reported little improvement. Complimentary evaluations can help achieve comparative assessments between traditional and BL methods.

The varied instructional approaches specific to blended learning need total investigation with pedagogical skills as the professional development (Korr et al.,

2012). The organization under study identified pre-existing technical and pedagogical support for both teacher and student based on the results of the research. Adopters have received more pedagogical and technological guidance for BL faculty adopters, but no pedagogical assistance for student users has been identified.

Based on the previous study, the organizations presented two of the three types of BL advancement benefits recommended in the literature: cash reward packages and the extra hours for student assistants (Korr et al., 2012). The institution did not provide special incentives for adopters of blended learning, even though it is well known that the implementation of blended learning certainly requires more costs and more effort than just face-to-face learning. The results of this study suggested that organizations should consider giving BL adopters incentives. Therefore, in building an effective BL, the universities in this sample can not only use incentives but also reductions in course loads. Evaluation through advancement may have attracted a younger faculty to embrace and show institutional approval for BL. If BL is taken into account in tenure and commercial decisions, teachers who fear lower ratings of students while they are trying to implement BL effectively may become disincentive.

6. CONCLUSION

In this paper, a case study report on the implementation of blended learning in higher education focused on institutional policy cases regarding the blended learning stages that were discussed. The results of the study stated that the institution under study adopted blended learning at the awareness/exploration stage. There are still very few adopters of blended learning at this institution. Blended learning incorporation of pedagogical courses has a strong ability to improve the skill of students as teachers in the conception of basic instruction for reading and writing. Given the difficulties such as limited timing for input, lack of scientific base, and demand for personal reviews, students have a good outlook for mixed learning. The research defined tendencies and associations in relation to institutional strategy, structure, and support preferences. One of the most important results is the strategic need to develop blended learning advocacy at different institutional levels so that they develop a collective agenda for implementation, access funding, and encourage prospective adopters. Moreover, institutions must help identify a blended learning structure for the next adopters. There are also enhancements to the technology to promote the convergence of online and face-to-face learning.

This paper was designed to provide a comprehensive reference to the application of blended learning strategies. The research is concerned with proposing an impact analysis during its implementation instead of as an afterthought to the integrated learning approach. This case study indicates that universities examined have started to apply blended learning with a small number of early adopters and expect their activities to increase; future studies can define important considerations to take into account in the institutional scaling process. Finally, the limitations of the research

must be acknowledged, as in many exploratory studies. The findings are from a single institution in higher education. In this respect, the next step in analysis can be expanded the other cases to compare various models to blended learning.

7. REFERENCES

- Al-Emran, M., & Salloum, S. A. (2017). Students' attitudes towards the use of mobile technologies in e-Evaluation. *International Journal of Interactive Mobile Technologies*, 11(5), 195–202. <https://doi.org/10.3991/ijim.v11i5.6879>
- Anthony, B., Kamaludin, A., Romli, A., Raffei, A. F. M., Phon, D. N. A. L. E., Abdullah, A., & Ming, G. L. (2020). Blended Learning Adoption and Implementation in Higher Education: A Theoretical and Systematic Review. In *Technology, Knowledge and Learning* (Issue 0123456789). Springer Netherlands. <https://doi.org/10.1007/s10758-020-09477-z>
- Chang-Tik, C. (2018). Impact of learning styles on the community of inquiry presences in multi-disciplinary blended learning environments. *Interactive Learning Environments*, 26(6), 827–838. <https://doi.org/10.1080/10494820.2017.1419495>
- Creswell, J. W. (2018). Qualitative inquiry & research design: Choosing among five approaches. 2nd ed. California: Sage.
- Honhaner, E. L. (2010)
- Cutri, R. M., & Whiting, E. F. (2018). Opening Spaces for Teacher Educator Knowledge in a Faculty Development Program on Blended Learning Course Development. *Studying Teacher Education*, 14(2), 125–140. <https://doi.org/10.1080/17425964.2018.1447920>
- Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*, 15(1), 1–16. <https://doi.org/10.1186/s41239-017-0087-5>
- Fesol, S. F. A., & Salam, S. (2017). Towards MOOC for technical courses: A blended learning empirical analysis. *Proceedings - 2016 4th International Conference on User Science and Engineering, i-USer 2016*, 6(6), 116–121. <https://doi.org/10.1109/IUSER.2016.7857945>
- Frankel, J. D. (2018). *Efl Teacher Perceptions of a Blended Teacher Professional Development Workshop in Mexico*.
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education*, 7(2), 95–105. <https://doi.org/10.1016/j.iheduc.2004.02.001>
- Ghazal, S., Al-Samarraie, H., & Aldowah, H. (2018). “i am Still Learning”: Modeling LMS Critical Success Factors for Promoting Students' Experience and Satisfaction in a Blended Learning Environment. *IEEE Access*, 6, 77179–77201. <https://doi.org/10.1109/ACCESS.2018.2879677>
- Graham, C. R., Woodfield, W., & Harrison, J. B. (2013). A framework for institutional adoption and implementation of blended learning in higher

- education. *Internet and Higher Education*, 18, 4–14.
<https://doi.org/10.1016/j.iheduc.2012.09.003>
- Halverson, L. R., Graham, C. R., Spring, K. J., Drysdale, J. S., & Henrie, C. R. (2014). A thematic analysis of the most highly cited scholarship in the first decade of blended learning research. *Internet and Higher Education*, 20, 20–34.
<https://doi.org/10.1016/j.iheduc.2013.09.004>
- Ismail, A. O. A., Mahmood, A. K., & Abdelmaboud, A. (2018). Factors influencing academic performance of students in blended and traditional domains. *International Journal of Emerging Technologies in Learning*, 13(2), 170–187.
<https://doi.org/10.3991/ijet.v13i02.8031>
- Kim, D., Park, Y., Yoon, M., & Jo, I. H. (2016). Toward evidence-based learning analytics: Using proxy variables to improve asynchronous online discussion environments. *Internet and Higher Education*, 30, 30–43.
<https://doi.org/10.1016/j.iheduc.2016.03.002>
- Korr, J., Derwin, E. B., Greene, K., & Sokoloff, W. (2012). Transitioning an Adult-Serving University to a Blended Learning Model. *Journal of Continuing Higher Education*, 60(1), 2–11. <https://doi.org/10.1080/07377363.2012.649123>
- Lai, M., Lam, K. M., & Lim, C. P. (2016). Design principles for the blend in blended learning: A collective case study. *Teaching in Higher Education*, 21(6), 716–729. <https://doi.org/10.1080/13562517.2016.1183611>
- Mirriahi, N., Alonzo, D., & Fox, B. (2015). A blended learning framework for curriculum design and professional development. *Research in Learning Technology*, 23(1063519). <https://doi.org/10.3402/rlt.v23.28451>
- Moskal, P., Dziuban, C., & Hartman, J. (2013). Blended learning: A dangerous idea? *Internet and Higher Education*, 18, 15–23.
<https://doi.org/10.1016/j.iheduc.2012.12.001>
- Miles, M. B., Huberman, A. M., dan Saldana, J. 2014. Qualitative Data Analysis, A. Methods Sourcebook, Edition 3. USA: Sage Publications
- Niemiec, M., & Otte, G. (2010). An administrator's guide to the whys and hows of blended learning. *Journal of Asynchronous Learning Network*, 14(1), 91–102.
<https://doi.org/10.24059/olj.v14i1.1641>
- O'Dowd, R. (2013). Telecollaborative networks in university higher education: Overcoming barriers to integration. *Internet and Higher Education*, 18(July 2013), 47–53. <https://doi.org/10.1016/j.iheduc.2013.02.001>
- Owston, R., York, D., & Malhotra, T. (2019). Blended learning in large enrolment courses: Student perceptions across four different instructional models. *Australasian Journal of Educational Technology*, 35(5), 29–45.
<https://doi.org/10.14742/ajet.4310>
- Paskevicius, M., & Bortolin, K. (2016). Blending our practice: using online and face-to-face methods to sustain community among faculty in an extended length professional development program. *Innovations in Education and*

- Teaching International*, 53(6), 605–615.
<https://doi.org/10.1080/14703297.2015.1095646>
- Porter, W. W., Graham, C. R., Spring, K. A., & Welch, K. R. (2014). Blended learning in higher education: Institutional adoption and implementation. *Computers and Education*, 75(June 2014), 185–195.
<https://doi.org/10.1016/j.compedu.2014.02.011>
- Porter, W. W., Graham, C. R., Bodily, R. G., & Sandberg, D. S. (2016). A qualitative analysis of institutional drivers and barriers to blended learning adoption in higher education. *Internet and Higher Education*, 28, 17–27.
<https://doi.org/10.1016/j.iheduc.2015.08.003>
- Prasad, P. W. C., Maag, A., Redestowicz, M., & Hoe, L. S. (2018). Unfamiliar technology: Reaction of international students to blended learning. *Computers and Education*, 122, 92–103. <https://doi.org/10.1016/j.compedu.2018.03.016>
- Salloum, S. A., Al-Emran, M., Monem, A. A., & Shaalan, K. (2017). A survey of text mining in social media: Facebook and Twitter perspectives. *Advances in Science, Technology and Engineering Systems*, 2(1), 127–133.
<https://doi.org/10.25046/aj020115>
- Smith, K., & Hill, J. (2019). Defining the nature of blended learning through its depiction in current research. *Higher Education Research and Development*, 38(2), 383–397. <https://doi.org/10.1080/07294360.2018.1517732>
- So, H. J., & Bonk, C. J. (2010). Examining the roles of blended learning approaches in computer-supported collaborative learning (CSCL) environments: A delphi study. *Educational Technology and Society*, 13(3), 189–200.
- Staker, H., & Horn, M. B. (2012). Classifying K-12 Blended Learning. *Innosight Institute*, May, 22.
<http://eric.ed.gov/?id=ED535180>
<http://files.eric.ed.gov/fulltext/ED535180.pdf>
- Stein, J., & Graham, C. R. (2014). Essentials for blended learning: a standards-based guide. New York: Routledge
- Subramaniam, S. R., & Muniandy, B. (2019). The Effect of Flipped Classroom on Students' Engagement. *Technology, Knowledge and Learning*, 24(3), 355–372.
<https://doi.org/10.1007/s10758-017-9343-y>
- Tamim, R. M. (2018). Blended Learning for Learner Empowerment: Voices from the Middle East. *Journal of Research on Technology in Education*, 50(1), 70–83. <https://doi.org/10.1080/15391523.2017.1405757>
- Taylor, J. A., & Newton, D. (2013). Beyond blended learning: A case study of institutional change at an Australian regional university. *Internet and Higher Education*, 18, 54–60. <https://doi.org/10.1016/j.iheduc.2012.10.003>
- Van Laer, S., & Elen, J. (2020). Adults' Self-Regulatory Behaviour Profiles in Blended Learning Environments and Their Implications for Design. In *Technology, Knowledge and Learning* (Vol. 25, Issue 3).
<https://doi.org/10.1007/s10758-017-9351-y>

- Williams, N. A., Bland, W., & Christie, G. (2008). Improving student achievement and satisfaction by adopting a blended learning approach to inorganic chemistry. *Chemistry Education Research and Practice*, 9(1), 43–50. <https://doi.org/10.1039/b801290n>
- Wong, R. (2019). Basis psychological needs of students in blended learning. *Interactive Learning Environments*, 0(0), 1–15. <https://doi.org/10.1080/10494820.2019.1703010>