

DESIGN AND IMPLEMENTATION OF A PROJECT-BASED E-MODULE FOR HISTORY LEARNING TO FOSTER NATIONALISM: A STUDY AT SENIOR HIGH SCHOOL

Damasti Rohani Simanjuntak^{1*}, Samsidar Tanjung², R.Mursid³

^{1,2,3} Universitas Negeri Medan/ Educational Technology, Postgraduate Universitas Negeri Medan, Medan

Corresponding E-mail: simanjuntakmasti@mail.com^{1*}, samsidartanjung@unimed.ac.id²

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Abstract

This study aimed to develop a Project-Based Learning-based e-module in history education to promote nationalism values among high school students. The research was conducted using the ADDIE development model, involving five phases: analysis, design, development, implementation, and evaluation. Data were collected through expert validation, student and teacher questionnaires, and pre- and post-tests with control and experimental groups. The feasibility of the e-module was validated by material, media, and instructional design experts, each indicating that the module was highly appropriate in terms of content accuracy, visual appeal, and instructional structure. Practicality tests with teachers and students revealed high usability and engagement levels. The results of the effectiveness test using an independent samples t-test showed a significant improvement in learning outcomes for students who used the e-module compared to those who used conventional textbooks. These findings confirm that the developed e-module is feasible, effective, and practical for use in history classrooms. It not only supports curriculum goals but also encourages active, independent learning and strengthens students' national identity. The module holds strong potential for broader implementation and future development in digital history education.

Keywords: *curriculum, e-module, history education, nationalism, project-based learning*

INTRODUCTION

History education plays a crucial role in shaping national identity and character among young generations (Westberg & Primus, 2023; Zahro et al., 2017). Through historical learning, students are expected not only to acquire knowledge about the nation's past but also to develop a strong sense of nationalism and civic responsibility (Rulianto, 2019; Sheng, 2023). However, recent studies have revealed alarming trends in moral degradation among youth, including declining respect for social norms, national values, and even authority figures in schools (Boty et al., 2023; Rahayu, 2022). This moral erosion reflects a weakening of national consciousness and highlights the need for educational strategies that integrate character formation, particularly the cultivation of nationalism, within school curricula (Alimjonova, 2021). Nationalism, defined as a profound sense of loyalty and pride toward one's country (Heiskanen, 2023), is an essential character trait for Indonesian youth in facing global challenges and preserving national unity (Aspinall, 2016).

Unfortunately, many students today show limited awareness of their national identity and are more attracted to foreign cultural influences, which leads to a growing indifference to the nation's historical struggles and values (Widiyono, 2019). Without active intervention, this trend may contribute to the ideological weakening of the nation's future citizens (Sadam Fajar Shodiq, 2023). To address this issue, history as a subject must move beyond traditional methods and offer more interactive, engaging, and values-oriented learning experiences (Kustati et al., 2023). Yet, history teaching in many Indonesian senior high schools remains reliant on outdated textbooks and conventional lecture-based delivery, which fail to stimulate students' interest or foster critical thinking (Stoddard, 2012). As a result, students often find history boring and irrelevant to their lives. Moreover, access to quality and engaging learning materials is still limited, especially in rural areas (Kysela & Štorková, 2015). The integration of digital technologies especially the development of electronic modules (e-modules) offers a promising alternative (Chalimi, 2023). E-modules allow students to learn independently and at their own pace, support diverse learning styles, and present content in multimedia formats that enhance motivation and comprehension (Almahera et al., 2023; Kusuma et al., 2023). When embedded within a project-based learning (PjBL) framework, e-modules can further enable students to construct historical knowledge through authentic, collaborative tasks that emphasize real-world problem-solving and the internalization of national values (Herwina et al., 2023). Despite their potential, few e-modules in

the Indonesian educational context have been designed specifically to instill national values through history learning. Preliminary surveys conducted at SMA Negeri 1 Serbajadi in North Sumatra revealed that existing history learning resources were inadequate in both quantity and quality. Students expressed a strong preference for digital learning tools and reported low engagement and comprehension in traditional history classes. In the 2023–2024 academic year, only 40.62% of students in Grade XI passed history based on the minimum competency standard, signaling an urgent need for innovation.

Therefore, this study aims to develop a digital history e-module based on Project-Based Learning that explicitly integrates and reinforces nationalism values. The e-module focuses on the historical theme of Indonesia's proclamation of independence, a pivotal moment for cultivating national pride and identity. This initiative responds to the learning needs of 21st-century students who are digital natives and require flexible, engaging, and value-rich educational content (Zainil *et al.*, 2023). The main objectives of this development program are: (1) to assess the feasibility of a nationalism-oriented PjBL-based history e-module; (2) to evaluate its practicality for classroom use; and (3) to determine its effectiveness in improving student engagement and internalizing national values. In achieving these goals, the study adopts a systematic development framework that incorporates expert validation, student feedback, and classroom implementation trials to ensure quality and relevance.

LITERATURE REVIEW

The integration of character education, particularly the cultivation of nationalism, into history teaching has been widely acknowledged as essential in shaping students' civic identity and fostering national unity (Heiskanen, 2023). Historical education serves as a conduit through which students learn to appreciate the nation's past, understand the sacrifices made by national heroes, and develop a sense of loyalty and pride toward their country (Sumino, 2021). However, the moral decline and waning nationalism among youth reflected in disobedience, cultural detachment, and increasing egocentrism have sparked concerns over the effectiveness of current pedagogical strategies (Shairgojri, 2022; Shoham, 2023). Several studies have investigated the role of history education in addressing this issue. Cipta (2020) emphasized the growing risks of interethnic conflict and national disintegration, pointing to the urgent need for educational reforms that reinforce national identity. Similarly, Jaskułowski *et al.* (2018) argued for the importance of embedding nationalism into early education to build resilient future citizens. Yet, many traditional history teaching methods remain overly theoretical, monotonous, and fail to engage students emotionally or cognitively (Putu *et al.*, 2021). The disconnect between pedagogical goals and learning experiences suggests a misalignment in both content delivery and learning modalities (Mayer & Schwemmler, 2023).

Emerging literature points to the transformative potential of Project-Based Learning (PjBL) in addressing these gaps. PjBL promotes active, inquiry-driven learning where students engage in real-world problems and construct their own understanding through projects (Rizki *et al.*, 2022). This model is particularly suitable for fostering higher-order thinking, collaborative skills, and reflective citizenship making it an ideal approach for teaching history infused with national values (Syawaludin *et al.*, 2022). Despite these advantages, limited empirical research has explored the intersection between PjBL and nationalism education in the Indonesian context, especially within history classrooms. Simultaneously, the advancement of digital education tools has catalyzed the development of electronic modules (e-modules), which offer interactive, flexible, and personalized learning experiences. E-modules have been found to enhance student motivation, promote independent learning, and accommodate diverse learning paces and styles (Kusumantoro *et al.*, 2022). According to Chalimi (2023), effective e-modules incorporate multimedia content, self-assessment features, and contextual relevance, all of which are critical for deep learning and knowledge retention. Yet, a major shortcoming in the current body of work is that most e-modules are content-focused and rarely designed with a character-building framework such as nationalism in mind.

Moreover, while studies by YANĀWATĪ *et al.* (2021) and Scheffler *et al.* (2015) demonstrated the viability of e-modules for improving student interest and learning outcomes in history, their designs often lacked integration with constructivist pedagogies like PjBL. These works primarily evaluated e-modules from usability and motivation perspectives without addressing how such modules could be structured to nurture civic identity or embed nationalistic values into learning activities. Consequently, there is limited research on how e-modules can serve as both instructional media and instruments for value transmission within history education. From a theoretical standpoint, this study is grounded in the intersection of constructivist learning theory, which underpins Project-Based Learning, and character education theory, which emphasizes the internalization of moral and civic values through educational experiences (Hein, 1991). Constructivism supports learner-centered approaches, promoting the active construction of knowledge through meaningful engagement, while character education theory highlights the deliberate inclusion of ethical and national values in curriculum and pedagogy. Despite mounting calls for innovation, no existing studies have comprehensively designed, developed, and tested a digital history learning module that both utilizes the PjBL approach and explicitly aims to instill national values. The current literature lacks

integrative models that combine content delivery, value education, and digital technology within history teaching. This research addresses that gap by developing an e-module on the Indonesian Proclamation of Independence a topic rich in nationalist meaning structured within a PjBL framework and tailored to the needs of 21st-century learners.

METHOD

Research Design

This study employed a Research and Development (R&D) approach using the ADDIE instructional design model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation (Widyastuti, 2019). The ADDIE model was selected for its structured and iterative process, which allows for systematic product development tailored to educational needs (Budoya et al., 2019). The research aimed to develop a digital history e-module based on Project-Based Learning (PjBL), specifically targeting the theme of Indonesia's Proclamation of Independence and the inculcation of nationalism values. To evaluate the effectiveness of the developed e-module, a quasi-experimental design was adopted.

Target Audience

The target audience of this study consisted of eleventh-grade students at SMA Negeri 1 Serbajadi, located in Serdang Bedagai Regency, North Sumatra, Indonesia. Two intact classes were selected as research subjects: Class XI IPA 1 served as the experimental group, receiving instruction through the developed e-module, while Class XI IPA 2 acted as the control group, using conventional textbooks provided by the school. A total of 68 students participated in the study. In addition to student participants, the study also involved one history teacher from SMA Negeri 1 Serbajadi, who provided input during the needs analysis phase and implemented the instructional intervention in the classroom. The involvement of the teacher was critical to ensuring contextual relevance and instructional feasibility of the e-module. The study also involved expert validators to ensure the quality of the developed product.

Materials and Tools

The instructional material focused on the topic *"The Indonesian National Awakening and the Proclamation of Independence."* The e-module was developed using Canva, integrating multimedia elements to support diverse learning styles:

- Textual materials: structured readings and historical articles.
- Audio: teacher-recorded voice explanations.
- Visuals: historical illustrations and diagrams.
- Audiovisuals: embedded educational videos.
- Interactive components: quizzes, reflective activities, and gamified elements.

The e-module was designed to be accessed through smartphones, in response to prior needs analysis indicating that most students at the school use mobile phones regularly for both communication and learning.

Development Procedure

Following the ADDIE model, the research was carried out in five sequential phases:

1. Analysis: This phase involved curriculum analysis, classroom observation, and teacher interviews to identify learning needs, student characteristics, and the lack of suitable instructional materials, especially in teaching nationalism through history.
2. Design: Based on the analysis, the structure and components of the e-module were planned. This included defining learning objectives, organizing content, integrating multimedia elements, and preparing assessment tools.
3. Development: The e-module was developed using Canva, incorporating visual, audio, and interactive elements to accommodate various learning styles. The completed module was then reviewed and validated by content, media, and instructional design experts. Revisions were made based on the feedback to ensure content accuracy, clarity, and usability.
4. Implementation: After validation, the e-module was tested on students through a three-stage trial: individual trial (3 students), small group trial (6 students), and large group or field trial (36 students). These trials were conducted to evaluate the usability and practicality of the e-module in real classroom settings.
5. Evaluation: Both formative and summative assessments were conducted to measure student understanding, learning outcomes, and the overall effectiveness of the e-module. Results from pre-tests and post-tests were compared to assess its impact relative to conventional instructional methods.

Data Collection and Analysis

This study employed a combination of qualitative and quantitative methods. Data were collected through Likert-scale questionnaires administered to experts, teachers, and students to evaluate the e-module's validity, usability, and engagement. Classroom observations and interviews with the history teacher were conducted during the analysis phase to identify learning needs and instructional challenges. To assess the module's effectiveness, pre-tests and post-tests were given to both experimental and control groups. Quantitative data were analyzed using descriptive statistics to measure feasibility and user satisfaction, and inferential statistics specifically normality tests, homogeneity tests, and independent t-tests to compare student learning outcomes. Qualitative responses from experts and participants were thematically analyzed to capture feedback and improvement suggestions.

RESULTS AND DISCUSSION

Results

To ensure a systematic and goal-oriented development process, the e-module was created using the ADDIE instructional design model, which consists of five phases: Analysis, Design, Development, Implementation, and Evaluation. Each phase was carried out sequentially to ensure the resulting product met both pedagogical and technical standards. The following is a description of each stage as it was applied in the development of the Project-Based Learning-based history e-module aimed at fostering nationalism among senior high school students.

Analysis Phase

The initial phase of the ADDIE development model—analysis—was conducted to identify learning needs, instructional gaps, and learner characteristics relevant to the teaching of nationalism through the topic of Indonesia's Proclamation of Independence. This analysis focused on three key aspects: curriculum content, student needs, and learner profiles. Data were collected through observations, interviews, and questionnaires administered to history teachers and students at SMA Negeri 1 Serbajadi, Serdang Bedagai Regency. The findings revealed that history learning at the school was still dominated by the use of printed textbooks and conventional lecture-based instruction. Teachers reported limited access to and use of digital teaching materials, especially those aligned with the Merdeka Curriculum. Instructional media were primarily limited to PowerPoint presentations and verbal explanations. A significant proportion of teachers expressed dissatisfaction with existing materials and highlighted the need for more engaging resources; only 50% of teachers stated they were satisfied with the current materials, while all respondents agreed that new teaching tools were needed to improve learning effectiveness.

In addition, student feedback revealed a mismatch between learning interests and the instructional methods used. While the majority of students demonstrated curiosity and enjoyment in group activities, they felt that the lessons lacked variety and engaging materials. Half of the students noted that the learning materials used by their teachers were uninteresting, and most of them reported that learning activities followed a repetitive format throughout the session. Notably, nearly all students expressed a desire for learning materials that could support independent study. Overall, the teacher questionnaires indicated a strong agreement regarding the need for instructional improvements, with an average feasibility score of over 90%, categorized as very appropriate. Meanwhile, the student responses suggested moderate satisfaction, highlighting several instructional limitations but also reflecting motivation to learn when properly supported. Based on these findings, it was concluded that the development of a Project-Based Learning e-module on Indonesian Proclamation content is both necessary and relevant. This e-module is expected to increase student engagement, promote independent learning, and support the internalization of nationalism values. History teachers at SMA Negeri 1 Serbajadi expressed full support for the implementation of such a module, viewing it as a potential solution to enhance both cognitive and affective learning outcomes in history education.

Design Phase

Based on the findings from the needs analysis, it became clear that the development of an e-module was essential to support history learning at SMA Negeri 1 Serbajadi. The lack of engaging, varied, and independent learning materials highlighted the need for a digital learning resource that could address these gaps while fostering students' understanding of nationalism. In response to this, the e-module was designed to be as attractive and engaging as possible, both in terms of content and visual presentation. The layout, use of multimedia, and integration of project-based activities were all planned with the goal of increasing student motivation and participation. The design process emphasized clarity, accessibility, and relevance to ensure that the module would be effective and appealing for high school learners.

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Development Phase

After completing the design process, the next step was to develop the e-module based on the previously established blueprint. The e-module was created using Canva, incorporating visual and interactive elements to enhance its appeal and effectiveness for high school students. The content was arranged in a structured and engaging format, aligned with the Project-Based Learning model and the topic of Indonesian Independence. The completed e-module features a combination of historical narratives, project tasks, multimedia resources, and student reflection prompts. It is designed to be accessed via digital devices, particularly smartphones, to accommodate the learning environment at SMA Negeri 1 Serbajadi. The following shows Figure 1, which is the completed E-module.

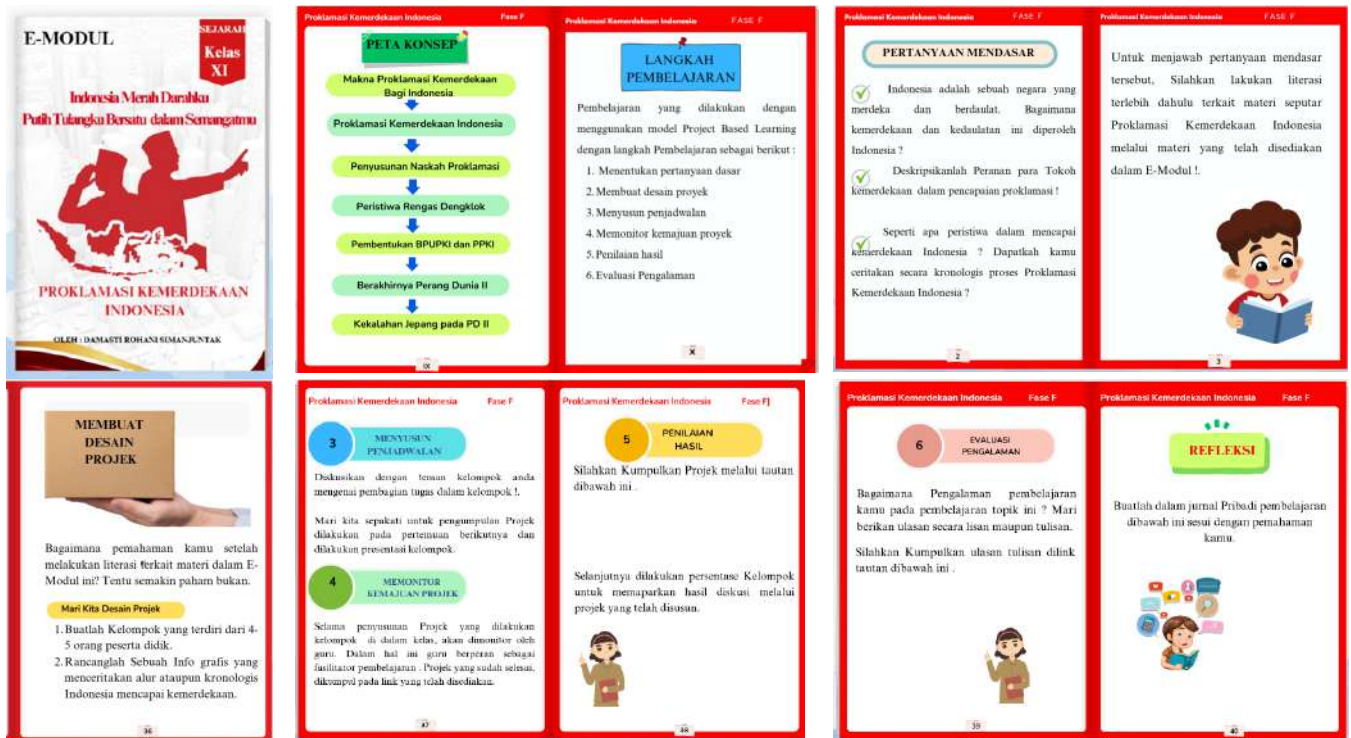


Image 1. E-Module Based Project Learning

After the e-module was fully developed, it was subjected to a feasibility test conducted by three experts: a subject matter expert, a media expert, and an instructional design expert. This feasibility test was carried out to evaluate the quality and suitability of the module in terms of content accuracy, media presentation, and instructional design. The expert feedback served as the basis for ensuring that the e-module met the required standards before being implemented with students.

1) Material Expert Feasibility Test

The feasibility test by material experts was tested on 2 expert lecturers. The aspects assessed were the Overall Appearance, Format and Writing of the Content of Independent Learning Language. The results can be seen in Table 1 below:

Table 1. Feasibility Test Results by Subject Matter Experts

No	Aspect	Expert 1	Expert 2	Average	Score (%)	Criteria
1	Overall Appearance	4.0	4.0	4.0	100	Highly Feasible
2	Format and Writing	3.8	3.8	3.8	95	Highly Feasible
3	Content	3.9	3.9	3.9	97.5	Highly Feasible
4	Language	4.0	4.0	4.0	100	Highly Feasible
5	Independent Learning	3.7	3.7	3.7	92.5	Highly Feasible
Average		3.88	3.88	3.88	97	Highly Feasible

Table 1 presents the results of the feasibility test conducted by two subject matter experts to evaluate the developed e-module. Both experts provided consistent ratings, resulting in an average score of 3.88 across all aspects, which corresponds to a feasibility percentage of 97%. This score falls within the "Highly Feasible" category, indicating that the e-module is considered excellent in terms of content relevance, clarity, language use, and its

potential to support students' independent learning. The highest scores were achieved in the aspects of overall appearance and language, both rated at a perfect 4.0, while the lowest, though still very strong, was in the independent learning category with an average of 3.7. These results suggest that the e-module is well-constructed and suitable for use in the classroom with only minor improvements, if any, needed.

2) Media Expert Feasibility Test

The feasibility test by media experts was tested on 2 expert lecturers. The aspects assessed were Programming, Quality (Technical/ Display), and Quality of Audio Usage, the following are the results of the feasibility test by media experts which can be seen in table 2 as follows:

Table 2. Feasibility Test Results by Media Experts

No	Aspect	Expert 1	Expert 2	Average	Score	Criteria
1	Programming	3.7	3.7	3.7	92.5	Highly Feasible
2	Technical/Visual Quality	3.6	3.6	3.6	90	Highly Feasible
3	Audio Quality	4.0	4.0	4.0	100	Highly Feasible
Average		3.8	3.8	3.8	94.2	Highly Feasible

Table 2 shows the results of the feasibility evaluation conducted by two media experts to assess the technical quality of the developed e-module. The average scores given by both experts were consistent across all aspects, resulting in an overall average of 3.8, which corresponds to a feasibility score of 94.2%. This score falls under the "Highly Feasible" category. The highest score was in the aspect of audio quality, with both experts awarding a perfect score of 4.0. Meanwhile, programming and visual quality aspects also received strong ratings of 3.7 and 3.6, respectively. These results indicate that the e-module meets high standards in terms of technical implementation and multimedia support, and is suitable for use in a classroom setting with minimal revisions.

2) Learning Design Expert Feasibility Test

For the feasibility test by learning design experts, it was carried out by 2 expert lecturers. The aspects assessed were learning design and e-module characteristics. The results of the feasibility test can be seen in table 3 as follows:

Table 3. Feasibility Test Results by Instructional Design Experts

No	Aspect	Expert 1	Expert 2	Average	Score	Criteria
1	Instructional Design	3.5	3.5	3.5	87.5	Highly Feasible
2	E-Module Characteristics	3.5	3.5	3.5	87.5	Highly Feasible
Average		3.5	3.5	3.5	87.5	Highly Feasible

The table displays the feasibility evaluation results provided by two instructional design experts. Both experts gave identical scores of 3.5 for each criterion, resulting in an average score of 3.5, which corresponds to a feasibility score of 87.5%. According to the classification criteria, this falls into the "Highly Feasible" category. These results indicate that the e-module meets the expected standards of instructional design, including clarity of structure, alignment with learning objectives, and suitability for student needs. The module is considered ready for use with minimal revision from an instructional design perspective. Based on the validation results from subject matter experts, media experts, and instructional design experts, the developed e-module was categorized as highly feasible in terms of content quality, technical presentation, and instructional design. These findings indicate that the e-module meets the necessary standards for use in the classroom and is appropriate for supporting student learning. Therefore, the e-module was deemed suitable to proceed to the next phase of implementation and was tested directly with students.

Implementation Phase

In the implementation phase, the e-module that had previously passed the feasibility validation was tested with students to assess its practicality and effectiveness in a real classroom setting. The trial was conducted in three stages: individual testing, small group testing, and large group testing, involving students from SMA Negeri 1 Serbajadi. During these stages, the evaluation focused on several key aspects, including the clarity and accuracy of the material (content quality), the appropriateness of instructional criteria, and the overall usefulness of the e-module in supporting learning. This step aimed to gather feedback on user experience, the relevance of the content, and the perceived benefits of using the e-module to enhance student engagement and understanding. The following are the results of the media trials presented in table 4 as follows:

Table 4. E-Module Trial Results

No	Type of Trial	Average Score	Criteria
1	Individual Trial	92.5	Highly Feasible
2	Small Group Trial	93.85	Highly Feasible
3	Field Trial (Large Group)	97.4	Highly Feasible
Overall Average		94.58	Highly Feasible

Table 4 presents the results of the e-module implementation trials. These trials were aimed at evaluating the practicality and effectiveness of the e-module when used directly by students in various classroom settings. In the individual trial, the e-module achieved an average score of 92.5, indicating a high level of feasibility in terms of user interface and comprehension for one-on-one usage. The small group trial yielded an average score of 93.85, reflecting positive feedback regarding collaborative use and clarity of content. The field trial, conducted with a full classroom of students, resulted in the highest average score of 97.4, demonstrating the e-module's strong performance under typical classroom conditions. Overall, the e-module received an average feasibility score of 94.58, placing it in the "Highly Feasible" category. These findings confirm that the e-module is well-received by students and effectively supports independent and group-based learning activities.

Evaluation Phase

The evaluation phase represents the final stage of the ADDIE model, focusing on assessing the overall effectiveness and quality of the developed e-module. This phase involved both formative and summative evaluations. Formative evaluation was carried out during the development process, including expert validations and student trials, which helped refine the content, design, and usability of the e-module. The summative evaluation aimed to measure the e-module's impact on student learning outcomes, particularly in the context of Indonesian Independence and the promotion of nationalism values. A quasi-experimental design was employed, involving two groups: an experimental group using the e-module and a control group using traditional printed textbooks. Pre-tests and post-tests were administered to both groups to assess their understanding before and after the intervention. Before conducting statistical tests to determine effectiveness, the normality and homogeneity assumptions were examined to ensure data validity.

Table 5. Normality Test Results

Group	Kolmogorov-Smirnov (Sig.)	Criteria	Conclusion
Pre-test (Experimental)	0.200	Sig. > 0.05	Normally distributed
Post-test (Experimental)	0.200	Sig. > 0.05	Normally distributed
Pre-test (Control)	0.086	Sig. > 0.05	Normally distributed
Post-test (Control)	0.200	Sig. > 0.05	Normally distributed

All significance values exceeded 0.05, indicating that the test scores were normally distributed across both groups.

Table 6. Homogeneity Test Results

Levene Statistic (Sig.)	Criteria	Conclusion
0.228	Sig. > 0.05	Homogeneous variance

The data met the assumption of equal variance between the experimental and control groups. Following this, an independent samples t-test was conducted to determine the significance of the difference between post-test scores.

Table 7. Independent Samples T-Test Results

Group	N	Mean	Sig. (2-tailed)	Criteria	Conclusion
Experimental	34	87.79	0.000	Sig. < 0.05	Significant difference (effective)
Control	34	76.18			

The results show a statistically significant difference between the experimental and control groups ($p = 0.000$), with the experimental group achieving higher mean scores. This confirms that the e-module had a positive and meaningful impact on student learning outcomes. Through a rigorous evaluation process involving expert reviews, student trials, and statistical testing, the e-module was found to be pedagogically effective, technically feasible, and well-received by learners. The findings validate that the integration of Project-Based Learning in the digital module

format significantly enhances student understanding and supports the cultivation of nationalism values among high school students.

Practicality of the E-Module

The practicality of the developed e-module was assessed after its implementation in the classroom, involving feedback from both teachers and students. This evaluation aimed to determine how easily the e-module could be used in real learning environments and how effectively it supported the teaching and learning process. From the teacher's perspective, the e-module was considered easy to operate and well-aligned with the curriculum. Teachers noted that the structure of the module, including the instructional design and integrated learning activities, helped facilitate a more engaging and student-centered classroom experience. The module was also found to be adaptable and suitable for encouraging student independence. Students likewise responded positively to the practicality of the e-module. They reported that the module was visually attractive, simple to navigate, and helpful in guiding their understanding of the material. The interactive features, such as embedded media and self-assessment tasks, were especially appreciated for enhancing their learning engagement. The results of the practicality test are summarized in the Table 8 below:

Table 8. Practicality Test Results

No	Respondent Group	Number of Respondents	Average Score	Criteria
1	Teachers	2	91.5	Highly Practical
2	Students	36	89.8	Highly Practical

These results indicate that the e-module was rated as highly practical by both teachers and students. The ease of use, clarity, and relevance of the content confirmed that the module is functionally effective and can be efficiently implemented in the classroom without significant obstacles.

DISCUSSION

This study aimed to develop and evaluate a Project-Based Learning-based e-module in history education to foster students' nationalism values. The research focused on three core aspects: feasibility, effectiveness, and practicality. The findings from each stage of the development and implementation process offer meaningful insights into the module's quality and its potential contribution to high school learning environments. Feasibility was assessed through expert validation involving subject matter experts, media experts, and instructional design experts. The results indicated that the e-module was considered "highly feasible" across all evaluated dimensions. Experts rated the content as accurate and relevant, the design as structured and engaging, and the media as technically sound and accessible. These outcomes support previous research emphasizing the importance of expert involvement in ensuring the quality of digital learning resources (Budi Purnomo et al., 2023; Rijal Fadli et al., 2020).

In terms of effectiveness, the e-module demonstrated a significant impact on students' learning outcomes. The results of the independent t-test revealed a statistically significant difference between the post-test scores of the experimental and control groups, with the experimental group achieving higher average scores. This confirms that the integration of Project-Based Learning within the e-module successfully enhanced students' comprehension of the Proclamation of Independence and their appreciation for national identity. This aligns with existing studies which show that project-based approaches foster deeper understanding, critical thinking, and personal engagement with historical content (Chairunisa & Zamhari, 2022; Marpaung & Rosmen, 2022).

The practicality of the e-module was validated through student and teacher feedback following implementation. Both groups rated the module as highly practical. Teachers found it easy to integrate into their teaching practices, while students appreciated the visual appeal, interactivity, and self-paced learning opportunities. These results suggest that the e-module is not only pedagogically sound but also usable and engaging in real classroom settings. This reinforces findings from previous studies that highlight the importance of intuitive digital learning tools in enhancing student motivation and autonomy. Overall, the findings of this study indicate that the developed e-module meets the criteria for an effective instructional tool. It is feasible for implementation, practically useful in classrooms, and demonstrably improves learning outcomes. Its alignment with current curriculum standards and its potential to instill nationalism values among students make it a valuable contribution to the field of history education and digital learning innovation.

CONCLUSION

This study was conducted to develop a Project-Based Learning-based e-module for history education that aims to promote nationalism values among high school students. Based on the needs analysis conducted at SMA Negeri 1 Serbajadi, it was evident that there was a lack of engaging, technology-integrated instructional materials. The development of this e-module using the ADDIE model served as a strategic response to this gap by combining

pedagogical relevance with digital innovation. The results of the study confirm that the e-module is feasible, effective, and practical. Expert validation from material, media, and instructional design experts concluded that the module was highly feasible, with strong scores across content quality, design structure, and usability. The effectiveness of the e-module was demonstrated through a significant increase in students' learning outcomes in the experimental group compared to the control group. Meanwhile, the practicality assessment, based on teacher and student responses, showed that the module was easy to use, engaging, and suitable for independent learning. Given these findings, it can be concluded that the developed e-module is ready for broader implementation in history classrooms. It offers a valuable solution to support independent and active learning, while also aligning with curriculum objectives and promoting civic values such as nationalism. For future development, the e-module can be enhanced further by integrating adaptive features or expanding its content to other historical themes. Moreover, training and collaboration with teachers can ensure sustainable and effective use of the e-module across diverse educational settings.

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DESIGN AND IMPLEMENTATION OF A PROJECT-BASED E-MODULE FOR HISTORY LEARNING TO FOSTER NATIONALISM: A STUDY AT SENIOR HIGH SCHOOL

Damasti Rohani Simanjuntak **et al**

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