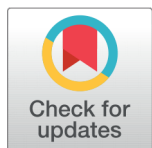


## RESEARCH ARTICLE



### OPEN ACCESS

**Received:** 23.07.2020

**Accepted:** 13.11.2020

**Published:** 04.12.2020

**Citation:** Irum S, Bhatti T, Abbasi WA, Dilshad M (2020) Blended Learning: Innovative challenge faced by students at University level in Pakistan. Indian Journal of Science and Technology 13(42): 4386-4395. <https://doi.org/10.17485/IJST/v13i42.1212>

\* **Corresponding author.**

Tel: 092-331-3660334  
[Sumera.irum@usindh.edu.pk](mailto:Sumera.irum@usindh.edu.pk)

**Funding:** None

**Competing Interests:** None

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Published By Indian Society for Education and Environment ([iSee](#))

**ISSN**

Print: 0974-6846

Electronic: 0974-5645

# Blended Learning: Innovative challenge faced by students at University level in Pakistan

**Sumera Irum<sup>1\*</sup>, Tarique Bhatti<sup>1</sup>, Waheed Ahmed Abbasi<sup>2</sup>, Muhammad Dilshad<sup>3</sup>**

<sup>1</sup> Assistant Professor, Faculty of Education, University of Sindh, Jamshoro/ Hyderabad, Pakistan. Tel.: 092-331-3660334

<sup>2</sup> Assistant Professor, Department of Criminology, University of Sindh, Jamshoro

<sup>3</sup> Assistant Professor, Government Degree College, Pratabad, Hyderabad, Pakistan

## Abstract

**Objectives:** To critically explore the perceptions of students about the problems and challenges faced by the students of Bachelor of Education (B.Ed.) in the universities of Pakistan. **Methods:** The study was a descriptive survey with quantitative approach which measured and quantified the perceptions and problems related to blended learning approach for teaching learning education in Pakistan. Data was collected from 250 out of 666 students enrolled in the Bachelor of Education (B.Ed.) level program offered by three general public sector universities of Pakistan in the academic year 2019. To collect data, a questionnaire with a three-point Likert scale was developed with the help of literature reviewed. The data was analyzed through frequencies, percentages and diagrams. **Findings:** The findings of the study revealed that the majority of students had a very positive view about the blended learning but at the same time they described many problems they faced during their learning, for example, lack of proper time, no skills and support to use proper way, lack of training, and un-availability of Learning Management Software (LMS) to use technological items for learning purposes. **Application:** The study recommended that proper institutional policy should be formed for effective use of blended mode for learning purpose in universities; proper training and skill development programs should be organized so that teachers could be able to use and integrate technology in their teaching.

**Keywords:** Blended learning; perception; challenges; student teachers; teacher education

## 1 Introduction

In recent decade, uses of technology and modern methods have brought drastic changes for the development and improvement of education standard in the higher education system. Most importantly the ongoing pandemic situation of Covid19 has caused closing of educational institutions and keeping social distancing procedures which have made delivery and imparting of education difficult and contact of social groups and individuals restricted<sup>(1)</sup>. In such social and pandemic conditions, educationists and policy-makers should have to devise effective ways and means of communication between teachers and students, so what is left to make the most of is the modern technology. It is already known that the integration of technology in education institutions and field has generated an active learning process which includes face-to-face and other means of teaching-learning like online technology. This method of teaching-learning is called 'blended learning' which has flourished equally in the developed and developing countries around the world because of its importance and result-oriented style<sup>(2)</sup>. The term consisting of two word, 'blend' and 'learning' denotes mixing of various approaches and methods (blend) and adaptation of various new information and knowledge (learning)<sup>(3)</sup>.

The programs and approaches blended in this method can provide with better opportunities of leaning in interactive manners amongst teachers and students, pedagogical abundance of elasticity and interaction, and cost-effective system to deliver the teaching and learning as meaningful and effective to their beneficiaries in the maximum quantity and quality<sup>(3)</sup>. Blended learning is an amalgamation of traditional and advanced learning approaches like in-class and out-of-class including as both the physical and virtual appearances of teachers and students. In fact, this carries heavy importance and same time a high challenge for teachers, instructors and educationists to know 'when' and 'how' blended learning method of technology can be applied to motivate learning and performance process of students<sup>(4,5)</sup> especially those enrolled in the bachelor of education level (B.Ed.) as is the case in Pakistan. Since the students of B.Ed. from their early stage of learning require gaining advanced and modern approaches to increase their learning habits so that they can become potential teachers of future. The focus of studying B.Ed. can provide valuable ideas and critical findings to help them move to be potentially prospective teachers, instructors and educationists. In addition, educationists and policy makers can collect and draw valuable inferences and lessons from such studies to strengthen their policies of education. Actually the concept of blended learning ensures the continuous process of learning with critical approaches and transformation of the knowledge to the next generation<sup>(3,5)</sup>. Therefore, in order to become well-versed and would-be effective teacher, modern times essentially demand for them learning through modern techniques to make their learning interesting and motivational in order to gain maximum benefits from both approaches- face-to-face and technological-oriented to help them continue process of teaching and learning<sup>(4,6)</sup>.

Today's new generation is viewed as the digital generation. In order to meet the demands of this generation, teaching has to be updated with modern targets and requirements. It is perceived that the use of technology increases the motivation and interest of students in class room and consequently enhances students learning outcomes<sup>(7)</sup>. Blended Learning; provides a personalized learning environment, students may get an education anywhere and anytime. It creates a collaborative learning environment, and students acquire 21<sup>st</sup> centuries skills. Researchers have focused on students' motivation, learning style, academic achievement and their methods of learning. Kavitha<sup>(8)</sup> inspected the students' practices in a blended learning mode and found that blended learning is a beneficial for students only when they possessed skills to use technology since it provides a collaborative learning environment. Oweis<sup>(9)</sup> studied the effect of the usage of blended learning on students' academic achievement. He used experimental study and divided

students in control and experimental groups to teach English. He found that the experimental group's performance was high as compared to the control group and the students belonged to the experimental group were more motivated to learn than a control group. By using blended learning teachers can adopt a modern technique of teaching that is "student-centered approach" by leaving traditional and conventional approach which reduces the teachers' dependence on lecture-based teaching and printed materials.

There are enormous potentials of using blended learning in teacher education. Such as the use of blended learning has improved teaching practices like the use of the Learning Management System (LMS) provides opportunities for teachers to take feedback from the students, and enhance students' understanding<sup>(7,8)</sup>. This method of learning involves blended learning, the students remain satisfied with teaching and learning styles since they can use WhatsApp group along with LMS for sharing information with their other class mates and teachers. However, students and teachers face few challenges to use technologies such as; no institutional policy, lack of technical assistance, low speed of internet, lack of computers in computer lab, and understanding English<sup>(3,5,10)</sup>.

In spite of facing problems in implementing blended learning by teacher educators, developing countries are striving hard to use technologies in their system. As in Pakistan, two universities; the Virtual University (VU) of Pakistan and Allama Iqbal Open University (AIOU) has started using a blended learning model since 2002. But right now, several other public and private universities have adopted blended learning models, particularly after the formation of the Higher Education Commission (HEC) in the year (2000). Because HEC has taken many initiatives for the improvement of education through technology in education sector and much focus has been given to teachers and prospective teachers. Such as the provision of Online Lecturing facilities, Net-Meeting, established video conferencing room, Broadband Facility, PERN (Pakistan Education and Research Network), National Digital Library, and distribution of laptops with the internet among the students. HEC also provides support for the construction of computer labs in universities<sup>(11,12)</sup>.

An international agency like USAID is also working with HEC Pakistan to improve the infrastructure and physical facilities for the progress of advanced technology in the universities. New buildings, computer labs, books, broadband facilities, IWB facilities have been provided especially to teacher education departments in the universities. Many public universities in Pakistan are also trying to use technology in their systems like introducing on-line attendance, and examination system, adoption of technology in teaching and learning process, pre-recorded lectures, peer-to-peer, and peer-to-faculty interaction instructional model, real-time discussions with experts and experienced people online. Especially during pandemic situation of Covid19, majority of universities has started on-line learning mode even with their limited resources. University of Sindh also started on-line mode of learning.

### **1.1 Rationale**

Pakistan is also struggling hard in technological accessibility and its integration into the educational field like other developing countries. The government of Pakistan has taken many initiatives for the promotion and enactment of blended learning in higher education institutions like universities. Although the inclination and use of blended learning are increasingly modified to be friendly and cooperative in the teacher education system in Pakistan, but, still, teachers and students are facing many problems in the effective use of blended learning like shortage of computers in computer labs, lack of technical support, computer laboratories, time to use technology, motivation to use technology, electricity and understanding of English language<sup>(3,5,10)</sup>. Therefore, the topic of students' readiness and challenges of blended learning adoption in Teacher Education Programs in Pakistan was selected for this study.

## 1.2 Research questions

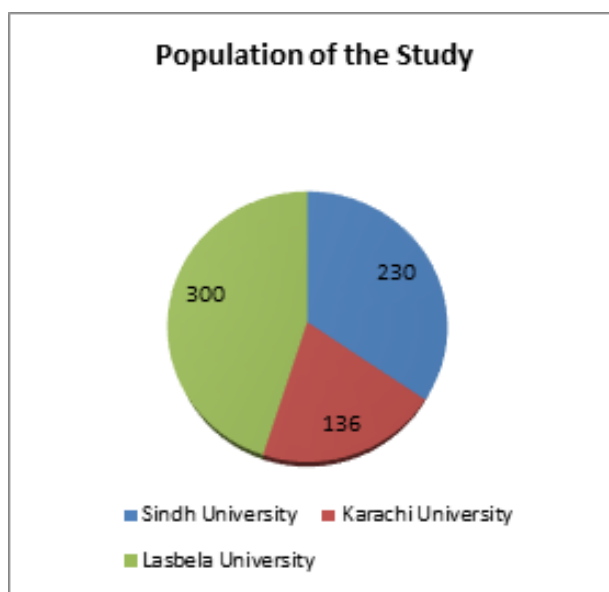
1. What are the perceptions of students about the use of blended learning at the university level in Pakistan?
2. What are the challenges faced by students in the use of blended learning at the university level in Pakistan?

## 1.3 Delimitation of the study

Due to paucity of time, a study was limited to investigate the current use of technologies at university level in public sector and B.Ed. (Hons) Elementary 4-year program was covered in order to examine the implementation of blended learning in Pakistan. Since the researchers are involved in teaching to these levels, so they had familiarity and relations with such institutions to collect their data. More, they had observed the students and teachers of such institutions are facing problems in academic learning, so they wanted to explore the existing problems their impact on the processes of teaching and learning. The study was limited to explore students' perceptions only.

## 2 Methodology

The study used a descriptive survey with quantitative method. The universe of the study spread to the students enrolled in B.Ed. (Hons) Elementary 4 year program batch (2019) in the different faculties of education of three public universities of Pakistan; the University of Sindh, Jamshoro, the University of Karachi, Karachi, and the University of Lasbela from Baluchistan province. The total numbers of students enrolled in the three universities were six hundred and sixty-six (666). Figure 1 shows the population of the study.



**Fig 1.** The population of the study in detail

The study has a confident level of (95%), therefore from six hundred and sixty-six (666) university students, two hundred and fifty (250) students were selected as a sample by adopting Yamane's formula<sup>(13)</sup>.

The following Figure 2 shows the sample taken from each university.

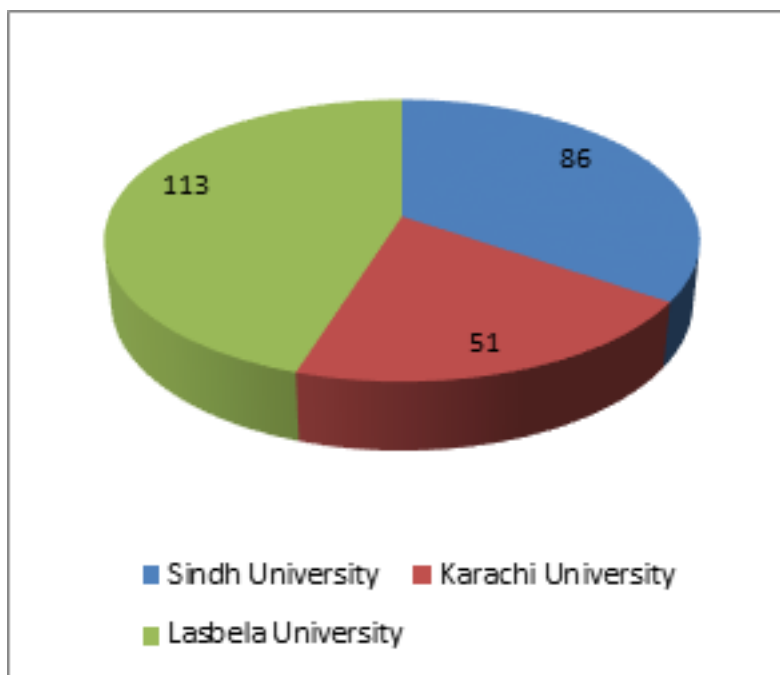


Fig 2. The sample was taken from each University

Quantitative data was collected through the questionnaire-based on a 3-point Likert scale (Agree, undecided, Disagree). The questionnaire was developed with the support of a literature review. The questionnaire consists of 19-items. The reliability of the questionnaire was calculated through the Cronbach alpha technique that came out to be (0.8). Data were analyzed through percentage. The SPSS version-22, the software was used for statistical analysis.

### 3 Data Analysis

#### 3.1 Analysis of objective No: 01 (Perception of Students)

The majority of participants had very encouraging perceptions about blended learning. Figure 3 shows the statements regarding the students' perception of blended learning. More than (80%) of the participants agreed with 9 items; item no.6 (87%), item no.3 (85.8%), item no.2 (84.9%), item no.8 (83.7%), item no.1 (83.1%), item no.5 (81.3%), item no.9 (81.6%) item no.12 (81.3%) and item no.7 (80%). Over (70%) of the participants agreed with item no.03; item no.4 (72.3%), item no.11 (72.3%) and item no.10 (69.3%). Whereas, Item no 10, 11, and 12 were reversely coded.

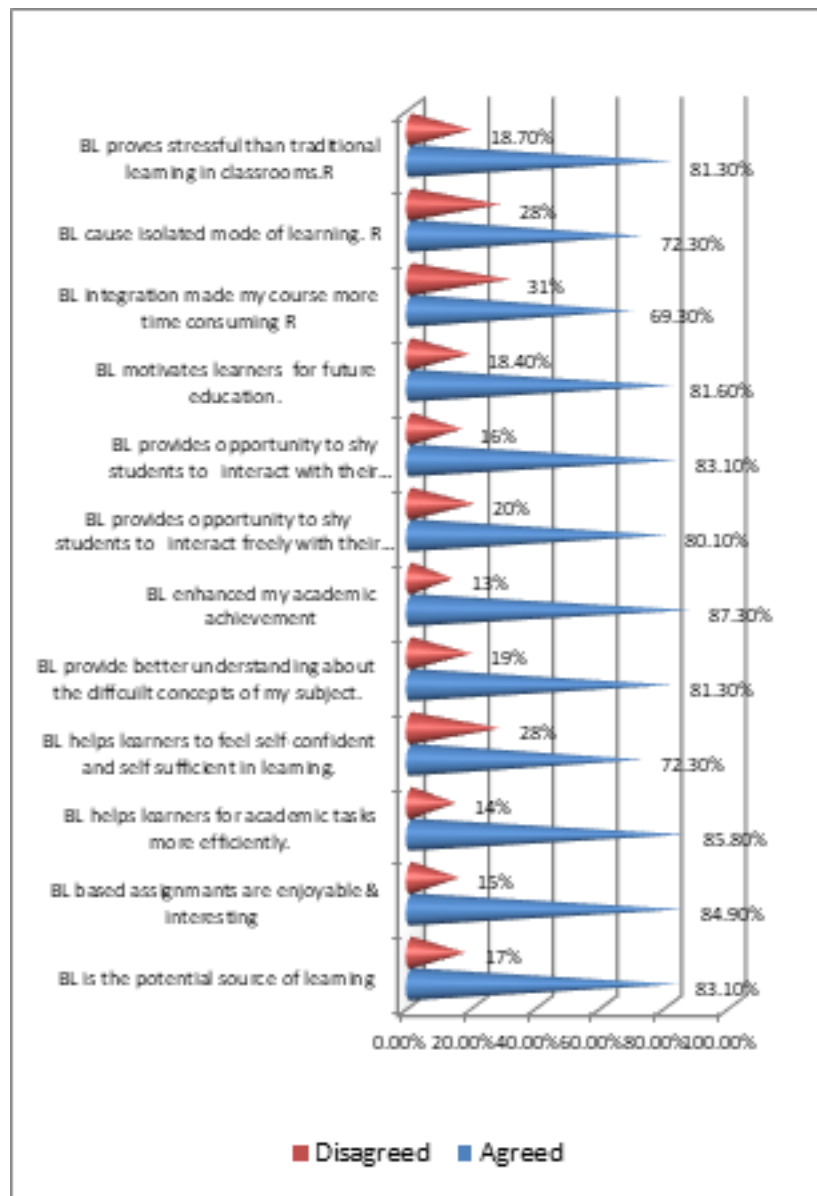


Fig 3. Students' perception of blended learning

### 3.2 Analysis of objective No: 02 (Challenges faced by Students)

The majority of students had faced many challenges in using blended learning in universities. Figure 4 demonstrates that the majority of the participants agreed that they faced challenges while using blended learning like; (86%) viewed that lack of motivation, (81%) viewed lack of technical support, (78%) perceived lack of institutional policies, (60%) viewed lack of time, while (56%) were disagreed that lack of skills is not hurdle to use blended learning.

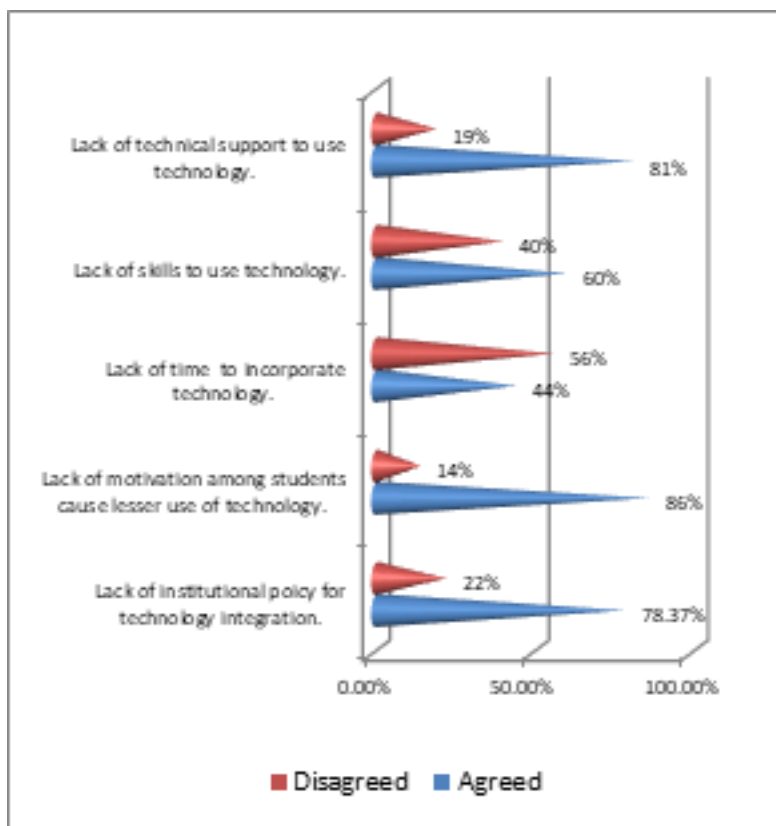


Fig 4. Challenges to use blended learning

## 4 Discussion

Blended learning is a popular and economical mode of learning. Students preferred blended learning over traditional mode because the new generation has become habitual and capable of using modern gadgets viz. smart phones, Pc-tablets, and laptops frequently in their daily life as blogs, and Facebook continue to spread in the whole world<sup>(14)</sup>.

Blended learning is a potential source of learning. Students take more interest in blended based assignments as it becomes very easy for them to use social networking sites such as; WhatsApp, Face book discussion forums, and blogs. Doing assignments and academic work online become an interesting activity for them. Students enjoy their work and spend more time on studies compared to traditional mode. Blended learning is intensely encouraged by the universities and provides impending benefits to instructors and students<sup>(15,16)</sup>.

The findings revealed that students gain confidence and become self-dependent when they complete their academic tasks through blended mode. They worked on their own and find the solution of different problems while completing their academic tasks and assignments of their respective courses. They also access multiple and excessive reading materials which enable them to understand different complex concepts of any subject instantly. The habit of spoon-feeding is also curtailed in this way. Powers et.al.<sup>(17)</sup> Conducted a study and used an experimental research design. One group was taught by the traditional method and another group was taught by a hybrid model. Student's performance in hybrid mode was found decreasing significantly because "students had to deal with difficult concepts



independently and without sufficient explicit traditional teaching.” Therefore their study found that ‘blended learning helps students for better understanding of difficult concepts’.

Consequently, by using blended learning academic achievement of the students has also enhanced, as found by Alammary<sup>(7)</sup> “the study reports increased students’ achievement by integrating out-of-school activities with classroom practices using digital technologies”. The study also found that the blended learning model is advantageous for shy and low confidence students because they come in contact with their teachers and classmates through technological linkages and they can easily share and exchange their learning difficulties and quarries with their teachers and colleagues without coming into a face to face contact.

The blended learning generated a new model for collaboration, among peers and with their teachers<sup>(18)</sup>. The study also revealed that the blended learning model not only provides the best opportunity to students in their day to the day learning process but also encourages and motivates them for further education as they gained a lot of confidence and impetus to learn more. However, the study also pinpointed some disadvantages aspects of blended learning mode. Participants agreed that blended learning is time-consuming, need an extraordinary arrangement and supporting environment.

Different technical hurdles, constantly hamper the system, and students and teachers sometimes become helpless, to continue the learning process. Blended learning mode also causes a feeling of isolation and stress and disparity among the students who fully relied on it. These findings are aligned with the study of Al-Asmari<sup>(19)</sup> they did a comparative study and results revealed that students belong to blended learning mode secured fewer marks as compared to traditional group students because working online creates isolation sense and less interaction with the classmates which causes them to secure fewer marks.

Students had a positive perception of blended learning because they had to face few barriers in learning through modern technology. It was also found that all categories of students (fast and slow learners) take full interest in learning of all subjects through blended mode. However, the study revealed that in our system, students face different barriers while learning through blended mode. The most common barrier among other barriers is the lack of institutional policy for technology integration. Findings are aligned with the study of Aldosemani<sup>(20)</sup>.

Lack of motivation among the students causes lesser use of technology and the findings are aligned with previous report<sup>(10)</sup>. The study found that some teachers have no confidence to use technology therefore they were reluctant and unable to motivate their students for blended learning. This finding is aligned with the study of<sup>(16,17)</sup>.

The barriers faced by students in the uptake of modern technology are such as lack of: time to use technology, skills to use technology, training, logistical support, technical support, qualified staff, Power failures, and lack of sufficient resources. This finding is aligned with studies of<sup>(18–22)</sup>.

## 5 Recommendation

1. Universities should offer blended learning model by launching their learning management software.
2. Institutional policies should be formed so that, the administration may bound teachers and students to use blended learning.
3. Every University must purchase licensed software, high-speed servers, and high bandwidth internet and extend them freely to students and teachers for blended learning without hurdles.
4. Technical and logistical support should be provided for the effective use of blended learning.



5. To equip teachers with needed technological skill. The teacher education institutions must introduce courses to teach them with new concepts or tools that are used in developed countries such as Open Educational Resources (OER), blogs, virtual reality, artificial intelligence, and block chain, etc.
6. Training for teachers should be arranged continually and sequential workshops should be organized to enhance their skills for using digital teaching technology.
7. Motivational strategies should be adopted that may inspire students to use blended learning such as conducting online tests and quizzes or assignments.

## 6 Conclusion

The study found that students have positive perceptions about the use of blended learning in universities of Pakistan. The majority of students viewed that blended learning is the potential source of learning. assignments are more enjoyable, interesting, enhanced academic achievements when it is based on blended learning. It helps learners to carry out their academic tasks more efficiently, provides better understanding of the difficult concepts and learners feel self-confident and can have peer-group discussion. The use of blended learning mode provides opportunities for those shy students to interact with their teachers digitally and also with their fellow learners freely.

The study also found that there are many barriers faced by university students while using blended learning mode in the processes of teaching and learning. Such as lack of; institutional policy for technology integration, motivation, time to use technology, resources, skills, high-speed internet, and technical support. To conclude, we are still a long way to go and to come on par with the developed world in developing a strong system for the implementation of blended learning in the present university teaching system.

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