The implementation of ICT in English subjects to increase student's motivation in learning at SMAN Negeri 16 Batam

Pebiana[1], Theodesia Lady Pratiwi[2]
Universitas Internasional Batam, Indonesia
Email: 2061010.pebiana@uib.edu

Abstract

Technology development is used to improve academic and non-academic students' abilities in education. Many platforms and devices offer interesting material designs for learning activities. Attractive and sophisticated material design can increase students' motivation and interest in learning. The implementation of ICT in English subjects is done at SMAN Negeri 16 Batam to increase students' motivation in learning. Interviews and questionnaires are conducted with the English teacher and students in grade XI of the Social Sciences Major. The Likert scale is designed as an instrument that consists of statements for data analysis. Through Google Forms will be shared online, students can fill in the questionnaires. The author conducts the interview face-to-face to obtain information based on the teacher's point of view. The results will determine and identify issues for implementing ICT in the school. The author will decide on the teaching media and create material that is suitable for students based on the result of the data analysis. The output of this project is Lesson Plan, Teaching materials and assessments design that integrate ICT. The author introduces ICT through Microsite for assisting the teacher in teaching English. Lastly, the author concludes the result through the response of the partner.

Keywords: ICT implementation, Motivation, Designing Materials and Assessment.

Introduction

1. Issues in material design and assessment EFL classroom

Nowadays, education is heavily influenced by technological advances. Technology development is used to improve academic and non-academic students' abilities in education. Many platforms and devices offer interesting material designs for learning activities. Attractive and sophisticated material design can increase students' motivation and interest in learning. Material design and assessment for EFL students are also designed to keep up with current technological advances. (Zulfiati & Suyanto, 2018) elaborated that the goal of utilizing ICT in education is to provide convenience by ensuring wider opportunities for students in learning and experiencing various advancements. The aim is to prepare students to compete with technology in the future.

Educators have done many efforts to produce a better generation in the era. (Fauzi, Hidayat, Junniardi, & Wahyudin, 2022) have conducted a study to investigate the local wisdom and culture of Banten implemented in the digital reading materials designed for second-semester undergraduate students of the Faculty of Social and Political Science at Universitas Serang Raya. They found that the digital reading materials design based on local wisdom using Flip PDF Pro was positively engaging the EFL students in language learning, and the reading texts effectively give social and cultural values with 83,75% average content feasibility and 80% average reading materials presentation. The previous study indicated that ICT has a positive impact to improve students' engagement and performance. The positive influence will also give impact students 'achievement in learning the language for EFL students. In this case, the use of technology is the aim of education to improve the quality of students.

2. Issues in integrating ICT for learning

The integration of ICT into learning processes and activities has some constraints and limitations. The study (Lailiyah & Mardliyah, 2021) concludes that the lack of adequate facilities provided by schools to carry out ICT-based learning is a limitation for implementation. In addition, several of students who do not have any gadget can hinder the learning process. (Lafendry , 2022) also mentioned that in implementing ICT in Indonesia, there are several obstacles that cause ICT and the internet to not be used as optimally as possible. One of the main causes is the lack of availability of human resources, the process of technological transformation, telecommunication infrastructure, and the legal instruments that regulate it.

Furthermore, Various problems arise in the application of ICT-based learning: 1) Teachers tend to be a burden because of a lack of knowledge about technology and are reluctant to transform learning, 2) Various reasons as there is no budget to complement the learning that is being developed, 3) The lack of ICT-based learning ideas that tend to be reluctant to apply them, 4) Inadequate understanding of technology, pedagogy, content knowledge (TPACK).

3. Issues/ Problems in your partner school

The author has conducted a project to improve student's performance at SMAN Negeri 16 Batam using ICT-based learning for English subjects. Based on the information was obtained by the headmaster and English teacher in the school concluded that technology can be used in the school but conducting ICT-based learning entirely for everyday activities has not supported enough. Limitations to the use of Wi-Fi in a great amount became an obstacle to implementing ICT-based learning in the school.

On the other hand, the school still applied task-based learning to conduct learning activities in the classroom. The lack of knowledge in technology was worried as the obstacle to conduct ICT-based learning at the school. However, the school is not obstructing the teacher to use technology in the classroom. It is supported by the school to increase students and teachers' knowledge about ICT

in the learning process. Teachers can explore more knowledge and information about ICT and improve their skills. The improvement of student's engagement is also expected by the school in implementing ICT for learning in the classroom.

4. The output and outcome of the project

In addition, the teacher said that students have low interest in learning English because the level of English skills made them difficult to communicate in the class. Students understand the material but unable to reexplain use English language. The results of questionnaires for students also conclude that students consider about English very important to learn, but some of them are not confident to speak English. The project conducts to assist SMAN Negeri 16 in increasing the motivation of students in learning English. The output of this project is Lesson plan, teaching material, and assessments design which creating with the technology. The implementation of ICT learning will determine whether the output can assist the partner in solving the issue of the school.

Methods
Data Collection Technique

To gather the necessary data for project implementation, the author uses two methods for data collection technique. Interviews and questionnaires are conducted to the English teacher and students in the grade XI of Social Sciences Major in SMAN Negeri 16 Batam. The Interview is done to obtain information based on the teacher's point of view. The result of the interview will determine and identify issue for implementing ICT in the school.

The second technique is questionnaire that used to collect data for student's need before conducting the project. The Likert scale is designed as the instrument which consists of statements for data analysis. The author uses Google Forms to collect the data, and will share online through WhatsApp, so students can easily answer the statements. The process will be conducted face-to-face at the classroom to make sure that all the students participate through the Google Forms.

After data was collected, the author will decide the teaching media and creating material that suitable for students based on the result of data analysis. The teaching media and assessment will be designed use technology to fulfill the objectives of the research. The implementation will be conducted to find out whether ICT can increase student's motivation in learning English.

Output Planning Process

The output planning process are developing Lesson plan, teaching materials, and assessment design for learning using ICT. Lesson plan is designed to integrate ICT into Prosses of learning. The author needs to design Lesson plan according to the topic of invitation. Students asks to create an invitation later using Canva. However, before conducting the activity, the explanation and instruction will be taught, and all the activities input on the Lesson plan. The Lesson plan will take Learning Approaches from the partners which is Scientific

Approach. Learning objectives for the topic are expected students can explain and creating lyrics through their creativity.

Teaching material is also designed to use technology. PowerPoint and Kahoot are media for teaching activity. Jamboard is used for the process of warming up before starting the core activity in the learning. The assessment will be adjusted to the instruction of Lesson plan.

Pre-implementation Phase

In this phase, the author will determine the venue of implementation and request for permission to conduct. As soon as the author's lecturer and the partner approve the proposal, the author will directly conduct the next step, which is making a schedule to conduct interview with the partner. The author will ask several questions regarding to the issue that the partner faced and some questions about ICT implementation in the school.

The author also conducts direct observation to gather relevant information regarding ICT implementation that is being applied in the school. The results of the interview and observation will be used by the author in planning to discover the issue that is found and to solve later. The issue that was found within the observation and interviews is the school still applied task-based learning to conduct learning activities in the classroom. The lack of knowledge in technology was worried as the obstacle to conduct ICT-based learning at the school.

Picture 1. Observation to the school

Implementation Phase

In this phase, the author will assist the partner to teach students in the school. The author applies the output planning when conducting the learning. The activities will conduct offline in the classroom and the author must prepare all

tools for teaching activities before beginning the class. Projector and Wi-Fi is provided by the school to facilitate learning activity. The author will introduce students to the microsite that created for the learning process. Microsite uses to help the author conveying materials.

The steps for using the Microsite will also be explained to the teacher, so the integration of ICT is introduced by the Microsite in the learning process. Furthermore, students learn English using the teaching media and materials that have been designed in the lesson plan. The process of learning will follow the instructions of the lesson plan.

Evaluation Phase

The author needs to consult with the lecturer for the lesson plan and teaching materials every week before assisting Mitra to teach students in the school. In the consultation sessions, discuss about media and planning which can improve students' motivation to learn English. The lecturer will give advice during designing the teaching material. Video of microteaching needs to be Interesting, so lecturer will check the quality of video. The author also asks for advice to the partner about students in the class and shows lesson plan and teaching materials that have been designed by the author.

Location, time, and duration of activities

During the observation, the author investigate the issue that faced by the partner. The observation is along with the approval of MoU and MoA with the partner. It is conducted offline at SMAN Negeri 16 Batam in JL. Jend. S. Parman, No. 6, Mangsang, Kec. Sei Beduk. After Observation is done, the author interviews the English teacher on October 10, 2020. The interview will be done online through Zoom application. The Need analysis for students is also important to design lesson plan and teaching materials that is appropriate to students. Therefore, the author shares the link of Questionnaires to the students on October 27, 2022. The results of teacher's interview and Questionnaires to the students will analyze to design an appropriate lesson plan and teaching materials within the implementation of ICT.

The lesson plan and teaching material must consult with the lecturer every week until approved on November 24, 2022. The consultations are conducted Hybrid through Zoom and at UIB during the assessment class. Video microteaching is created online on December 1, 2022, use Screencast Apps. Next, designing Microsite to assist the partner. In designing Microsite, the author collaborates with the IT students from Universitas Internasional Batam. it is conducts on December 15, 2022. Finally, the implementation to school is conducted on December 16, 2022, along with distributing satisfaction questionnaires to students. These responses are important to find out whether the project succeeds or fails.

Date	Activity	Location
September 20th, 2022	Observation	SMAN Negeri 16 Batam
October 10th, 2022	Interviews Teacher	Online (zoom)
October 27th, 2022	Questionnaires for students Need Analysis	SMAN Negeri 16 Batam
November 24th, 2022	Lesson plan approved	Online (zoom)
November 24th, 2022	Teaching material approved	Online (zoom)
December 1st, 2022	Video microteaching	Online
December 15th, 2022	Designing Microsite	Universitas Internasional Batam
December 16th, 2022	Implementation to school	SMA Negeri 16 Batam (in the class of grade XI 3 social major)
December 16th, 2022	Questionnaires of satisfaction	SMAN Negeri 16 Batam

Result and Discussion
Teaching Materials

Woolfook cited on (Farhana, Suryadi, & Wicaksono, 2021) stated that students can easily obtain information if the material is packaged in the form of images or videos. The statement becomes the basis for the author to create teaching materials use PowerPoint. According to (Wahyuni, Rahmadhani, & Mandasari, 2020) said that features on media PowerPoint can accommodate various types of student learning styles both visual, audio, kinesthetic and verbal. Besides, tools and features in PowerPoint are familiar to the author for developing teaching materials.

The results of implementation indicate that the teaching material used to assists the partner teaching English can improve students' engagement in learning. The responses from students are positive during the learning process. Students understand the materials that conveyed through PowerPoint slide. Some of them argue that they understand well when the learning materials delivered with Picture or audio. Students also prefer ICT-based learning then task-based learning. They said task-based learning makes them bored easily.

Picture 2. teaching material from slide PowerPoint

Assessment design

According to (Amalia, Nawir, & Nurindah, 2022) Using games for learning evaluation is more interesting for students because it gives the impression that can stimulate fun learning. Moreover, if evaluation activities use games is challenging for students to keep learning and getting a satisfactory grade. Kahoot is a web-based learning application or web-based learning by collaborating games into educational content. Palma, dkk cited on (Nawawi, 2020) stated that "The use of technology such as Kahoot can foster student motivation, participation, attention and experience as an active element in education". The statement encourages the author to use Kahoot for assessment design. The scoring rubric will follow the design of lesson plan.

Next, for the project will done by groups, students have to create an invitation later. The creativity of students is expected in this assessment. The author use Canva as the media for students creating invitation later. This assessment aims to assess the ability of students in writing. The previous study from (Yundayani, Susilawati, & Chairunnisa, 2019) investigated the effect of Canva on students' writing skills. The results indicated that students in the experimental group had a significantly lower number of writing errors compared to the control group, which confirmed the positive effect of Canva in improving students' writing skills.

Microsite will help to deliver the link for all material and assessment design to the students. The process will follow the design of lesson plan. Microsite greatly facilitates the learning process in the class. The component of Microsite can be used to gather links of materials and assessment into a media. It is convenient for students to access all the materials for a certain topic of learning. In addition, (Patria, 2022) Mentioned that S.id is a platform for people to show

their expertise in creating microsites and shortening links with the code s.id/. Moreover, the features provided by the platform are one of the best platforms for designing microsites for education.

Picture 3. Implementation of assessment design

ICT integration

(Lafendry , 2022) mentioned that ICT integration for education in the 21st century is believed to help educational institutions both academically and administratively. The government has supported the use of ICT in learning as stated in the regulation of the Minister of National Education (Permendiknas) No. 78 of 2009 which states that "proses pembelajaran menerapkan   pendekatan pembelajaran berbasis teknologi informasi dan komunikasi, aktif kreatif, efektif, menyenangkan, dan kontekstual".

Throughout the statement encourages the author to design learning with ICT integration. The integration of ICT to the learning will be implemented to assist partner teaching English. The evaluation from Partner indicates that the output is designed has a positive respond. The output of project can help the partner to increase students' motivation in learning English. Convenient and easy to access media is the main point of the outcomes.

Picture 4. The process of implementation

Conclusions

The results show that the output of the project received a positive response from partner. The lesson plan, Teaching materials, and assessment design can assist the partner in integrating ICT into the learning process in the English class. The implementation of ICT to the school can increase student motivation in learning English. Students are active during the process of learning in the class. They are interested to the materials that is provided with animation through PowerPoint. Students also understand the materials that is explained by the author. The media can be accessed easily by the students. All the responses indicate that the implementation of ICT is successfully conducted in SMAN Negeri 16 Batam.

The author expects that the implementation of ICT can continue to be used for in the future. Based on the success obtained from this implementation, it proves that there is an attachment to student learning motivation. This success will help improve the quality of education in the future.

References

Amalia, R., Nawir, M., & Nurindah. (2022). Efektivitas penggunaan Kahoot sebagai media evaliuasi pembelajaran kelas VII SMP. *JRGI, I*, 56-62.

Farhana, F., Suryadi, A., & Wicaksono, D. (2021). Pengembangan bahan ajar berbasis digital pada mata peajaran Bahasa Inggis di SMK Atlantis plus Depok. *Junal Intruksional, 3*, 1.

Fauzi, I., Hidayat, S., Junniardi, Y., & Wahyudin. (2022). Designing Digital Reading Materials Based on Bantenese Local. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 3041-3051.

Lafendry , F. (2022). Implemntasi ICT dalam proses pembelajaran di sekolah. *Tarbawi : Jurnal Pemikiran Dan Pendidikan Islam, V*, 37-49.

Lailiyah, N. N., & Mardliyah, S. Z. (2021). Poblematika Pemanfaatan Media Pembelajaran berbasis TIK di Madrasah Ibtidaiyah. *Bidayatuna Jurnal Pendidikan Guru Mandrasah Ibtidaiyah*, 4(1), 89–92.

Nawawi, M. I. (2020). Pengaruh Media Pembelajaran terhadap Motivasi Belajar: Tinjauan berdasarkan Karakter Generasi Z. *Jurnal Penelitian dan Pengkajian Ilmu Pendidikan: e-Saintika, IV*, 197-210.

Patria, R. (2022, Juni 18). *About Us: DomaiNesia*. Retrieved from DomaiNesia Web site: https://www.domainesia.com/berita/microsite-adalah/

Wahyuni, S., Rahmadhani, E., & Mandasari, L. (2020). Pelatihan Pembuatan Media Pembelajaran Interaktif. *Jurnal Abdidas, 1*, 597-602.

Yundayani, A., Susilawati, & Chairunnisa. (2019). Investigating The effect of canva on student' writing skills. *ENGLISH REVIEW: Journal of English Education*, 169-176.

Zulfiati, H. M., & Suyanto, H. P. (2018). Optimizing ICT-based Learning of Social Studies. *ICASI* , 77-83.

Isgandi, Y., & Prasodjo, P. (2018). Studi Komparatif Materi Buku Ajar PAI Ristekdikti dan Produk Pengembangannya bagi Calon Pendidik. 1–7. https://jurnal.unimus.ac.id/index.php/psn12012010/article/view/4177

Carnando, Gea and Nurlaily. 2020. " implementing Communicative Language Teaching (CLT) Approch in an International Standard School in Batam. The Journal of English Literacy Education. Vol. 7. No. 2.

Ferstephanie, J., & Pratiwi, T. L. (2022). The effect of Tiktok platform to develop students'motivation in speaking ability: a classroom action research. Wiralodra English Journal, 6(1), 1-12.

Attachment

Link of folder Lesson plan

https://uibedu-my.sharepoint.com/:f:/g/personal/2061010_pebiana_uib_edu/EuvvHYB6IRlGnyoHgv5p42EB2P_Xf9L4pRmgjjzkZmzUgw?e=Hz1Oby

Link of folder Teaching material

https://uibedu-my.sharepoint.com/:f:/g/personal/2061010_pebiana_uib_edu/EokNXzR6mKtMno-Ii4GJKskBW94TE9Te3IyYCug1LxwAFg?e=jtFZ3B

Link of Microsite and Assessment Instument

https://s.id/songpebi

Link of Video microteaching

Video microteaching.mp4

Documentation of submission proof for the submission Concept

Comment:

1. Section of Introduction should discuss general introduction of the research.
2. Create specific section that discuss for issue.
3. Add section for related work.
4. The quality is acceptable
5. Paper using many shortform such as SMAN. Need to have bracket. Ex: ICT (Information Communication Technology)

6. This paper is accepted for publication.

731