

# To Learn, Unlearn, and Relearn with Personalized Language Learning and Educational Technology

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**Abstract.** The implementation of Personalized Learning as a learning system provides opportunities for students to manage learning according to their competencies, time, and interests. It has emerged as a trend in K-12 classes in the United States and the United Kingdom, but not that much in higher education. Thus, little research has examined higher education students' transition from conventional to personalized language learning. Students must unlearn and adapt to personalized learning. This research reports the experience of a private university students who chose to do personalized learning system. We examined their learning methods, including technology's effects. Based on a semi-structured interview held with 15 students, data were qualitatively collected on the participants' impression of the system and the technology incorporated to support their learning. The interview suggests that most participants integrate personalized learning and use educational technology to support it. To achieve the same goal, they were situated to unlearn the conventional structured system and relearn the new system provided in personalized learning. The participants claimed that personalized learning supports them in improving their self-management, taking care of non-academics matters, and flexibility in learning based on their competencies and interest. Personalized language learning, with the support of technology, has the potential to be the future of institutional foreign language learning.

## 1. Introduction

Personalized learning is rooted from Howard Gardner's theory of multiple intelligences [1] and was first introduced by Buckley [2], who defined the term in two different ways: first, "Personalization for the learner", which refers to the teacher creating the learning experience for the student, and second, "Personalization by the learner", which refers to the students acquiring skills to adjust his or her learning better. According to the U.S. Department of Education [3], personalized learning is:

"Instruction in which the pace of learning and the instructional approach are optimized for the needs of each learner. Learning objectives, instructional approaches, and instructional content (and its sequencing) may all vary based on learner needs. In addition, learning activities are meaningful and relevant to learners, driven by their interests, and often self-initiated".

In a personalized language learning context, students are driven by the same method in the context of language learning, where the learning process moves from a teacher-led, "one-sized-fits-all" experience to a learner-driven, where students' competencies, time, and preferences are the driving factors.

Studies found that personalized learning has been a major turning point in the teaching and learning process. Personalized learning is a positive, initiative, and

independent study process in which learning strategies are customized according to the different personalities of students [4]. Bill Gates declared that "the best lectures in the world" will be online within the next five years [5,6]. In the university, students attend lectures after lectures and do assignments that they may not have the passion in. Students were not free to choose what and how the learning method suits them, which may result in failure to learn. Personalized learning lets students to be able to learn by analyzing their strengths and weaknesses. The method used lets students choose which and how the lesson is delivered that work best for their learning skills. The trick to developing a personalized learning system is to abandon thinking about how to build it from within the existing educational system and to begin pondering how such system could be developed outside of education [5,6]. It is an innovational and functional method designed for those students with different capabilities. It not only changes the way teachers deliver the materials, but also helps change the conventional history of learning for students.

Ever since the pandemic, students have not been able to do face-to-face learning process since everything is done through online lessons. Most online lessons have been delivered as one-for-all, which means teacher sets a goal for every student to reach at the same time, not allowing them to do it at their own pace and work on their ability.

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This can cause the decreasing effectiveness of the study due to the lack of attention given, whether from the students or teacher. Lack of attention can slow down one's progress to reach a particular goal. They can start to lose interest and motivation, which gradually affects their results or grades. One of the ways to cope with this situation is for students to take control of their learning by understanding their own needs in learning. In its implementation, they can make a schedule, choose their own courses, and decide when to finish them.

In transitioning from the conventional system at higher education, students are forced to stop their "normal course", unlearn it and relearn the method that the university provides in order to gain new understanding, perspectives, and abilities in learning. Toffler [7] wrote: "The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn." The process of removing outdated skills and techniques and diversifying our skill set is referred to as unlearning and relearning. We begin the cyclic of learn, unlearn, and relearn as soon as we start learning new things as babies, but the difference between adults and babies is that children have no prior routines or knowledge. Unlearning refers to the act of discarding obsolete knowledge in order to make room for new information [8]. This is one of the motivations delivered throughout the personalized learning method. Some students will have stumbled upon their experiences, and some may be too scared to start anew because of how they used to be led by the old learning method.

This research is significant because it explores students' voices during and after the implementation of a new teaching and learning system. Previous studies on this issue have mostly been experimental and observational in their nature. In this research, we focus on the context of one class consisting of fifteen students of Bina Nusantara University in Jakarta to outline what and how personalized learning looks like, what learning opportunities it might create and how it might benefit the students in any way. For the interview, we divided a class of 15 students into three groups consisting of 5 students each and observed them through their honest experiences with the personalized learning method that is conducted by the university. We observe their habit of using technology, like what media and applications or websites they use to help them in managing time and understanding the course's materials.

### 1.1. Objectives

The objectives of this research are:

1. To explore the personal experiences, the learning and unlearning of students choosing to do personalized learning system in higher education
2. To identify the efficient technology or platform that students use to support personalized learning

## 2. Literature Review

### 2.1. Personalized Learning

According to the document 'A National Conversation about Personalized Learning', personalized learning is a style needed to fully realize 'individual need, interest and aptitude' [9]. The document also indicates that personalized learning is a way for pupils (learners) to become e-literate, independent, fulfilled, and life-long learners [10]. Personalized learning offers a new vision for education, one in which students become the center of the learning environment using technology to support a more individualized learning experience, both inside and outside the classroom.

As stated by McMillen documented by Edutopia [11] on their observation in Summit Preparatory Charter High School in California, personalized learning seeks to accelerate student learning by tailoring the instructional environment—what, when, how, and where students learn—to address the individual needs, skills, and interests of each student. What is exciting about flexible space is that it allows students to really understand what type of learning works for them and it equips the teacher with ways that they can deliver more personalized instructions to the students.

Confusion may happen over the difference between individualized learning and personalized learning, which is expressly related to who needs to take responsibility for teaching or learning. Courcier [12] stated that individualized learning expects only teachers to direct the individual student toward their own goals because in this style, students study individually by using different tasks suitable for their level and pace. Good teaching skills are much more necessary to look after students inside a class than students' learning skills. In short, individualized learning focuses not on the way students learn but on the way teachers teach a class.

Personalized learning, on the other hand, focuses on suiting students' needs by looking at their strengths and abilities for them to perform maximally. Learners would have their own question bank, personalized to their specific learning interests. As a result, this system is built around the learner rather than a physical location (e.g., schools), an educational environment (e.g., learning management systems), or a person of authority (e.g., instructor) [5, 13]. This can be the root of how personalized learning is meant to be flexible so that the students are not restricted on when, where, and how they work.

A personalized learning system will not emerge from within formal education. Education is like an overgrown field with only a few areas of fertile soil. Too many stakeholders (parents, unions, administration, teachers, faculty, etc.) compete in promoting various ideas on how to change, choking back plant growth like weeds or plagues. The open Web's healthy soil can support the rapid growth of a personalized learning system. Then, like a good fertilizer, it may be used to restore the soil of formal education and support us in achieving education's "Holy Grail": personalized learning for all [5, 13].

## 2.2 Learn, Unlearn, and Relearn

For students transitioning from conventional learning, to be able to follow the new personalized learning method, they are acquired to learn, unlearn and relearn. Learning, unlearning, and relearning are applied in order during students' learning process. First, they learn the conventional method from the previous learning system, where in most cases, the method consists of students paying attention to the teacher or lecturer and then being given some assignments with certain time constraints. While transitioning to personalized learning, students have to unlearn the conventional method and then relearn the new method and adapt to it. The relearn process will take them some time to adapt because of the broad difference they face compared to the previous learning method. McLaughlin [14], language unlearning has been used in different contexts and with different meanings in the past. As a term, that refers to an almost active process of erasing prior learning. Thus, it is frequently used to refer to language learners' and teachers' beliefs about language learning and teaching held by both language learners and teachers and what can be brought into the sphere of consciousness. Unlearning is the process of changing habits and being aware of teaching and learning strategies that are in need to be changed. Warrell [15] emphasized that unlearning and relearning are not ends. It is in and of itself. Thus, the key to unlearning is not in the teacher but in the students. Based on the research from Klein [16], by learning, she refers to building new content and pedagogical content knowledge relevant to the school's subjects. By unlearning, she means letting go of deeply held assumptions of previous concepts. Moreover, relearning is the process of creating new understandings and behaviors around the same concepts.

## 2.3 Technology in Personalized Education

Technology-assisted personalized learning refers to various degrees of tailoring or customization of a learning experience through applications and/or platforms [17]. The teacher is supposed to guide and customize or personalize tasks and teaching aids for each student to feel comfortable in learning. For example, some students may prefer to work alone, in a group of two, etc. The teacher is supposed to fulfill their preferences for them to work well.

As stated by West [18], learning can be personalized to the individual using digital technology, and performance can be reviewed in real-time. This means that accreditation agencies should provide schools and colleges more flexibility in using classroom time rather than relying solely on formalistic measures of student performance. Students can be promoted if they learn a subject rather than sitting for a certain number of hours. West [19] suggested in his book, *Digital Schools: How Technology Can Transform Education*, that schools must employ technology not just to offer the contemporary education paradigm but also to implement alternative teaching methods. Education must become more student-

centered, interest-based, result-oriented, and personalized through digital technology. Teachers must expand their roles as coaches and mentors, and assessments should be more nuanced than annual standardized tests.

Advance in technology provides many exciting opportunities for educators to personalize learning for their students. Using tools to approach such as websites is about more than technology; it is about changing the way students connect with their classmates and teachers, opening up classrooms to new instructional approaches and rich content that helps them progress quicker and further than before. While the concept of personalized learning is not dependent on educational technology, in recent years, educational technology and online learning advocates have invigorated that the use of educational technologies can strongly boost and enable blended learning and personalization as a pedagogical strategy [20-27].

## 3. Methods

This research was conducted to answer the inquiries on the transitioning into a personalized learning system adopted in the English major. Three research questions were set to examine the participants' opinions about personalized learning, the factors that may influence the efficiency, and the effects on learning.

1. How did participating students feel about personalized learning system?
2. How does personalized learning affect the students' learning ability?
3. What factors influence the efficiency of personalized learning system?
4. How does technology support the students' learning?

### 3.1. Participants

The study participants were 15 (fifteen) voluntary university students of 7 (seven) females and 8 (eight) males from English Literature major in one of the private universities in Jakarta. They were the students who volunteered to experience the brand-new personalized learning system in the university in their full semester (5 months) with insufficient knowledge of the introduced system. Due to the Coronavirus pandemic era, the lesson and system were done through online learning, video conferences, and discussion forums. The courses they took in the semester were in total of 7 (seven), five of which were English language-related subjects, and the other two were general subjects (entrepreneurship and religion). The lessons are in total of 13 weeks (from November 2021 to January 2022), which also includes exams at their own times.

**Table 1.** Distribution of the Group Sample

Group	Number of Students	Students Names*
1	5	Asher
		Amy
		Ariana

		Adam
		Alice
2	5	Harry
		Ivan
		Kai
		Madison
		Rosie
3	5	Ryan
		Steve
		Walter
		Yohana
		Sofia

\*All names are pseudonyms

#### 4. Data Collection

To analyze the input from students about personalized learning, the research applied qualitative analysis through forum group discussion-based interviews with the students to observe their responses, including impressions, comments, the technology used, and time management during their personalized learning experience.

The first stage was for the researcher to meet the students and interview them about what each of them thought about personalized learning. The interview took once every week to keep up with the updates and improvements. Students were asked a few questions regarding the personalized learning system and how they cope with it. The last stage was for the researchers to analyze the data and make a result based on it.

#### 5. Results and Discussion

##### 5.1 Learn, Unlearn, and Relearn

A semi-structured interview in the form of forum group discussion observation was done to analyze the data. We conducted a meeting once every week to keep up with their responses and improvements as they worked on the assignments and exams. Notes were made during the sessions. Three to four questions were asked to each student individually, and we wrote down the main point answers while recording the meeting for us to review in the later use. After conducting the interviews, the researchers analyzed the responses given by the participants during the interview. The researchers then confirmed the data of the interviews with the data of their weekly discussions.

Based on the interview done within six months, some students were really into personalized learning, and some were not. This is caused by how they have gotten used to the conventional/structured learning system during their time in regular classes, which made them grow out the mindset of not being able to study all by themselves. Some who were into personalized learning stated that they were able to work individually because it gives them a lot more freedom in terms of what and which course they want to finish first. Meanwhile, students who were not so sure

about personalized learning in the first place tended to claim that they wanted to go back to the conventional learning system since they were not sure of how personalized learning would turn them to be better at learning. They claimed they were quite concerned about their grades if they could not perform a personalized learning system well.

In the first four weeks of the semester, students were asked regarding their first impressions and how they felt about personalized learning. The majority of students stated that they had difficulties in adjusting, and some students still had the mindset of deadline awareness. Although they were told to submit the assignments as they desired, they were still worried about how that would impact their grades. Some students seemed to have an ambiguous response; they were accepting but still concerning grades and their communications with lecturers. Some students also stated they definitely rejected the idea of personalized learning. They stated they had a hard time keeping up with the assignments, a long preparation to adjust to, and how they were not used to learn by themselves individually. However, they later confessed that they were trying to adjust themselves to personalized learning after being given further information by the responsible lecturers.

As stated by Klein [16] learning refers to building new content and pedagogical content knowledge relevant to the school's philosophy and design. In this case, students were used to studying the courses in the conventional learning system, where the lecturer delivers information in front of the class while students pay full attention. However, since they are part of a personalized learning class where students study at their own pace, they are situated to unlearn the old system and relearn a new method, a personalized learning system, to be able to perform it. As Klein [16] describes unlearning means letting go of deeply held assumptions, and relearning is the process of creating new understandings and behaviors around the same concepts.

On week five and so forth, students claimed to have adjusted themselves to personalized learning system and tried to study and work on themselves. Sometimes they would ask each other about the assignments and courses. Primarily they would communicate through a messenger application and hold a meeting for those who want to work together.

To answer the first research question on how the participants feel about personalized learning, from the interview conducted, students showed their progress and improvement in learning; they felt a lot more confident and comfortable working individually. They declared to have grasped the personalized learning system and worked on their assignments and exams very well. Some of them joined the regular class's video conference lecture to add to their understanding. They develop their ways of learning courses. Some stated that they started to work on the easiest course, and some started on the hardest. Some students took their exams on the first batch (two months after the semester started), some on the second batch (three months after the semester started), and some on the third or last batch (fourth months after the semester started). Although some of them were still concerned



about their grades, they were performing their best for their assignments and exams. Students with ambiguous first impressions reported they have improved in terms of learning. Students who were rejecting in their first impression proclaimed that they had adapted to the system.



**Fig.1.** Students' Responses on Personalized Learning (PL)

Based on the figure, the majority of students expressed how personalized learning has helped them in providing time to manage other things, which refers to them being able to take care of other things outside academics, for example, family and/or organization activities. Most of them also announced that personalized learning helps in improving self-management, which in this case, the ability to prioritize which course they want to finish earlier based on their competencies and interest. However, they also responded that they were still concerning their grades, the number of assignments, and the miscommunication that often occurred between students and lecturers.

For their learning ability, it is shown clearly by how some students who were discouraged and worried about personalized learning now have developed the enjoyment of studying. Since it is flexible for them to choose their submission time, which course they want to set their priority on, and unrestricted exam schedule, they seemed to work maximally at their own pace. As stated earlier, they also had the initiative to join video conference lectures from the regular class to deepen their understanding of certain courses.

The later observation in the following semester results in a different outcome. Students have grasped their understanding of personalized learning fully and have integrated with the system. Most of the students proclaimed that the current personalized learning mode is far more satisfying than the previous mode, mostly due to some miscommunication and the lack of briefing with the general courses' lecturers. Some students said that personalized learning is beneficial because it gives them freedom and flexibility to attend class and work on assignments. However, some other students found the system boring because of less interaction with other

students and the lecturer. Those who stated added on to mention that they might not belong in personalized learning class because they prefer regular class better and they found personalized learning quite troubling. Other than that, the rest did not pay much attention and stated that they did not feel contented or troubled.

## 5.2. The Technology and Personalized Learning

In order for them to understand the courses, they use technology to support their learning comprehension. The university provides a Learning Management System (LMS) through the webpage which is used to access the materials, track students' progress, schedule video conference, and announce exams. Other than LMS, Microsoft PowerPoint, and Zoom, most lecturers do not use other websites to deliver the lecture materials. Throughout the semester, students were using the webpage maximally. Since the webpage can be easily accessed through any device other than laptop or computer, students can also use their smartphone or tablet to keep up with their work and progress at any time and anywhere.

Students implied they used other applications and websites to help them do their assignments and exams, such as Google, Notion, and Google Calendar. YouTube was also mentioned as it is one of the sources that can be found easily and is a lot more interactive and visually engaging for the students to grasp the materials. Students agree that technology use can help a lot in their learning. It allows them to gain resources outside of what the lecturers gave them, explore e-books, read website articles, watch informative videos, and write down things and plans for their learning. On the other side, some students mentioned that technology could hinder personalized learning if the person cannot operate or use the technology to its full potential and end up being a waste.

In terms of difficulties, there are a few things involved, including some problems with the university's LMS webpage. In the first three weeks, students confronted about the webpage crashing and how it did not give scores after they had submitted the assignments. Luckily, this case was solved by the lecturers right after. As for the other struggle they faced was the unavailability of one of the course's lecturers due to miscommunication. Since personalized learning is a new system introduced in the university, and since the English Literature major was the first major to experience it, the lecturers from general courses are most likely to think of it as the same as a conventional learning system. There was a miscommunication that occurred for almost the whole semester. This is caused by different understanding and resulted in the students getting confused about their assignments and deadlines. For example, personalized learning originally did not set any deadlines for the assignments because it supposedly gives freedom for students to submit as they desire. However, in one of the courses, they were told to submit the assignment at the time the lecturer set.

There are factors that influence the efficiency of personalized learning system. From what we found in the data, the factors can be divided into two; the first one is internal factors. Internal factors include the motivation and learning type of each student. The "learn, unlearn and relearn" method is totally individualistic, depending on each person. Thus, when someone is not motivated enough to try and learn new things, such as personalized learning, they would not be able to do the rest. As for the study or learning type, there are students who can learn independently, and there are students who prefer to work together and be taught by a lecturer. Second is the external factors, including facilitation and the educators, in this case, lecturers. The facilitation meant in this case is the university's assignments webpage (LMS). If the webpage is crashed, students will have a hard time submitting their assignments and keeping up with their grades. As stated before, some students still need guidance from the lecturer, meaning that lecturers should also have the same understanding as the students about the personalized learning system so that they can achieve the same goal. Misunderstanding and miscommunication that occur can affect the students' progress and improvement in learning.

## 6. Conclusion

This study has focused on observing the personalized learning system in higher education. The study contributes to the field of teaching and learning by giving insights into the personalized learning system. The analysis of the focus group discussion resulted in various outcomes but can be divided into two main branches. First is the ability of students to accept personalized learning system and try to do their best during the semester. Second is the rejection from students to implement personalized learning system. Three questions were raised in this study: How did the students involved in personalized learning feel about the system? What factors influence the efficiency of personalized learning system? How does personalized learning affect the students' learning ability? The results have revealed that students who were used to the conventional learning system can eventually adjust to the personalized learning system. This study also proves that the "learn, unlearn and relearn" method is applied in order to adjust to personalized learning. It has shown that personalized learning can be the option for a major turning point in the teaching and learning system. The findings have shown that there are positive responses and negative responses to personalized learning. Some students enjoyed personalized learning, and some preferred being in the regular—conventional learning—class. Another thing that can be found in this study is the factors that influence the efficiency of personalized learning, including facilitation and educators. For the implementation of personalized learning in higher education, the first thing for the university administrator to do is to prepare its students to follow the cycle of learning, unlearning, and relearning when it is introduced as a new concept. In the future, more comprehensive study with a larger number of participants on students' experience in doing personalized learning is needed.

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