



The influence of the personal learning environment (PLE) approach on english speaking ability

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ABSTRACT

The aim of this research is to determine the effect of the Personal Learning Environment (PLE) Approach on English Speaking Ability. The concept of the Personal learning environments (PLE) approach will make learning individuals become a subject. Each person is both a teacher and a student who can decide the direction of the learning. The method used in this research was an experimental method using two class groups. The research instrument used was a written test. Based on the results of data analysis, it can be concluded that the average score for English speaking skills in the control class is 53.7. Furthermore, in testing the t test hypothesis, a sig of 0.00 was obtained. Based on the conclusion, if the sig (2-tailed) value is <0.05, then there is a significant difference. Meanwhile, the average value of English speaking skills for the experimental class is 80.1. So, it can be concluded that there is an influence.

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INTRODUCTION

Limited facilities and infrastructure in schools are no longer an obstacle, let alone hampering creativity and innovation in learning. All problems related to learning facilities can be solved by mastering methods and media. Therefore, learning and mastering technology and the developments in it is a necessity for educators (Liber & Johnson, 2008). The development of information technology which is impossible to control should be able to be applied in learning. To make all this happen, learning innovation is an alternative answer that can make teachers technologically literate and even able to master it and then use it in learning. Limited facilities and infrastructure, which has been the biggest problem and is often complained about by educators, can be overcome with educational and learning innovations (Joenaiddy, 2019).

Learning innovation 4.0 emphasizes the mastery of learning methods by education, their application in the classroom, and their development in learning. Learning innovation utilizes all existing potential, including mastery of technology and its application in learning. Through learning innovation, students are expected to be able to adapt to developments in information and communication technology (Feida Noorlaila, 2020). Of course, this adjustment takes a long time.

So, studying it and then developing it and putting it into practice in learning is a real step to learning innovation 4.0. Competition in the industrial world in the 4.0 era has given birth to many things that may be beyond reason. Learning is no longer just done in the classroom. This means that the classroom is no longer the only place to learn. This development must of course be used as material for evaluation of whether an educator can adapt to it, is able to utilize it in learning, and plays a role as a connecting bridge for students in order to achieve learning 4.0 (Joenaity, 2019).

Currently, the development of Information and Communication Technology (ICT) has had an influence on the world of education, especially in the learning process. This generation 4.0 industrial revolution began with the internet revolution which began in the 90s which then developed with the emergence of supercomputers, smart robots, driverless vehicles, genetic editing and neurotechnology developments which allow humans to further optimize brain function. The industrial era 4.0 is recorded as a milestone in the fourth revolution in the development of human civilization. In this era, there is a phenomenon that combines cyber technology and automation technology. In order to face changing conditions, human competence is needed that can live in its time according to conditions (Daryanto & Suryanto, 2022).

Education is determined by two major components. The atmosphere of the learning environment and the learning process. The most important thing in a learning environment in the digital era is something that is flexible to accommodate relationships between people. This is the most important thing for successful learning. A school must be designed as a place of friendliness, openness, and accessibility, promoting cooperation and interaction, and reducing tensions that can lead to inattention, acting out, and unhelpful punishments. Children need more challenges to increase their competence (Sholeh & Yufiarti, 2021).

This will be the focus of teachers' work in the future. He must ensure that students have creative thinking skills to understand the foundations of the knowledge being studied. Teachers must continue to develop their competence in the field of ICT continuously. Of course you cannot follow developments as an expert, but you must be able to map out how to use ICT in the learning process (Mulyasa, 2021).

In the future, we can expect continued research and development in this area, with a focus on how technology can be further enriched and adapted to students' needs in secondary school English learning. By continuing to understand the impact of this technology in more depth, education can continue to keep up with the times and provide more diverse and effective learning approaches (Ariestika et al., 2022). It cannot be denied that in the current era of globalization, the ability to speak English has become a very valuable asset. English is not just an international communication tool, but also a skill that is almost always a requirement in various fields of work. Therefore, the importance of developing effective teaching methods to improve students' speaking skills in English cannot be ignored (Maria Dimova & Stirk, 2019).

Personal learning environments (PLE) is a concept of an electronic learning method approach where learning individuals become a subject. This means that each person is both a teacher and a student who can decide the direction of learning (Martindale & Dowdy, 2010). In the past, we knew a learning method called Everyone Is a teacher here. This method is popular and widely used in learning activities, the Everyone Is a teacher here method is also often used in workshops and technical guidance activities. Similar to this method, each student is a teacher for his other friends. They exchange and convey information to each other, help solve problems and answer complex questions by working together and complementing each other. Everyone Is a teacher here's conventional learning concept is now starting to shift to learning that utilizes technology in learning activities, both inside and outside the classroom (Hamdan et al., 2016). In general, the concept of a personal learning environment is very good for use in learning because each individual will be encouraged by themselves to master the material. From there, self-confidence will automatically grow. However, don't forget that the teacher is the main figure who still plays an important role in helping students achieve the future (Väljataga, 2011).

The definition of PLE is that it gives students control over their own learning process. Since the idea of PLEs developed partly as a reaction to learning management systems it is not surprising to see “personal” control represented in descriptions of PLEs. The phrase “personal learning environment” was apparently first mentioned at the annual JISC-CETIS (Joint Information Systems Committee – Interoperability Standards Educational Technology Center) event in 2004 (Schaffert & Hilzensauer, 2008). The historical development of the PLE concept has been documented in sources such as Wikipedia, and by Mark van Harmelen of the University of Manitoba (van Harmelen, 2008). We refer the reader to these two sources for more details on the history of the PLE. A key event in the history of the PLE was Scott Wilson's presentation of the “VLE of the future” (Wilson et al., 2006).

The PLE concept emerged from discussions among a broad group of professionals interested in designing and supporting online learning environments. Currently, no single environment or application instantiates the PLE archetype. For some people, PLE is a specific tool or set of tools used by students to organize their own learning process. For on the other hand, PLE only acts as a metaphor to describe the activities and environment of modern online learners (Attwell, 2006).

PLE brings with it a number of changes for students, institutions, and content. Anderson (2006), details several advantages of PLE over traditional LMS. With PLE, learners have a sense of self or identity outside the classroom. When they direct their own learning, learners control the environment in which they work. The learner personally navigates the environment rather than operating within an environment that makes sense to the instructor or institution. The learner has responsibility for his or her own content. No longer a passive consumer, but a learner now in an ownership role. The reach of learners is much wider than the reach of traditional classrooms and LMSs. While taking part in various online communities of practice, students develop an online personality (Sitompul et al., 2022).

Learning materials have been prepared in such a way by teachers with an open source concept. So, every student can freely access content and materials, read, study, and then practice them (Siregar & Kom, 2010).

If along the way students encounter difficulties, the teacher acts as a facilitator. The teacher's role in this case is to provide assistance, help solve problems encountered by students, and strive to be a partner in determining the material to be studied. PLE in 21st century learning is a collaborative learning process. Each student is free to choose the type of material and the time to study the material. Collaboration between students is needed so that when they encounter problems in learning activities, they can work together to solve the problem without help from the teacher (Joenaiddy, 2019).

From this presentation, the Personal Learning Environment (PLE) can improve English understanding. This is in line with the results of previous research, PLE is the door to a world where students can explore and be creative according to their interests and directions, which gave birth to the idea where the concept of PLE learning moves from institutions to students. So PLE is a manifestation of students' informal learning processes on the Web. The PLE is based on values, namely: the emergence of social networks and communities (learning in communities), emphasis on creation and not just consumption, decentralization of content and control. PLE allows students to become producers and not just resources or consumers of content. PLE implements learning experiences contextually (Downes, 2007).

RESEARCH METHODOLOGY

This The method used in this research is an experimental method using two class groups. In carrying out experimental research, the experimental group and control group should be organized intensively so that both variables have the same or close to the same characteristics. What differentiates the two groups is that the experimental group was given certain treatment,

while the control group was given treatment as usual. Verification of the results was obtained by comparing the experimental class with the control class (non-experiment)

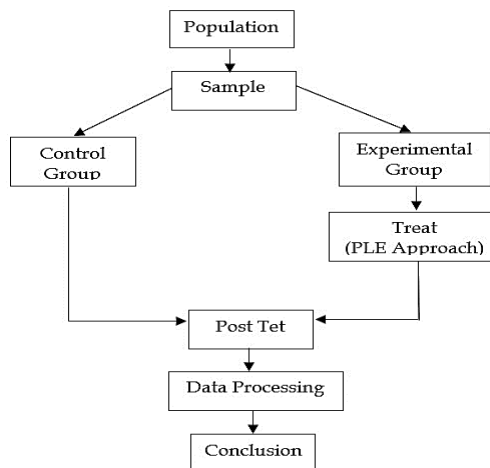


Figure 1. Posttest-only control design

In this design, each group is not given an initial test or pretest to determine their initial condition but is given a final test or posttest to determine the symptoms that occur after being given treatment. The control group was not given treatment but was given the same test as the experimental group, then the results of the final test or post-test were both compared. Based on this comparison, it can be seen whether there are changes and improvements in English writing skills after using image media or not.

To obtain data that is relevant and in accordance with the interests of this research, a test collection technique is needed that is in accordance with the research formulation and objectives. In this research, researchers chose data collection techniques through tests. The test tested in this research was the post test. This post test was tested on a control group that was not given treatment and an experimental group that was given treatment. Then the results of the two groups were compared. The data analysis techniques used in this research include descriptive tests, data requirements tests which include normality tests and homogeneity tests, as well as hypothesis tests.

RESULTS AND DISCUSSIONS

Research Result

Data obtained from two class groups, each with 20 students, were then analyzed.

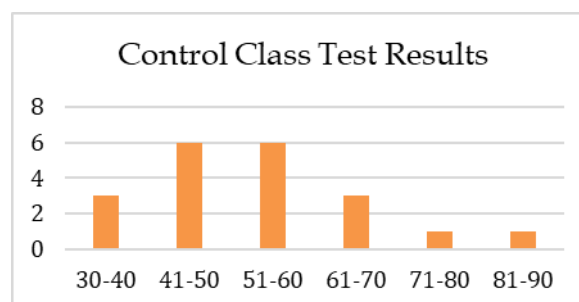


Figure 2. Control class test results

Based on the calculation results, the average score for English speaking skills in the control class was 53.7. The median value is 52. The mode value is 50. The variance value is 1068.5. The standard deviation value is 13.63.

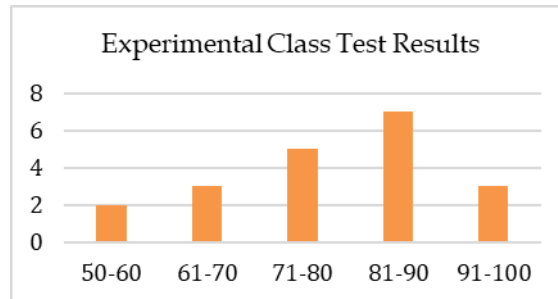


Figure 3. Experimental class test results

The results obtained were that the average score for English speaking skills in the experimental class was 80.1. The median value is 81.5. The mode value is 80. The variance value is 1569. And, the standard deviation value is 11.70.

Furthermore, in testing the t test hypothesis, a sig of 0.00 was obtained. Based on the conclusion, if the sig (2-tailed) value is <0.05, then there is a significant difference between learning outcomes in the Control class and the Experiment class. Thus, it is known that it is significant. So, it can be concluded that there is a positive and significant influence of the Personal Learning Environment (PLE) Approach on Speaking Ability in English Language Learning. The results of this research can also be seen from the table as follows:

Tabel 1. Independent samples test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hasil Belajar Bhs Inggris	Equal variances assumed	.312	.580	-6.571	38	.000	-26.400	4.018	-34.533	-18.267
	Equal variances not assumed			-6.571	37.153	.000	-26.400	4.018	-34.540	-18.260

Discussion

During the implementation of learning, it appears that students have achieved the material well. This is said because the Personal Learning Environment (PLE) is a learning approach that is oriented towards student-centered learning to improve English speaking skills. Through this approach, students are actively involved/interactive in learning through communication between students and students, as well as students and lecturers and interaction with other learning resources (Sholeh & Yufiarti, 2021). There is interaction in learning, namely exchange between two or more interactors (interacting subjects - human or non-human) students is considered as a type of interaction that must be differentiated qualitatively where interaction is defined as action between participants, in individual learning requires interaction. There are two types of personal interaction in learning, namely: (1) Mutual, namely interaction that requires reciprocity and is characterized by

a dynamic relationship that is interdependent and cooperative, each individual participates in building an intensive and cooperative relationship that is sustainable and contextual. Through dialogue, this is conflict. changing the relationship and its recursive impact changes the interaction of the learning process to be less boring; (2). Reactive, namely personal interactions limited by deterministic relationships based on stimulus and response. Reciprocal interactions cannot be determined in advance because the interaction occurs within a specified time limit, the input and output are expected to be the same by each person (Irwindi Putri et al., 2015).

Based on interviews with Informatics Engineering students learning English in speaking skills. Students enjoy learning with a personal learning environment (PLE) approach because it improves their English speaking skills because it is more personally intensive for students. Apart from that, with this approach, learning English is more comprehensive because you can learn through various sources (Che Ku Nuraini et al., 2014).

From this explanation, the Personal Learning Environment (PLE) approach can improve English speaking skills. This is in line with the results of previous research, PLE is the door to a world where students can explore and be creative according to their interests and directions, which gave birth to the idea where the concept of PLE learning moves from institutions to students. So PLE is a manifestation of students' informal learning processes on the Web. The PLE is based on the values, namely the emergency of social networks and communities (learning in communities), emphasis on creation and not just consumption, decentralization of content and control. PLE allows students to become producers and not just resources or consumers of content. PLE implements learning experiences contextually (Downes, 2007).

Wheeler in Ragupathi (2011), summarized the PLE and suggested it not only encompasses the personal web tools and personal learning networks (connecting people through social network) but it takes in the experiences as well as learning through other formal media contexts like the TV, music, paper based materials.

PLE In the 21st century learning is a collaborative learning process. Each student is free to choose the type of material and the time to study the material. Collaboration between students is needed so that when they encounter problems in learning activities, they can work together to solve the problems without help from the teacher. Some of the advantages of the personal learning environment learning concept are: (1) Information and technology that are developing increasingly rapidly can become part of the personal learning environment. This is very likely to be utilized by students in choosing the material to be studied; (2) Instill independence in students, especially helping them determine direction, talent and interest in learning; (3) Assist teachers in delivering material to students. Learning that is not carried out face-to-face may speed up the learning process itself. In this way, teachers do not need a long duration of time to deliver material to students; (4) The teacher's freedom to determine and choose the material provided is possible to provide a lot of additional knowledge for students. So, not only is the main material the main indicator in learning, but students will also find additional material that can be studied. This material supports learning and provides knowledge for them; (5) Foster a climate of healthy competition between students. Each student will work together or compete with each other in learning and solving problems encountered in the learning process using a personal learning environment.

CONCLUSION

Based on the results of data analysis, it can be concluded that the average score for English speaking skills in the control class is 53.7. Furthermore, in testing the t test hypothesis, a sig of 0.00 was obtained. Based on the conclusion, if the sig (2-tailed) value is <0.05, then there is a significant difference. Meanwhile, the average value of English speaking skills for the experimental class is 80.1. So, it can be concluded that there is a positive and significant influence of the Personal Learning Environment (PLE) Approach on Speaking Ability in English Language Learning. The

sophistication and rapid development of science and technology does not mean that the role of teachers in learning is completely eliminated. Overall, teachers are parents for students at school. Guidance and assistance from teachers is important in order to lead students towards their dream future. Technology is only a complement that supports the achievement of these goals. In general, the concept of a personal learning environment is very good for use in learning because each individual will be encouraged by themselves to master the material. From there, self-confidence will automatically grow. However, don't forget that teachers are the main figures who still play an important role in guiding students to achieve their future.

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