

iLearn: Electronic-English Teaching Platform Based on Artificial Intelligence (AI) For the College Students

Griselda Gian Heris Herdina¹, Nurul Aini²

^{1,2}Department of English Education, State Islamic Institute of (IAIN) Kediri.
Jl. Sunan Ampel No. 7 Ngronggo Kediri (Kode Pos) 64127 (0354) 689282, Faks. 686564, East Java, Indonesia.

Corresponding author

¹griseldagian285@gmail.com; ²florida_aini@iainkediri.ac.id

Abstract: The use of technology in teaching English in college must be continually updated due to the high tense of students and teachers in applying it. Moreover, the industrial revolution 4.0 era which was marked by automation and the exchange of data on where most people used the Internet to site, search, analyze data and information, and access cloud services. In addition, it is in line with the 5.0 society era which is intended to bring human centered on the technological and economic sides that use virtual and reality systems to solve various problems. Educational technology has revolutionized teaching and learning into an innovative use of artificial intelligence (AI) in the university. The one of innovation is based on AI is iLearn. It designed to find out the needs of the students and to know the mastery of the students' material based on the curriculum through programs that provide ease of teaching activities in college. This reserach discusses the innovation based on integration between learning English and the sophistication of AI will have advantages over previous teaching techniques. The article limits to discuss about how this AI system operates to make learning more conducive. For the result, iLearn strives for a rewarding experience for students in full-featured English learning in its latest version and will suit of English learning curriculum.

Keywords: Artificial Intelligence (AI), English, iLearn, platform.

Introduction

Teacher must master technological competence in teaching English. This is because teaching English is not only learning about basic knowledge of the English language, but it is also required to understand what is happening in the world so that students can produce a culture, receive information, and build a global communication (Rao, 2019). Conventional English teaching can cause students not to know enough the material presented, so it does not consider the feedback and does not measure the students' ability of the material, so that the students are less motivated in learning English. Therefore, using the right medium can increase the student's learning motivation (Yana & Adam, 2019). It can influence their ability to improve quality of learning activities.

The motivation for learning language can also be affected by several factors. One is the student shortage in developing the curriculum that should be exploited in courses (Sun et al., 2021). It can interfere with objective needs of the students such as proficiency levels, use of language in daily life, language difficulties, and so on. As for the subjective needs that must be met such as learning arrangements, methodologies, and learning styles. The integration between the curriculum and application of learning in the classroom can significantly impact on students' success (Foo et al., 2021).

Maximizing the use of technology in English education is needed. Moreover, the industrial revolution 4.0 era which was marked by automation and the exchange of data on where most people used the Internet to site, search, analyze data and information, and access cloud services (Prastiwi & Pujiawati, 2019). It also

relevant with the 5.0 society, which is intended to bring human centered on the technological and economic sides that use virtual and reality systems to solve various problems. Fahimirad et al. (2019) state that educational technology has revolutionized teaching and learning into an innovative use of artificial intelligence in the university. Therefore, students as part of the industrial revolution 4.0 and society 5.0 must have skills in automation, exchange of data, and analyzing information data to solve problems.

Artificial intelligence (AI) is a system that is developed and capable of innovating in the field of study that is modeled on both machines and computers that can have the same or even more intelligence as humans, which is characterized by adaptive, decision-making, cognitive, and learning abilities. AI in particular has helped coaches perform their tasks more successfully and efficiently due to the development, introduction and widespread use of technology. This innovation has penetrated other fields of science, advancing effectiveness and efficiency (Rahardja et al., 2019). AIs' references include supercomputer, computer with power great processing cognitive, and functional abilities like a human interacting with a supercomputer (Alakwe, 2023). In the field of education, there is an increasing intelligence number of AI applications in education, including embedded computing systems (Pedro et al., 2019). AI systems can be continuously upgraded and configured to provide support for integrated guidance strategies based on instructional theory. It uses in education, in various ways and for various purposes, this significantly impacts the effectiveness, as well as the operation of administrators in education. This allows educators or instructors to be more effective in carrying out tasks.

In the previous study from Cox (2021) who analysis the impact of artificial intelligence in teaching and learning in higher education. Another research from Mohanty et al. (2021) said that the evolution and revolution of AI can affect of education in the next 25 years there are evolutionary process, focusing on classroom activities, collaborating with teachers to apply AI, and diversifying technology and domains.

Therefore, this research focus on introduce of implementing AI design in class activities through a cloud computing system which can make it easier for teachers and students to learn English at the college level which relate with the curriculum. This design should be able to assist students in tertiary institutions in learning basics of English and also be able to develop their abilities in implementing the English language, especially in communicating using English. It must be ensured that students can develop their abilities stably in their individual and learning activities, so they can meet their needs (Herdina & Fakhurriana, 2023).

Develop of learning abilities should base on the curriculum needs are objective needs and subjective needs. For objective needs it refers to factual information about students, namely "students' biographies", this is used so that teacher can analyze students' personal data knowledge about shared learning so that teacher can find out their language proficiency and patterns of language use (López-Belmonte et al., 2021). Then, there are subjective needs which include the cognitive and affective needs of students in subjects such as self-confidence, attitudes, and expectations. This subject need also includes the length and intensity of the course, methodology, and preferred language style (Ismailova & Baitleuova, 2022).

The current research is a development of previous research that has found AI-based media to innovate platforms for colleges' students. Previous research from (Underwood, 2017) entitled "Exploring AI language assistants with primary EFL students". This study attempts to quantify the impact of artificial intelligence applications in EFL (English as a Foreign Language) classroom settings. In previous research by Koraisi (2023) talks about ChatGPT with the title "Teaching English in the Age of AI: Embracing ChatGPT to Optimize EFL Materials and Assessment". The purpose of this article is to discuss some possible advantages of using ChatGPT in EFL instruction. The research study from (Moybeka et al., 2023) with the title "Artificial Intelligence and English Classroom: The Implications of AI Toward EFL Students' Motivation", the study takes ethical issues into account, protecting participants' privacy

and welfare all through the research process. The previous research from (Jeon, 2021) entitled “Exploring AI chatbot affordances in the EFL classroom: Young learners’ experiences and perspectives” discuss with on the potential psychological effects that these chatbot affordances may have had on language learners. Another research from (Han, 2021) entitled “An Analysis of Korean EFL Learners’ Experience on English Classes Using AI Chatbot”. The objective of this research is to teach English using AI chatbots, which are quickly becoming popular terms in society at large.

Moving on from these conditions, the author proposed to discuss an innovation design called *iLearn*. It designed to find out the needs of the students and to know the mastery of the students’ material based on the curriculum through programs that provide ease of teaching activities in college.

Method

This article uses a conceptual design for research design which is the initial phase of the design process, where the outline of the function and form of something is articulated. This includes the design of interaction, experience, process, and strategy. It is expected to be able to help students in learning by integrating existing technology. By this concept, it might be reviewed by the related education sector so that they can develop innovations from existing technological renewal so that it can make it easier for teachers and students to learn.

Results and Discussion

Previous research from (Underwood, 2017) entitled “Exploring AI language assistants with primary EFL students”. This study attempts to quantify the impact of artificial intelligence applications in EFL (English as a Foreign Language) classroom settings. The Alapps used in this experimental study are Lyra Virtual Assistants (LVAs), which were selected based on the hypothesis that they

could enhance students’ public speaking abilities. LVA was chosen because it has many special features, is inexpensive, easy to use, and ranks among the top virtual assistants in 2018. The Ministry of Education recommended the secondary school used for the sample selection in this study because of its policy permitting students to use cell phones in class and because of its examination results consistently indicating poor English speaking performance result. The goal of this study is to measure the effects of AI programmes in EFL (English as a Foreign Language) classrooms. Lyra Virtual Assistants (LVAs) are the Alapps utilised in this experimental study. Their selection was based on the theory that they could improve students’ public speaking skills. LVA was selected because it is one of the best virtual assistants of 2018 and offers a lot of unique features at a reasonable price. It is also very user-friendly. The secondary school used for the sample selection in this study was recommended by the Ministry of Education due to its policy allowing students to use cell phones in class and its examination results consistently showing low English speaking performance. In previous research by Koraiishi (2023) talks about ChatGPT with the title “Teaching English in the Age of AI: Embracing ChatGPT to Optimize EFL Materials and Assessment”. The purpose of this article is to discuss some possible advantages of using ChatGPT in EFL instruction. The researchers start by looking at how ChatGPT can be used for material development, which can simplify the process of producing interesting and pertinent resources that are suited to the needs of specific learners as well as other, broader applications. In our second section, we examine ChatGPT’s function in text assessment and emphasise how, in contrast to humans, it can provide learners with personalised, real-time feedback on their performance, improving their overall learning experience. It is important to note that ChatGPT 4 is the most recent version, not ChatGPT 3.5, which is what this article and the applications it suggests are based on. The research study from (Moybeka et al., 2023) with the title “Artificial Intelligence and English Classroom: The Implications of AI Toward EFL Students’ Motivation”, the study takes ethical issues into account, protecting participants’ privacy

and welfare all through the research process. In the end, the study adds to the expanding corpus of information about AI's function in education and its potential to influence EFL instruction in the future. This study sheds light on how AI affects the motivation of EFL students, which can help educators, legislators, and other stakeholders integrate AI more effectively and produce lifelong, passionate language learners in the increasingly digital age. The previous research from (Jeon, 2021) entitled "Exploring AI chatbot affordances in the EFL classroom: Young learners' experiences and perspectives" discuss with on the potential psychological effects that these chatbot affordances may have had on language learners. Another research from (Han, 2021) entitled "An Analysis of Korean EFL Learners' Experience on English Classes Using AI Chatbot". The objective of this research is to teach English using AI chatbots, which are quickly becoming popular terms in society at large. Through the process, learners' responses will be used to qualitatively analyse the learning experiences of the participants. For this reason, twenty-three first-year students at A middle school were given an English class using the AI chatbot for a semester, and four of them were chosen to participate in the study. For this data, four students who took English classes with AI chatbots were interviewed in-depth to get a detailed understanding of their attitudes and ideas.

Based on previous researches, they have been proven that AI is very effective and conducive when implemented in English classes and the researcher offers an innovative concept of AI platform using cloud computing to manage the working system of iLearn. It aims as Artificial Intelligence (AI) based higher education in English teaching program. AI is an intelligence displayed by systems, machines, or programs (Ickowicz et al., 2022). It is not only effective in learning activities, but it also used as the development of science and technology (Zhou et al., 2019). This platform provides a communicative forum that supports interaction between teacher and students so that students can ask questions to teacher through this platform. They can also do a video chat with a predetermined time. Teacher can find out students' feedback through the platform and can target

students' interpretation of learning well (Huang et al., 2021). The advantage of the iLearn concept over previous research is that the entire learning process from student data to the final results of student performance will be recorded in cloud computing automatically so that the system can read student learning progress.

Discussion

The integration between learning English and the sophistication of AI will have advantages over previous teaching techniques. Here is how iLearn works in the learning system:

1. English Teaching Method based on iLearn

This platform is designed using cloud computing methods. Materials will be placed on the platform. On the platform, students will be grouped specifically according to their basic capabilities and knowledge, as they will get different training and learning plans. Students can create their own tests and final tests is conducted online. Students learning logs and students' exam data can be stored in the platform. The entire structure of teaching can be seen in figure 1.

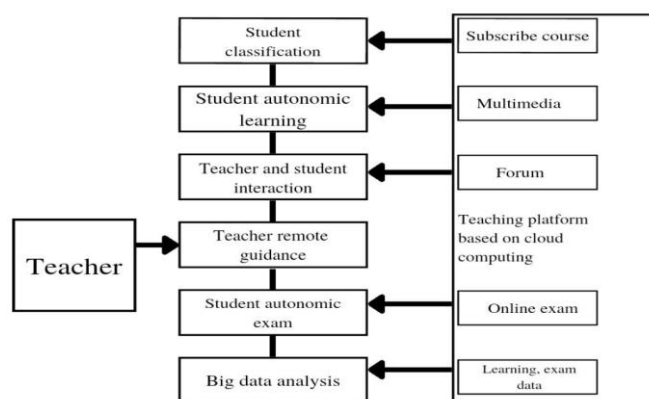


Figure 1. structure of iLearn platform based on cloud computing by (Zou et al., 2020)

2. Reform of Teaching Mode

In this mode, the teacher wants the students to be able to learn English well by knowing the student's needs by conducting analysis. Subjective analysis includes the attitude and preference for learning. Objective analysis of students' needs is obtained through biographical data, the purpose of learning, and language proficiency. Then, there is need analysis focusing on the students' needs at the end of course may be called the Target Situation

Analysis (TSA). Present Situation Analysis (PSA) is also used as a complement of TSA to determine what students are like at the beginning of their course, and to know the students' strengths and weaknesses. All of these things are done so that teachers can assess whether the English curriculum meets the needs of the students.

For teaching mode, first there is students grouping of students according to target, teaching methods, and assessment. Second, the iLearn platform will provide many learning of material resources. Cloud computing platform can record the full learning and training process of each points for each student. Then, the teacher can find out which knowledge the student wields well or not.

a. Interactive Teaching Methods

This method of learning is carried out through collaborative interactions of students and teacher about ideas that can have a mutual effect so that they have good communication relationships in class through the video, and teachers will be more targeting for the interpretation of knowledge.

b. Way of Exam and Assessments

The platform provides a large number of test units. When a test value unit reaches a certain value, then students will be able to sign up for the final exam. The form will automatically produce a set of the final exam papers online. Students who do not qualify for online final exams, cannot continue pursue further studies.

Assessments are the most difficult activities, therefore to avoid cheating, teachers administer online and written exams that account for 50% each.

3. Artificial Intelligence and Data Mining for iLearn Platform

The technology in educational data collection and analysis of AI is taken from relevant methods of the established areas, exploration of variables, and support of teaching. On this iLearn platform are many student learning records, feedback data, student knowledge, student exam questions data, and material resources stored in cloud computing platforms. The structure can be seen in figure 2.

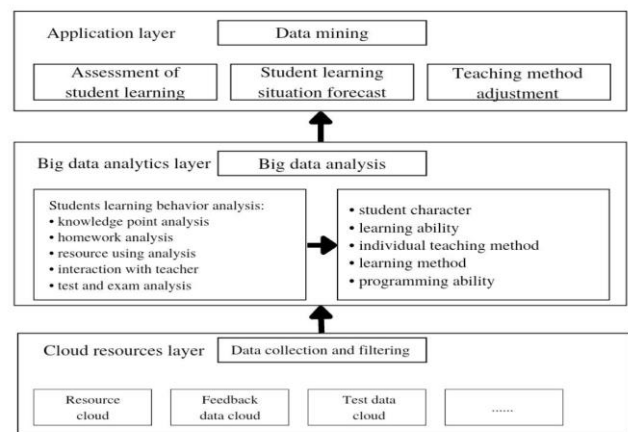


Figure 2. structure of artificial intelligence analytics and data mining based on cloud computing platform by (Zou et al., 2020)

iLearn strives for a rewarding experience for students in full-featured English learning in its latest version. iLearn continues to develop their technology and services as a learning platform for students to improve their understanding and needs of their English learning curriculum. iLearn should have quite good advantages in education. This is because learning through the system can significantly increase learning. School administrative activities are also more efficient thanks to AI, for example, assessing student work using a web-based system, and automating sending feedback on assignments. To be more effective, the iLearn platform provides video conferencing to virtual reality. By it, the students will have a higher level of academic success through competent learning (Cheung et al., 2021).

iLearn based AI can reduce obstacles in the learning process. Online platforms can also improve the working atmosphere for teacher and students in courses (Manongga et al., 2022). This is of course still related to the curriculum so that their learning can be fulfilled optimally.

Conclusion

English is a basic subject of most Universities. Every student from various majors has a different basis of ability and career direction. Conventional methods of learning are considered less than optimal in learning English. Learning systems in artificial intelligence, and learning models are very

important to increase self-learning. This matter built from student behavior data as result of the process learning. Students' thinking ability and ability are examined to determine their learning capacity. Then the knowledge analysis is applied so that students master the knowledge. By the reference to the various problems discussed, the author offers iLearn as an innovation to the problems related to English learning platforms that combine existing technology. Hopefully, this will be useful in the scope of education in the future. The author also hopes that later this concept can be useful and can be realised in the future.

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