DEVELOPING PROBLEM-BASED E-MODULE FOR MASTERING CODE MIXING IN SOCIOLINGUISTICS

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Abstract
Acquiring the pursuit skill necessitates using instructional material as a point of reference. The comprehension of sociolinguistics material is crucial for students. There is a need for independent learning resources encompassing all explanatory material. To address this need, a research project explicitly focused on developing a Sociolinguistics E-Module based on Problem Based Learning, specifically targeting code mixing learning. This study used the ADDIE framework, which consists of the following stages: Analyze, Design, Development, Implementation, and Evaluation. This study first conducted tests on 15 fourth-semester students from the English language study program of Mulawarman University's class and subsequently tested another 15 students from the English language study program of Mulawarman University's class of 2021. The e-module validation findings, as assessed by material experts, were determined to be 74.54% practicable. The evaluation conducted by media experts yielded a feasibility rating of 76%. Additionally, the student's reaction to the e-module was extremely practical, with a rating of 82.54%. The study has yielded a Sociolinguistics E-Module that focuses on Problem-Based Learning, specifically on Code Mixing. This module is well-suited for students engaging in autonomous learning, since it is practical and valuable.
Keywords: Code Mixing, E-Module, Problem Based E-Modul, Sociolinguistics

Introduction

Sociolinguistics describes how many aspects of society, such as cultural norms, expectations, and conditions, influence how language is used (Wardhaugh, 2022). Sociolinguistics substantially influences English as a second and foreign language in the classroom, as stated by (Hasanah et al., 2019). Faizin (2019) states language education and sociolinguistics are closely connected. Hence, educators need a comprehensive grasp of sociolinguistics to teach and learn language processes effectively. According to the opinions expressed by the experts, it is evident that sociolinguistics has a crucial function in education, namely in the classroom, where English is taught as a foreign language and as a second language. According to Paksi & Iswari (2022), the requirements of students should be the primary consideration when creating educational materials for specific objectives.

Code mixing, a prevalent occurrence in sociolinguistics, refers to amalgamating components from two or more languages into a solitary expression. Proficiency in code-mixing requires a profound comprehension of language frameworks, cultural circumstances, and societal conventions. Conventional instructional approaches often focus on lectures and exercises, which may not adequately involve students in self-directed learning. Problem-based learning (PBL) is acknowledged as an effective method for improving critical thinking and problem-solving abilities.

According to the analysis, students nowadays want digital learning tools that are accessible online and in face-to-face learning environments and can be utilized at any time and location. An e-module is a digitally packed module designed to be more interactive. An E-module, a self-study medium, provides instructions for independent learning. E-modules, including multimedia and interactive components, may increase the efficacy of PBL by offering a more immersive and captivating learning setting. It may be enriched with various materials, such as PDFs, videos, and animations, which facilitate active learning for users (Winangun, 2024). Therefore, there is a need to create E-modules.

Considering the issues, students must comprehend code-mixing theories due to their substantial impact on language education (Nawir, 2024). Although code-mixing is considered necessary in sociolinguistics, there is a notable lack of research on how to learn and master code-mixing effectively. Most of the research primarily concentrates on theoretical frameworks or language analysis, disregarding the practical elements of teaching and learning. Furthermore, the use of e-modules in sociolinguistics education is restricted since only a few studies have investigated their capacity to improve self-directed learning. This study seeks to fill this need by creating a problem-based e-module tailored to enhance students' code-mixing abilities. The uniqueness of this strategy resides in its incorporation of PBL concepts with multimedia features, which is anticipated to improve students' involvement and educational achievements significantly.

There is a pressing demand for educational resources that students may use autonomously, including all necessary instructional content. An excellent medium for learning is the E-Module. According to Susanti & Rachmajanti (2023), e-module can be used in blended learning and significantly facilitate students to learn borderless (anytime and anywhere). Hence, researchers developed E-modules for learning code-mixing for the sociolinguistic class. This study aims to provide educational resources using problem-based learning that are validated, feasible, and practical. The study was carried out at Mulawarman University, with the participation of instructors who served as subject matter experts, media experts, and students from the class of 2021. The objective was to assess the feasibility of the E-Module.

The e-module was created using a problem-based learning structure in which students face authentic situations that need code-mixing abilities. The module uses interactive multimedia components, such as films, audio snippets, and interactive quizzes, to actively involve students and enhance their learning process. The efficacy of the e-module is assessed by pretest and post-test evaluations, as well as questionnaires and interviews to measure students' perspectives of the learning encounter. The e-module is anticipated to have a substantial impact on students' code-mixing proficiency, as well as their capacity for critical thinking and problem-solving.

Creating a problem-based e-module to master code mixing in sociolinguistics is essential to improving self-directed learning. By incorporating problem-based learning (PBL) concepts with multimedia components, this e-module can greatly enhance students' educational achievements and level of involvement. The uniqueness of this method is found in its pragmatic implementation of theoretical frameworks, which is anticipated to make a substantial contribution to sociolinguistics education.

Method

The applied research approach is Research and Development. Research and development are the systematic process of designing and verifying educational goods for teaching and learning. Education researchers used Borg and Gall's (1983) research and development (R&D) methodology to construct and refine their educational materials. Education practitioners and pedagogues have widely used this method to develop educational product models (Gustiani, 2019). This study technique employs the ADDIE model, created by Reiser and Mollanda in 1967. The approach consists of five sequential steps: analysis, design, development, implementation, and evolution (Widyastuti & Susiana, 2019).

The objective of this study was to create a Sociolinguistics e-module and assess the practicality of the E-Module by involving 2 validators. The validators were responsible for evaluating the developed e-module. Expert lecturers in their respective fields conducted the validation process using a prepared validation sheet. The research used two validators, namely professors who specialize in sociolinguistics and lecturers who specialize in design. In addition

to assessing the feasibility of the E-Module, a small-scale test was conducted on 15 students from the English education class of 2021 at Mulawarman University.

Findings and Discussions

The Sociolinguistics E-Module on Code Mixing Based on Problem-Based Learning results from this development research.

Analysis of Need Stage Results

The results of the needs analysis given to students, 73% of students said that sociolinguistics learning was difficult to understand in terms of the material they got while online learning was carried out, both in PDF, PowerPoint, and video form, therefore they needed additional explanations from the teaching lecturer and looked for other sources of material. Furthermore, 27% of participants said that sociolinguistics learning was fun and easy to understand because it involved students' experiences. Furthermore, all students stated that sociolinguistics material is critical to understand. According to the results of the needs analysis, most students have difficulty understanding the sociolinguistics material that has been provided. During the learning process, lecturers provide PDF files, YouTube videos, and PowerPoint presentations, and most students struggle to understand the material. The response stated that understanding sociolinguistics material is essential, so students require a re-explanation from the supervising lecturer.

Design Stage Result

After analyzing student needs and identifying field problems, the next step is to create the initial product of the Sociolinguistic Learning E-module based on Problem-Based Learning that can address each of these issues. The stages in developing this initial product included compiling an outline of the e- module contents. There are 3 steps: (1) Outline, (2) Material Gathering and (3) Create E-module. The number of pages on the E-Module is 18 pages, including cover and content. The next step is to upload the e-module file to the Anyflip.com service after completing the e-module writing process.

Development Stage Result

Trial design/material design teaching is assessed and validated by two experts, material experts and media experts. The validation test is carried out by validators who are expert lecturers in their respective fields, using a prepared validation questionnaire sheet. Validation tests were carried out by material experts and media experts.

Table 1. Recap of Material Focus Validation Results Data

Validator	Numer of Item	Ideal Score	Score is Obtained	Percentage	Qualification
1	22	110	82	74,54%	Good

The number of items that must be validated by material experts in the questionnaire is 22 items with an ideal score of 110 and the score obtained from the validation results is 82. Based on the results of the development, it is known that the validator for the Sociolinguistics learning e-module based on Problem Based Learning scored 74.54% with good qualifications. Therefore, it can be concluded that the developed Sociolinguistics learning e-module based on Problem Based Learning is suitable for use or can be tested on students during the learning process based on the results of the validator and the conversion table.

Table 2. Media Focus Validation Data Recap

Validator	Numer of Item	Ideal Score	Score is Obtained	Percentage	Qualification
1	20	100	76	76,00%	Good

The number of items that must be validated by media experts in the questionnaire is 20 items with an ideal score of 100 and the score obtained from the validation results is 76. For creating Problem-Based Learning-based Sociolinguistics learning e-modules, the overall percentage of validation results obtained by media expert validators is 76.00% with suitable qualifications. Based on the validation results and the conversion table, it is possible to conclude that the developed sociolinguistics learning e-module is suitable for use or can be tested on students during the learning process.

Based on the assessments of material experts and media experts, the Sociolinguistics learning e-module based on Problem-Based Learning Code mixing material received a score of 74.54% (good) from the material expert and 76.00% (good) from the media expert.

Implementation and Evaluation Stage Results

Small-scale product trials were conducted on English language education students class of 2021 at Mulawarman University. A limited/small-scale trial was carried out to determine the practicality of the Sociolinguistics learning e-module. Product trials were carried out on 15 English language education students' class of 2021 at Mulawarman University. E-module Sociolinguistic Learning in a Limited Group Test based on Problem-Based Learning. The table below shows the practicality of teaching materials based on the analysis of student practicality response sheet assessments in the limited test:

Table 3. Data Analysis of the Practicality

Respondents	Score	Percentage	Category
Student 1	49	89,09%	Very Practical
Student 2	44	80,00%	Practical
Student 3	44	80,00%	Practical
Student 4	45	81,81%	Very Practical
Student 5	47	85,45%	Very Practical
Student 6	45	81,81%	Very Practical
Student 7	44	80,00%	Practical
Student 8	43	78,18%	Practical
Student 9	44	80,00%	Practical
Student 10	43	78,18%	Practical
Student 11	44	80,00%	Practical
Student 12	46	83,63%	Very Practical
Student 13	46	83,63%	Very Practical
Student 14	52	94,54%	Very Practical
Student 15	45	81,81%	Very Practical
Total	681	82,54%	Very Practical

The implementation carried out in the results of Table 4.8 above involved 15 students who filled in 11 questions to validate the practicality of the E-Module that the researcher had created with the highest score for each question, namely 5 and the results presented in Table 4.8 stated that the learning teaching materials in the group test limited E-Module Sociolinguistics based on Problem Based Learning is included in the convenient category with a result of 82.54%.

Generally, this research received little input and revision from students or the expert team. This can be seen from the percentage at the analysis stage who obtained Good and Very Practical qualifications up to the evaluation stage. Only a few things need to be considered, which are currently in the evaluation stage and have been corrected before being applied to students.

To answer the first research question in this research about how to develop the Sociolinguistics E-Module, the research and development method was used with the ADDIE Model (Analysis, Design, Development, Implementation and Evaluation) in the first stage, namely carrying out a needs analysis which was carried out on students of the 2019 class of Mulawarman University and the result 73% participants said that sociolinguistics learning was difficult to understand in terms of the material they got while online learning was carried out, both in PDF, PowerPoint, and video form. Therefore, they needed additional explanations from the teaching lecturer and looked for other material sources. Furthermore, 27% of participants said that sociolinguistics learning was fun and easy to understand because it involved participant experiences. In this research, a needs analysis was carried out by asking several questions regarding the material used in learning code-mixing and research carried out by researchers. Based on these results, they enter the second stage of E-module development.

The second research question is how to test the feasibility of an E-Module. First, the E-Module must be designed. At the design stage, the RPS and outline of the Sociolinguistics topic code mixing material were needed so that the material was by the learning objectives, a Sociolinguistics E-Module based on problem-based learning, was created with topic code-mixing with a total of 18 pages, including cover, material content, questions involving student activities and experiences as well as conclusions from the code-mixing material in terms of design, this E-Module uses the Times New Roman font with font size 12. The E-model will then be tested for feasibility by material and media experts. From this stage, a feasibility E-module was produced with a total score of 74.54% from Material experts and 76% from media experts, using the Likert scale formula (Kumala et al., 2018). -The module produced by the researcher is suitable for use and implementation with students. This finding is consistent with previous research (Oktapianti, 2021), (Zulkifli, 2021), and (Rahmahwati, 2019). with the results of the E-module being suitable for use as teaching material.

The third research question is how to test the practicality of the E-module. To test the practicality of the E-Module, it is necessary to implement it for students. In this case, 15 students from Mulawarman University class of 2021 majoring in English education were involved on a small scale. This was also carried out by a previous researcher Oktapianti, (2021) who used small-scale research in its implementation. Then, the results from this implementation stage were 82.54%, which was included in the convenient category. This finding is the same as the findings by Zulkifli, (2021) who produced an E-module with an efficient category

Generally, this research received little input and revision from students or the expert team. This can be seen in the percentage results from the analysis stage to the evaluation stage. There are only a few things to note regarding the size of the letters and the use of colour in the E-module design, but this has been corrected before being implemented for students. So, the results of this research are suitable and practical for use in the teaching and learning process.

Conclusion

Research on developing an E-Module based on Problem-Based Learning Code Mixing Topic in sociolinguistics courses. Results implementation of this development research in the form of a product design E-Module using the ADDIE model through the analysis stage, design, development implementation and evaluation. The results obtained were that the Sociolinguistics E-Module was based on Problem-Based Learning as a product/model categorised as good with a percentage of 74.54% in Material and 76% in Media, which was validated by material experts and media experts. Implementation and evaluation results, their effectiveness, and their suitability as a model for teaching materials were categorised as very Practical, namely reaching a percentage of 82.54%. Thus, the research results of developing this E-Module produce a product/model of teaching materials as an E-Module as additional

material on Code Mixing material for sociolinguistics courses listed in the course RPS sociolinguistics. Based on the feasibility and practicality test results, the Sociolinguistics Learning E-Module Based on Problem-Based Learning Code Mixing Material was declared feasible and practical to apply.

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