

# Mobile-Based Project Citizen: Innovating Civic Education for the Digital Era

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## ABSTRACT

This study aims to develop a mobile-based learning media to support the implementation of the Project Citizen model and to analyze its effectiveness in civic education within higher education settings. The research utilized a Research and Development (R&D) approach, applying the ADDIE model which consists of five phases: Analysis, Design, Development, Implementation, and Evaluation. The development process involved one media expert, one subject matter expert, and 52 university students as participants. Validation from the media expert resulted in a score of 91%, indicating the media is *very feasible*. Similarly, the material expert gave a validation score of 94%, also categorized as *very feasible*. Student feedback, collected through questionnaires, yielded an effectiveness score of 83%, classifying the media as *very effective*. The findings demonstrate that the developed mobile-based Project Citizen learning media is both feasible and effective. It supports active civic engagement and structured learning, aligning well with the objectives of civic education in higher education institutions. The mobile-based Project Citizen media is a viable and effective tool for enhancing civic education. Its integration into the curriculum can facilitate meaningful student participation in democratic practices through project-based learning.

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## 1. INTRODUCTION

Education plays a critical role in shaping the future of a nation by nurturing knowledgeable, skilled, and morally responsible citizens. It serves as an investment in human capital to ensure the sustainability and advancement of a society (Fajri et al., 2021). In the current era of globalization, education systems are increasingly influenced by rapid technological development and the digital transformation of information. One of the major benefits of this digital shift is the enhanced accessibility of educational resources for both students and educators (Trisiana & Utami, 2022). However, challenges

persist, particularly in the Indonesian context, where educational practices have traditionally emphasized cognitive development at the expense of moral and civic values. This imbalance is evident in the focus on intellectual attainment over character building, posing concerns for the holistic development of learners (Trisiana & Utami, 2022).

Civic education, as a compulsory subject in Indonesia from primary to higher education levels, is positioned as a strategic vehicle for instilling democratic values, moral character, and civic responsibility (Budimansyah, 2020). According to Dewi et al. (2021), the primary objective of civic education is to develop students into "smart and good citizens" who possess the awareness and motivation to engage in public discourse and policymaking. This necessitates that civic education go beyond theoretical instruction and focus on strengthening students' values, critical thinking, and social engagement.

The role of civic education in higher education aligns with the objectives outlined in Indonesia's Higher Education Law (Law No. 12 of 2012), particularly Article 4, which emphasizes the development of intellectual capabilities, character, innovation, competitiveness, and a dignified national identity. The law underscores the responsibility of higher education to cultivate not only academic excellence but also democratic citizenship by integrating the values of the Tridharma—education, research, and community service.

University students, as part of the academic community, play dual roles: learners in the classroom and agents of change in society. Their moral responsibility extends to applying the principles of Pancasila—the foundational ideology of Indonesia—in real-life contexts (Utami & Najicha, 2022). As such, civic education at the university level must provide students with the tools to analyze societal issues and engage in democratic processes. This imperative becomes even more relevant in the context of Indonesia's evolving educational landscape, particularly with the adoption of the Merdeka Belajar–Kampus Merdeka (MBKM) curriculum, which grants students greater autonomy in shaping their learning experiences (Zulfa & Bektiningsih, 2024).

The MBKM curriculum promotes flexibility by allowing students to engage in various experiential learning activities, such as internships, research, community projects, and student exchanges. It encourages collaborative and participatory learning environments and shifts assessment towards performance-based outcomes, such as Key Performance Indicators (KPIs) (Meke et al., 2021). To meet these new demands, teaching strategies must evolve to incorporate project-based and team-based learning models, which are well-suited to the development of 21st-century skills such as communication, collaboration, critical thinking, and creativity.

Digital technology has become a cornerstone of modern education, facilitating interactive and engaging learning environments. Mobile-based learning, in particular, has emerged as a viable solution to meet the needs of contemporary learners by providing flexible, accessible, and cost-effective learning experiences (Marini et al., 2024). The integration of mobile technology in civic education can enhance the effectiveness of project-based learning models, enabling students to participate more actively in the learning process and apply civic knowledge to real-world issues (Arsy et al., 2024).

In the context of civic education, one promising model that aligns with project-based learning principles is the Project Citizen model. This model emphasizes student engagement through inquiry-based activities, including problem identification, data collection, policy analysis, and solution development. It not only encourages student participation in democratic practices but also fosters civic competence and responsibility (Fajri et al., 2021). Previous research has demonstrated the effectiveness of the Project Citizen model in improving academic achievement (Fajri & Yusuf, 2021), fostering morality (Priyanto & Thambu, 2022), developing character (Indra Handayani & Wibowo, 2022), and enhancing critical thinking (Mukhlisotin, 2022). However, these studies largely focus on pedagogical outcomes and overlook the potential of digital platforms to enhance implementation and accessibility.

The application of Project Citizen in classroom settings involves multiple stages—ranging from problem identification and information gathering to portfolio creation and public presentation—that require extensive guidance and resources (Öztürk et al., 2021). In its traditional form, this model is time-

intensive and often relies on paper-based portfolios and manual coordination, which can hinder scalability and student engagement, particularly in large or remote classes. To address this, it is essential to develop a digital learning media—specifically a mobile-based application—that can support each phase of the Project Citizen model while aligning with the MBKM curriculum's emphasis on flexibility and student autonomy.

Mobile-based learning media can integrate various instructional components such as manuals, tutorials, evaluation tools, and templates for developing project portfolios. According to Yulita Anggraini et al. (2023), mobile-based learning provides students with the flexibility to access learning materials anytime and anywhere, making it highly suitable for modern educational environments. It reduces logistical barriers, saves time and costs, and supports both synchronous and asynchronous learning. Furthermore, mobile applications can facilitate collaboration and feedback through built-in communication features, enhancing the interactive dimension of project-based learning.

The proposed innovation is in line with Arni Rahayuni et al. (2018), who highlight the importance of diversifying instructional methods to improve the learning experience. Developing a mobile-based application for Project Citizen would offer a structured and interactive platform that guides students through each step of the civic engagement process. This approach not only modernizes the delivery of civic education but also ensures consistency, accuracy, and accessibility of learning resources.

The steps in the Project Citizen model include: (1) identifying public policy issues, (2) selecting a class issue for deeper study, (3) gathering information through various sources, (4) compiling a class portfolio, (5) presenting the portfolio publicly, and (6) reflecting on the learning experience (Öztürk et al., 2021). Students work in groups to analyze real-world societal issues and formulate policy alternatives. They present their findings in the form of a portfolio and showcase, often through public exhibitions or presentations. This experiential learning model demands high levels of coordination, which can be streamlined through mobile applications.

Moreover, the effectiveness of Project Citizen is heavily dependent on the availability of conceptual materials, instructional instruments, and assessment tools. If these resources are fragmented or difficult to access, the learning process becomes inefficient. Therefore, consolidating all necessary materials into a single mobile platform will significantly improve the feasibility and implementation of the model (Trisiana & Utami, 2022). The development of an Android-based application will allow students and lecturers to access all resources in one place—ranging from guidelines and templates to evaluation criteria and examples of past projects.

Based on the issues identified and the opportunities provided by digital technology, this research aims to develop a mobile-based learning media to facilitate the application of the Project Citizen model. The study also seeks to evaluate the effectiveness of this media in supporting civic education in higher education settings. By integrating civic education with mobile technology, this project aspires to create innovative, participatory, and impactful learning experiences that prepare students to be informed, active, and responsible citizens in a democratic society.

## 2. METHODS

This research was conducted at the Management Study Program, Faculty of Business and Law, PGRI Yogyakarta University, with a total of 52 student participants. The focus of the study is the development of mobile-based learning media designed to support the implementation of the Project Citizen learning model in Civic Education courses.

The study employed a Research and Development (R&D) approach, which is a method used to create and refine products through a systematic process (Sugiyono, 2010). The primary goal of this development was to design a functional learning product, assess its feasibility, and evaluate its practicality using the ADDIE model—consisting of Analysis, Design, Development, Implementation, and Evaluation phases (Spatioti et al., 2022).

Several techniques were utilized to collect data, including observations, interviews, expert validations, student questionnaires, and documentation. Observations were conducted from the third to the sixth lecture sessions during the implementation phase at PGRI Yogyakarta University. Interviews were held with Civic Education lecturers and selected management students to gather qualitative insights. Feasibility assessments were carried out using structured questionnaires, which were completed directly by material and media experts. Student questionnaires were administered to evaluate the practicality of the developed media. Documentation was also maintained throughout the research to ensure all collected data were systematically archived and preserved.

The research relied on several instruments to assess the quality and practicality of the media, specifically expert validations for media and content, and a student-based practicality assessment. Data analysis involved both descriptive and analytical approaches. Descriptive analysis was employed to interpret needs analysis data using a Likert scale and percentage calculations. Meanwhile, analytical analysis was applied to assess the practicality of the mobile-based learning media in enhancing Project Citizen implementation in Civic Education.

For the validation process, scores ranged from a minimum of 1 to a maximum of 5. The average score was calculated using the following formula:

$$x = \frac{\sum Xi}{n}$$

Description:

X : Average

$\sum Xi$  : Total validation score

N : Number of validations

Mobile-based learning media to support the implementation of project citizen learning in the Civic Education course developed can be said to be feasible if the percentage value of feasibility is above or equal to 61%.

Student response assessment is between the range of numbers 1-5, with a very poor conversion for a range of numbers 1 and a very good conversion for a range of 5. The final score is calculated using the following formula:

$$NP = \frac{R}{SM} \times 100\%$$

Description:

NP: Percentage value sought

R : Score obtained

SM : Maximum Score

After the percentage results are found, determine the practicality of mobile-based learning media to support the implementation of project citizen learning in the Citizenship Education course developed using the formula above. Mobile-based learning media to support the implementation of project citizen learning can be said to be practical if the percentage of practicality is above 61%.

### 3. FINDINGS AND DISCUSSION

#### 3.1 Development of a mobile-based project for citizen in Civic Education Learning

A mobile-based citizen project was developed for students in classes A1 and A2 of the Management Study Program, Faculty of Business and Law, PGRI Yogyakarta University. This initiative employed an analytical framework grounded in contemporary issues currently affecting Indonesia. The research was conducted between April and June and encompassed the stages of analysis, design, and development. These phases were followed by expert validation involving both media and content specialists, as well as product testing.

The research and development process resulted in the creation of instructional media deemed both feasible and practical. Validation results demonstrated highly positive outcomes, with media validation scoring 91% and material validation 94%, both falling within the "very valid" category. The implementation phase involved integrating the mobile-based citizen project into civic education instruction within the Management Study Program, engaging 52 students. Student feedback, gathered through questionnaires, indicated a high level of practicality, with an average rating of 83%, categorized as "very practical."

The integration of technology in 21st-century civic education plays a critical role in enhancing the learning process. This is supported by findings from Japar et al. (2021), whose evaluation of mobile learning in civic education yielded average scores of 91.33% and 91.67%, affirming its classification as "very feasible." Furthermore, research by Gardner-McTaggart and Palmer (2018) emphasizes that the use of technology in civic education—particularly within the Global Education Context (GEC)—creates opportunities for reorienting educational disciplines, thereby supporting schools in adopting a more global perspective.

### 3.1.1 Analyze

Analyze is the initial stage of the development process with the aim of determining the needs, problems that can be overcome from the existence of a development product to be made, and what kind of product will be made (Astuti et al., 2021). The analysis of the development of the learning model carried out consists of analyzing the learning material, analyzing the learning process and analyzing the learning model used in the Civic Education course. The research was conducted in Management A1 and A2 classes at the Faculty of Business and Law, PGRI Yogyakarta University. The research conducted produced mobile-based learning media products to support the implementation of project citizen learning using Microsoft Power Point Software. The project citizen used is packaged in software that can be accessed via Smartphone. At the learning system analysis stage, researchers know that the learning carried out uses the OBE curriculum as a curriculum developed based on the foundation of the Merdeka Curriculum. One of the main approaches in the Merdeka Learning Curriculum is Outcome-Based Education OBE.

OBE is an educational process that focuses on achieving predetermined concrete results, including knowledge, skills, and results-oriented behavior. The OBE process involves curriculum development, evaluation, and reporting practices in education that reflect the achievement of high-level learning and mastery, not just the accumulation of credits (Suryaman, 2020). There are five main principles in OBE. First, OBE focuses on learning outcomes, ensuring that all aspects of education are geared towards achieving specific learning outcomes. Second, the curriculum design is thorough and well-structured to support the achievement of these learning outcomes. Third, OBE facilitates a variety of learning opportunities for students, giving them the space and time to develop themselves according to their individual learning pace and style. Fourth, the learning implemented should be in accordance with the constructive approach, which means students are actively involved in the learning process and understand the material in depth. Fifth, OBE uses the Plan-Do-Check-Action (PDCA) cycle to ensure the learning process is continuously evaluated and improved, ensuring that learning methods and outcomes are always relevant and of high quality.

Through the application of these principles, OBE seeks to create an education system that is more responsive and adaptive to the needs and potential of students, encouraging them to achieve optimal learning outcomes. The usual model used in learning is the lecture and question and answer model, without any learning innovations that are directly related to contemporary issues and problems that occur in Indonesia. The learning media used in the learning carried out uses power point media, zoom meeting and supporting books.

#### 1. Situation analysis

Observations conducted in classes A1 and A2 of the Civic Education course revealed several key findings. First, a number of students demonstrated a tendency to be passive during the learning process.

The total number of students across both classes was 52. The predominant instructional approach employed in these classes was a combination of lectures and question-and-answer sessions. The teaching module utilized was developed by the Institute for General Courses (LPP), the institution responsible for coordinating general education courses (MKU) at PGRI Yogyakarta University. Furthermore, the curriculum implemented in the course follows an Outcome-Based Education (OBE) framework.

## 2. Competency and material analysis

Competency analysis aims to identify and compile the content of the material that is relevant to the course being implemented, so that it can be the basis for the development of mobile-based citizen projects. This process involves mapping the required competencies and ensuring that the materials compiled are in line with the learning objectives. The material used for the model project should be related to contemporary issues in Indonesia. Based on this, students can apply their knowledge in a real context, develop a deeper understanding, and improve critical thinking and problem-solving skills. Through careful competency analysis, the mobile-based citizen project will be an effective, relevant learning tool, and able to have a positive impact on students in understanding and dealing with actual problems in society.

## 3. The results of identifying the objectives of developing a mobile-based citizen project

The purpose of developing the mobile-based Citizen project is to create a learning model that allows students to access materials through their smartphones. Thus, learning becomes more flexible and accessible at any time and from anywhere. In addition, this model is designed to increase student engagement in learning about contemporary issues in society, strengthen analytical skills, and encourage active participation in projects relevant to the social context in Indonesia. It aims to create a learning experience that is more interactive and responsive to the needs of the times.

## 4. Model determinant analysis results

Based on the observation, there is a need to develop a mobile-based project citizen to bring novelty to the learning process. This allows more flexible and interactive access, as well as increasing student engagement in learning through mobile devices, making learning more adaptive and in line with the needs of the digital age.

## 5. Interview result

The interview technique was conducted with unstructured interviews to strengthen the interview data as a reinforcement of the development carried out.

### a. Student Interview

Interviews conducted with students related to the learning system carried out are in a way that learning more often uses lecture and question-and-answer learning models, students feel less provoked to analyze contemporary issues that occur in Indonesia. Therefore, the researcher took the initiative to develop a mobile-based citizen project with a contemporary issue analysis system in Indonesia.

### b. Lecturer Interview

Civic education learning conducted in classes A1 and A2 uses the OBE curriculum, learning is carried out using an online system with ZOOM meeting media with lecture and question and answer methods.

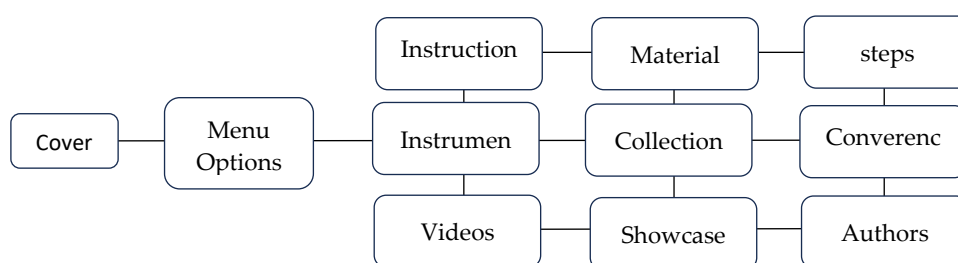
## 3.1.2 Design

The second stage of this study is the design phase, during which researchers prepared the necessary tools and materials to develop a mobile-based citizen project (Hidayat & Nizar, 2021). These materials included visual components such as icons, vector images, fonts, and animations, all selected to support the development of the learning model. A key element in this phase was the creation of a

concept map, which served as a structural framework to guide the systematic and organized development of the model. The mobile-based citizen project was designed to align with a predetermined theme and be integrated with the curriculum content being taught. This alignment is essential to ensure that the model enhances the learning process and contributes meaningfully to the achievement of instructional goals. Therefore, curriculum analysis was conducted to ensure the model's relevance, accuracy, and effectiveness in supporting student learning outcomes.

The design process also involved an in-depth analysis of curriculum content, learning objectives, and student needs. It was essential for researchers to have a clear understanding of the intended learning outcomes and how the mobile-based citizen project could facilitate their achievement. The model was purposefully designed to promote active student engagement, enhance critical thinking skills, and support the development of problem-solving abilities. Through a structured, inquiry-based approach, the mobile-based citizen project is intended to function as an effective and contextually relevant educational tool. It aims not only to deliver content knowledge but also to cultivate broader competencies, thereby providing meaningful learning experiences that prepare students to become informed, responsible, and proactive citizens.

The selection of visual materials—including images, icons, and animations—was conducted with careful consideration of both thematic alignment and curricular relevance. It was imperative that the visuals were not only aesthetically engaging but also functionally supportive of content comprehension. Aesthetic appeal plays a crucial role in maintaining student interest and motivation, while functional clarity ensures that key concepts are communicated effectively. Well-designed visuals can simplify complex ideas and contribute to a more interactive and engaging learning experience. As such, balancing aesthetic and functional considerations is critical in developing a mobile-based learning model that is both visually appealing and pedagogically effective. This balance ensures that visual elements not only capture students' attention but also actively support the achievement of learning objectives.



**Figure 1.** Concept Map

The concept map was designed to provide a detailed overview of the structure and flow of the mobile-based citizen project to be developed. It includes key components such as the cover, menu options, content slides, and author slide. Once this framework is established, it serves as a blueprint for the development process, enabling the researcher to systematically construct the learning model in accordance with the planned design. The concept map functions as a guiding tool to ensure that all elements and stages of development are logically organized, thereby facilitating the creation of an effective and comprehensive instructional model.

In designing the cover of the model, careful attention was given to selecting images that are visually appealing and thematically relevant to civic education. The choice of color schemes for the foundational design also played a significant role in enhancing the visual coherence and aesthetic appeal of the media. To further support the development process, researchers gathered various multimedia components necessary for constructing the mobile-based citizen project. To increase interactivity and user engagement, navigation buttons were integrated into the model, allowing users

to seamlessly transition between slides. This interactive design feature contributes to a more dynamic and engaging learning experience.

### 3.1.3 Development

The third stage is the development phase, during which the researcher constructs the mobile-based citizen project in accordance with the planning outlined during the design stage, as guided by the previously created concept map. In this phase, the researcher utilizes Microsoft Office PowerPoint as the primary platform to develop a functional product that includes instructional content for designing citizen projects. This content is packaged into an application referred to as a mobile-based citizen project. To ensure the quality and effectiveness of the media, a feasibility assessment is conducted during this stage, involving validation by both media and subject matter experts.

#### 1. Pre-production stage

In the pre-production stage, researchers prepare tools and materials used in research. The tools and materials needed are laptops, teaching modules, vector images, backgrounds, font support icons and Microsoft Office PowerPoint applications. Microsoft Office PowerPoint is used as an application in model development because it is often used by lecturers in delivering learning materials. So if the lecturer will use the research results as a reference, it will be more effective. Pre-production stage researchers prepare Microsoft Office Power Point which can be used as an opening worksheet contained in the application and then select the background that will be used in the development of the Model until the final stage.

#### 2. Production Stage

The Production stage is the stage of developing and designing application programs from the cover to the final slide. The first thing the researcher did was to make a cover as an opening model, then prepare the menu buttons for the next slide. The next step is to provide titles, additional elements, and command buttons used to move from one slide to another. The cover display as the opening display in the digital learning model is equipped with vector elements of Indonesian local wisdom and equipped with navigation buttons used to start the program. The novelty contained in the development is that the project program is converted to the Android system, so that users will find it easier to use and learn the Citizenship Project. The finished program is designed in Microsoft Office Power Point so that it can be used easily, researchers convert it to the Android system so that it can be used flexibly.

##### a) Media Expert Validation

The developed mobile-based citizen project was submitted to media experts for validation. The media expert validator in this study was Dr. Septian Aji Permana, M.Pd. The validation process involved the use of an assessment instrument designed to evaluate aspects of media engineering and visual communication within the developed program. The evaluation was carried out using a Likert scale questionnaire with five options: very invalid (1), invalid (2), fairly valid (3), valid (4), and very valid (5).

The results of the media expert validation are presented in Table 1 below:

**Table 1.** Media Expert Validation

No	Aspect	Value Obtained	Maximum Value	Percentage	Category
<b>Media Engineering Aspects</b>					
1	Innovation	5			
2	Ease of Distribution	5			
3	Ease of Media Use	5			
4	Appropriateness of Media Selection	4			
5	Clarity of Media Usage Instructions	5			
6	Creativity	5			
7	Media Durability	5	35	97%	Very Valid
<b>Visual Communication Aspects</b>					
8	Communicability (language easy to understand, proper, correct, and effective)	4			
9	Media Display	5			
10	Font Selection and Size	5			
11	Distance Setting	5			
12	Readability Level	4			
13	Image Display	4			
14	Image Balance	5			
15	Suitability of Images Supporting the Material	4			
16	Layout Settings	5			
17	Color Composition	5			
18	Color Harmony	5			
19	Design Neatness	4			
20	Design Attractiveness	4	65	91%	Very Valid
<b>Average Total</b>				<b>91%</b>	<b>Very Valid</b>

Based on the results, the media expert validation obtained an average percentage score of 91%, which falls into the *very valid* category. This indicates that the developed media is highly feasible for use in the learning process in terms of both technical and visual design.

#### b) Material Expert Validation

Following validation by media experts, the mobile-based citizen project was submitted to a material expert for further evaluation. The material expert responsible for this validation was Mrs. Ari Retno Purwanti, S.H., M.H. The validation process was carried out using an instrument designed to assess the adequacy, accuracy, and relevance of the learning material presented in the application.

This step was critical in ensuring that the content delivered through the learning media met the appropriate scientific standards and was aligned with the applicable curriculum. The results of this validation provided important insights into the validity and quality of the content, as well as a basis for making adjustments or improvements if necessary. The material expert's assessment results were converted into percentages and are presented in Table 2 below:

**Table 2.** Material Expert Validation

No	Aspect	Value Obtained	Maximum Value	Percentage	Category
<b>Learning Aspects</b>					
1	Suitability of Material with Learning Objectives	5			
2	Suitability of Material with Student Characteristics	5			
3	Suitability of Material with Textbook	5			
4	Student Interaction with Learning Materials	4			
5	Increase in Learning Motivation	5			
6	Novelty of the Material Taught	5			
7	Adequacy of the Material Taught	4			
8	Material Comprehension Level	5			
9	Suitability of Media with Learning Materials	5			
10	Ease of Learning Comprehension	4	50	94%	Very Valid
<b>Average Total</b>				<b>94%</b>	<b>Very Valid</b>

The results of the validation carried out by the material expert showed an average percentage of 94%, which falls into the *very valid* category. This confirms that the content of the developed application meets high scientific standards and is relevant to the intended teaching context.

Based on the validation conducted by both media and material experts, the mobile-based citizen project can be categorized as *highly feasible* for use in learning. After the validation stage was completed and a satisfactory evaluation was obtained from the material expert, the process proceeded to the next stage of development. This stage involved implementing adjustments or improvements based on the feedback provided by the experts, as well as preparing the mobile-based citizen project for implementation in an actual educational environment. These steps are essential to ensure that the final product not only meets academic standards but is also effective in supporting the learning process and achieving predetermined educational objectives.

### 3.1.4 Implementation

At the implementation stage, product trials were conducted involving 52 students from classes A1 and A2 of the Management Study Program. During this phase, students were asked to complete a questionnaire designed to evaluate the quality and practicality of the developed mobile-based Project Citizen application. The data obtained from this questionnaire were then recorded and analyzed to gain insights into students' perceptions, experiences, and the overall effectiveness of the product in a real educational context.

This implementation serves as a critical step in assessing the product's practicality and usability within an authentic learning environment. Positive student responses indicate that the product is well-received and aligns with learning expectations, while constructive feedback can be used to make improvements for future development. The analysis of student feedback provides a comprehensive understanding of the strengths and areas for enhancement of the learning media.

The results of the student response questionnaire are presented in Table 3.

**Table 3.** Student Responses During Implementation

No	Aspect	Value Obtained	Maximum Score	Percentage	Category
<b>Learning Aspects</b>					
1	Innovation	221	265	83%	Very Practical
2	Ease of Distribution	206			
3	Ease of Media Use	211			
4	Appropriateness of Media Selection	214			
5	Clarity of Media Usage Instructions	222			
6	Creativity	226			
7	Media Durability	218			
8	Communicability (language quality)	220			
9	Media Display	209			
10	Font Selection and Size	206			
11	Distance Setting	205			
12	Readability Level	218			
13	Image Display	217			
14	Image Balance	212			
15	Image Relevance to Material	213			
16	Layout Settings	216			
17	Color Composition	214			
18	Color Harmony	211			
19	Consistency of Color Selection	209			
20	Design Neatness	214			
21	Design Attractiveness	225			
<b>Total</b>	—	—	—	<b>83%</b>	<b>Very Practical</b>

Based on the results, the average student response to the developed product reached **83%**, placing it in the *Very Practical* category. These findings affirm that the mobile-based learning media is both feasible and practical to be used as a supporting tool in implementing *Project Citizen* within civic education.

Furthermore, the implementation of *Project Citizen* reflects a project-based learning approach that fosters students' critical thinking through problem analysis and the development of concrete policy solutions. As highlighted by Rafzan (2024), critical thinking in civic education is closely linked to fostering civic awareness and responsibility, aiming to produce citizens who are responsive to social

and environmental issues. This aligns with the primary goal of Civic Education: to cultivate citizens who understand and are actively engaged with their nation and society.

Similarly, Jayadiputra et al. (2020) emphasize the importance of nurturing thinking skills in students through structured project learning. Students are encouraged to select problems, identify and collect relevant information, and develop thoughtful, inquiry-driven solutions. This model promotes deep cognitive engagement and the development of civic competencies.

Carvalho et al. (2024) further support this approach by describing *Project Citizen* as a project-based learning model that is responsive to public concerns. Their methodology involves five core stages: analysis of learning needs, mobile media design with discussion features, data uploading, project templates, and evaluation. In practice, students are guided to select real-world issues, analyze data, formulate solutions, present findings, and reflect on their learning process. Lecturers serve as facilitators and evaluators throughout. This model is adaptable across various disciplines, including teaching innovation, environmental technology, community empowerment, and MSME marketing strategies—making learning more interactive, relevant, and grounded in real-world problems.

### 3.1.5 Evaluation Stage

The final stage of the development process is evaluation, where improvements to the application were made based on feedback from media experts, material experts, and student users. This stage ensures that the final version of the product meets both academic standards and practical classroom needs. The iterative process across these five stages—analysis, design, development, implementation, and evaluation—has resulted in a learning model that is validated as both feasible and practical for civic education.

It is important to note that the mobile-based learning media developed in this study is currently accessible only on devices running the Android operating system. The application has not yet been developed for compatibility with iOS-based devices (e.g., iPhones). Consequently, the scope of this study is limited to Android users in supporting *Project Citizen* in higher education civic learning contexts.

To extend the reach and impact of this educational tool, future development should focus on creating an iOS-compatible version. By expanding platform compatibility, the application can reach a broader population of students, increasing accessibility and enhancing the effectiveness of mobile-based civic education across various technological ecosystems.

## 4. CONCLUSIONS

This study concludes that the development of a mobile-based *Project Citizen* learning model, utilizing the Research and Development (R&D) approach with the ADDIE model, was successfully implemented and yielded positive results. The development process encompassed the stages of analysis, design, development, implementation, and evaluation. Key findings indicate that the resulting product is both feasible and practical, as evidenced by expert validation—91% for media experts and 94% for material experts, both categorized as *very valid*—and student responses, which reflected a high level of practicality at 83%. These outcomes demonstrate that the mobile-based learning media effectively supports civic education by promoting critical thinking and civic engagement through project-based learning. However, a notable limitation of the research is that the developed application is only compatible with Android devices, thereby restricting accessibility for users of iOS-based platforms. Future research is recommended to expand the application's compatibility across multiple operating systems, particularly iOS, to increase accessibility and user reach. Additionally, further studies could explore the long-term impact of the mobile-based *Project Citizen* on students' civic knowledge, attitudes, and participation in various educational settings.

## REFERENCES

- Abdurohim, N., Abdurrohman, M., Ali, H., & Nazar, R. F. (2023). Implementation of Anti-Corruption Education of the PKn Subjects in Project Citizen-Based Learning. *Tafkir: Interdisciplinary Journal of Islamic Education*, 4(1), 147–162. <https://doi.org/10.31538/tijie.v4i1.373>
- Alfiyah Mukhlisotin, F., & Ilmiah Pendidikan Pancasila Dan Kewarganegaraan, J. (2022). *The Effect Of The Project Citizen Learning Model On Students' Critical Thinking Ability In Pancasila And Citizenship Education Subjects*. 7(1), 214–227. <http://journal2.um.ac.id/index.php/jppk>
- Armiaati, & M. Topit Hidayat. (2024). Podcast Spotify Sebagai Media Pembelajaran Audio untuk Meningkatkan Hasil Belajar Siswa. *Jurnal Penelitian Dan Pengembangan Pendidikan*, 8(1), 116–126. <https://doi.org/10.23887/jpppp.v8i1.62871>
- Arni Rahayuni, N. P., Sri Asri, I. G. A. A., & Suniasih, N. W. (2018). Pengaruh Model Pembelajaran Pair Check Berbasis Penilaian Kinerja Terhadap Kompetensi Pengetahuan Pkn Siswa Kelas Iv. *Jurnal Penelitian Dan Pengembangan Pendidikan.*, 23(1), 60–67. <https://doi.org/10.23887/mi.v23i1.16408>
- Arsy, N., Hanif, M., & Ridwan, I. R. (2024). SMILE Application-Excursion to Space to Improve the Critical Thinking Skills of Fourth Grade Elementary School Students. *Jurnal Penelitian Dan Pengembangan Pendidikan*, 8(2), 346–355.
- Astuti, H., Sahono, B., Negeri, S., Timur, K., & Bengkulu, U. (n.d.). Application of the citizen project learning model to improve critical thinking skills and learning achievement. *DIADIK: Jurnal Ilmiah Teknologi Pendidikan*, 12(1), 2022.
- Carvalho, L., Freeman, C. G., & Lamb, J. (2024). Learning Spaces of Higher Education for Postdigital Citizens. *Postdigital Science and Education*, 0123456789. <https://doi.org/10.1007/s42438-024-00504-1>
- Dahliyana, A., Budimansyah, D., Nurdin, E. S., Suryadi, A., & Cahyati, S. (2024). Project citizen digital: Civic education strengthen the national defense character? *Kasetsart Journal of Social Sciences*, 45(1), 159–166. <https://doi.org/10.34044/j.kjss.2024.45.1.17>
- Desrini, F., Setiawan, D., & Rambe, T. (2021). The influence of project citizen learning model and citizenship competence on student ppkn learning outcomes at smp pahlawan nasional medan. *Jurnal Ilmiah Teunuleh The International Journal of Social Sciences*, 2(1).
- Dewi, D. A., Harsono Sunaria, N., Furnamasari, Y. F., & Wahyuningsih, Y. (2021). The influence of project citizen on attitudes nationalism in the era digital citizenship. In *American Journal of Multidisciplinary Research & Development (AJMRD)* (Vol. 3, Issue 01). [www.ajmrd.com](http://www.ajmrd.com)
- Fajri, I., & Yusuf, R. (2021). *Application of project citizen learning model : descriptive analysis of 21st century skills of high school students*. 9(3), 789–800.
- Fajri, I., Yusuf, R., Zailani, M., & Yusoff, M. (2021). *Model pembelajaran project citizen sebagai inovasi pembelajaran dalam meningkatkan keterampilan abad 21*. 2(3), 105–118.
- Gardner-McTaggart, A., & Palmer, N. (2018). Global citizenship education, technology, and being. *Globalisation, Societies and Education*, 16(2), 268–281. <https://doi.org/10.1080/14767724.2017.1405342>
- Hidayat, F., & Nizar, M. (2021). Model Addie (Analysis, Design, Development, Implementation and Evaluation) Dalam Pembelajaran Pendidikan Agama Islam. *Jurnal Inovasi Pendidikan Agama Islam (JIPAI)*, 1(1), 28–38. <https://doi.org/10.15575/jipai.v1i1.11042>
- Indra Handayani, M., & Wibowo, A. (2022). Project Citizen Model in Citizenship Education and Its Impact on Critical Thinking Skills for Elementary School Teacher Education Students. *International Journal of Elementary Education*, 6(2), 276–281. <https://doi.org/10.23887/ijee.v6i2.46763>
- Istiqomah, D., 1, 2, Budimansyah, D., & Agustin, M. (2021). ICEE-5 “The Transformation of Elementary Education for Welcoming Smart Society 5.0” The Application Of The Project Citizen Model To Improve Students’ Creative Thinking Skills In Civics Learning. *International Conference on Elementary Education*.
- Japar, M., Kardiman, Y., Raharjo, Fadhillah, D. N., & Syarif, S. (2021). Interactive Mobile Technologies on Civic Education Learning in Higher Education. *International Journal of Interactive*

- Mobile Technologies*, 15(3), 84–96. <https://doi.org/10.3991/ijim.v15i03.17509>
- Jayadiputra, E., Mulyasana, D., Saloko, A., & Suparman, O. (2020). Project citizen learning model : skills of critical thinking and 21st century learning in higher education. *Proceedings of the 2nd International Conference on Education, ICE 2019, 27-28 September 2019, Universitas Muhammadiyah Purworejo, Indonesia, 2016*, 663–670. <https://doi.org/10.4108/eai.28-9-2019.2291068>
- Marini, A., Yarmi, G., Safitri, S. S., Safitri, D., & Zahari, M. (2024). Kahoot ! -Based Interactive Multimedia : Can it Increase Social Studies Learning Interest ? *Jurnal Penelitian Dan Pengembangan Pendidikan*, 8(2), 390–397.
- Meke, K. D. P., Astro, R. B., & Daud, M. H. (2021). Dampak Kebijakan Merdeka Belajar Kampus Merdeka (MBKM) pada Perguruan Tinggi Swasta di Indonesia. *Edukatif: Jurnal Ilmu Pendidikan*, 4(1), 675–685. <https://doi.org/10.31004/edukatif.v4i1.1940>
- Murdiono, M., Suyato, Rahmawati, E. N., & Aziz, M. A. (2020). Developing an android-based mobile application for civic education learning. *International Journal of Interactive Mobile Technologies*, 14(16), 180–193. <https://doi.org/10.3991/ijim.v14i16.14967>
- Öztürk, T., Rapoport, A., & Zayimoğlu Öztürk, F. (2021). Civics Education in Higher Education: “Project Citizen” Sample. *Educational Policy Analysis and Strategic Research*, 16(2), 382–401. <https://doi.org/10.29329/epasr.2020.345.18>
- Priyanto, E., & Thambu, N. A. (2022). Pembangunan nilai moral dan karakter mahasiswa melalui penerapan model project citizen dalam pembelajaran pendidikan kewarganegaraan di Universitas Muhammadiyah Purwokerto. *Khazanah Pendidikan*, 16(1), 173. <https://doi.org/10.30595/jkp.v16i1.13411>
- Putu Windu Mertha Sujanaa, Cecep Darmawanb, Dasim Budimansyahc, S. (2020). id125Representasi Pendidikan Kewarganegaraan pada Jenjang Pendidikan Tinggi Dilihat dari Perspektif Generasi MillennialI. *Jurnal Inspirasi Pendidikan*, 10(2), 125–132. <https://doi.org/https://doi.org/10.21067/jip.v10i2.4550>
- Rafzan, R. (2024). Media Kajian Kewarganegaraan Improving critical thinking skills in civic education based on project citizen building awareness of environmental issues Improving critical thinking skills in civic education based on project citizen building awareness of env. *Jurnal Civics*, 21(2), 359–368.
- Spatioti, A. G., Kazanidis, I., & Pange, J. (2022). A Comparative Study of the ADDIE Instructional Design Model in Distance Education. *Information (Switzerland)*, 13(9), 1–20. <https://doi.org/10.3390/info13090402>
- Suryaman, M. (2020). Orientasi Pengembangan Kurikulum Merdeka Belajar. *Seminar Nasional Pendidikan Bahasa Dan Sastra*, 1(1), 13–28.
- Trisiana, A., & Utami, R. D. H. (2022). “Smart Mobile Civic” based on the Project Citizen Model as an Effort to Optimize Citizenship Learning in the Independent Campus Era. *Journal of Internet Services and Information Security*, 12(4), 74–83. <https://doi.org/10.58346/jisis.2022.i4.005>
- Utami, S. G. A., & Najicha, F. U. (2022). Kontribusi Mahasiswa Sebagai Agent of Change Dalam Penerapan Nilai-Nilai Pancasila pada Kehidupan Bermasyarakat. *De Cive : Jurnal Penelitian Pendidikan Pancasila Dan Kewarganegaraan*, 2(3), 96–101. <https://doi.org/10.56393/decive.v2i3.591>
- Yulita Anggraini, E., Santoso, M., & Rarasati, I. P. (2023). Pengembangan Media Mobile Learning Pelajar Nusantara untuk Pembelajaran PPKn SMA/SMK/MA Kelas X. *JPK: Jurnal Pancasila Dan Kewarganegaraan*, 8(1), 1–10. <http://journal.umpo.ac.id/index.php/JPK/index>
- Zulfa, I. A., & Bektiningsih, K. (2024). *Koditako Media ( Digital Comics of Economic Activities ) in IPAS for Fourth-Grade Students*. 8(2), 209–220.