

## DEVELOPMENT OF DIGITAL POCKET BOOK MEDIA BASED ON PROBLEM-BASED LEARNING IN PPKN THEME 7 LEARNING CLASS IV PRIMARY SCHOOL

Tri Widiastuti<sup>a\*</sup>, Otib Satibi Hidayat<sup>a</sup>, Evita Adnan<sup>a</sup>

<sup>a</sup>Universitas Negeri Jakarta, Jakarta, Indonesia

\*Correspondence: widia8991@gmail.com

### Abstract

This research and development aims to produce a media product in the form of a PBL-based digital pocket book for Civics learning Theme 7 The Beauty of Diversity in My Country in grade IV of elementary school. This study uses the ADDIE development method which has five stages, namely Analysis, Design, Development, Implementation and Evaluation. Product validation trials in this study involved three experts, namely material experts, linguists and media experts. In addition to these three experts, this development involved fourth grade students and teachers at SDIT Cendekia Islamic School Bekasi in product validation trials. The collection of information in this study was obtained based on the results of observations and interviews with teachers and fourth grade students and questionnaires. The validation results of material experts were 77.8%, linguists 85.4%, and media experts 88.75%. So as to obtain the overall results of expert test validation with an average of 83.98%. The results of product trials on One To One were 81.3%, Small Groups were 86%, and Field Tests were 91.3%, as well as teacher validation results were 91%. Thus, this shows that PBL-based digital pocket book media is feasible to be used as an additional learning media for fourth grade elementary school students.

**Keywords :** Digital pocket book, PPKn, Theme of the Beauty of Diversity in My Country.

### Abstrak

Penelitian dan pengembangan ini bertujuan untuk menghasilkan suatu produk media berupa pocket book digital berbasis PBL pada pembelajaran PPKn Tema 7 Indahnnya Keragaman di Negeriku kelas IV sekolah dasar. Penelitian ini menggunakan metode pengembangan ADDIE yang memiliki lima tahapan, yaitu Analisis, Rancangan, Pengembangan, Implementasi dan Evaluasi. Uji coba validasi produk pada penelitian ini melibatkan tiga orang ahli, yaitu pada ahli materi, ahli bahasa dan ahli media. Selain tiga para ahli tersebut, pengembangan ini melibatkan siswa dan guru kelas IV SDIT Cendekia Islamic School Bekasi dalam uji coba validasi produk. Pengumpulan informasi pada penelitian ini diperoleh berdasarkan hasil observasi dan wawancara bersama guru dan siswa kelas IV serta kuesioner. Hasil validasi ahli materi adalah 77,8%, ahli bahasa 85,4%, dan ahli media 88,75%. Sehingga memperoleh keseluruhan hasil validasi uji ahli dengan rata-rata adalah 83,98%. Hasil uji coba produk pada One To One 81,3%, Small Group 86%, dan Field Test 91,3%, serta hasil validasi oleh guru adalah 91%. Dengan demikian, hal tersebut menunjukkan bahwa media pocket book digital berbasis PBL layak untuk digunakan sebagai media belajar tambahan pada siswa kelas IV sekolah dasar.

**Katakunci:** Pocket book digital, PPKn, Tema Indahnnya Keragaman di Negeriku

## Introduction

Education can be written as a general activity that occurs in human life, because under various conditions, education will continue to occur in the life of every human being in the world. An education can be said to be good if its implementation is integrated according to the needs and developments of the times. A developed nation is a nation that has intelligent, educated human resources and is successful in developing its potential.

With regard to the implementation of the curriculum in Indonesia, the Government since July 2013 has established and implemented the 2013 Curriculum as the National Curriculum to date to replace the previous curriculum, namely KTSP (Education Unit Level Curriculum). One of the changes that can be found at the elementary school level is the implementation of an integrative thematic-based learning system. Integrative thematic itself is the application of learning by combining several subjects within the same theme. Thematic subjects include Indonesian, IPA (Natural Sciences), IPS (Social Sciences), SBdP (Arts, Culture and Crafts), and PPKn (Pancasila and Citizenship Education).

Civics is one of the subjects that has an important role in forming citizens who are good, intelligent, democratic, responsible and aware of the diversity of the nation. Citizenship education also equips students with character and knowledge relating to citizenship relations so that they become citizens of whom the nation and state can be proud (Agung Suharyanto, 2013, p. 192-203)

Learning success is influenced by several factors such as interest and motivation to learn, teaching materials, and also learning media. Learning media is everything, both software and hardware, that is used as an intermediary in conveying teaching material to students with the aim of helping stimulate students' thoughts, feelings, attention and interests so that a learning goal is achieved. With increasingly sophisticated developments in the field of technology, the world of education will certainly follow these developments as well, one of which is the application of technology in the learning process.

After Indonesia experienced a pandemic for approximately 2 years, teaching and learning activities in schools are not yet completely normal. There are still some schools that limit the time for teaching and learning activities. This learning process is also a transition from online to offline learning. This transition period is a challenge for teachers to create creative and innovative teaching and learning activities in the classroom so that they can increase students' interest and motivation to learn and produce meaningful learning.

Based on the results of interviews with teachers and class IV students at SDIT Scholar Islamic School Bekasi, the implementation of learning during the transition period can be said to be less than optimal. Teachers have not reused learning media and electronic media. Teachers still rely on thematic books as references in teaching and learning activities. This can cause problems for students, including the monotonous learning that is carried out, namely only racing through the student's book, then completing exercises in the student's book after studying the learning material, and the lack of delivery of additional creative learning media so that students feel bored during learning. This also causes students to be passive when carrying out learning activities, because students only remember information and do not really understand, interpret and apply the material provided.

Based on the problems above, solutions are needed to overcome the obstacles that occur in the implementation of learning, especially in learning during the current pandemic transition period. Teaching and learning activities can be carried out well if they are supported by optimal learning materials and media. Good learning media is media that is appropriate to the learning

material, interesting and concrete in nature, so that it can improve students' cognitive and affective understanding.

One of the solutions to the problems above is to create a learning media development based on the problems that have been explained. For this reason, researchers are trying to overcome this problem by creating an additional learning media in the form of a digital pocket book based on problem based learning in PPKn Tema 7 class IV elementary school learning.

In order to obtain meaningful learning, interesting learning methods and models are needed, learning models that are able to improve students' critical thinking and are able to get involved in solving a problem, one of which is the Problem Based Learning (PBL) model. PBL is a learning model that involves students being able to solve a problem through the stages of the scientific method so that students are able to learn knowledge related to the problem while also having the skills to solve existing problems (Iyam Maryati, 2017, p.65). then, according to Donalds Woods (in M. Taufiq Amir, 2009, p. 13) wrote in his research that PBL is more than just an effective environment in learning certain knowledge. PBL is able to help students build lifelong skills in problem solving, teamwork and communication.

This digital pocket book media based on Problem Based Learning will be designed with an attractive appearance and the material content will be presented along with pictures and additional learning videos in an effort to increase students' interest and motivation so that students do not easily feel bored and can learn optimally. This PBL-based pocket book media has PBL training stages at the end of each material for student evaluation both in groups and individually to train them in solving problems. The PBL-based evaluation presented consisted of 4 questions, namely for exercises on the diversity of traditional clothing, diversity of traditional houses and diversity of musical instruments completed in groups, and for exercises on the material on the diversity of regional languages completed and problem solving sought individually by students. So, in implementing this PBL-based digital pocket book media, all students are active in learning by trying to find and solve the problems presented.

Based on the explanation above, the background for researchers to carry out development with the research title "Development of Digital Pocket Book Media Based on Problem Based Learning in PPKn Learning Theme 7 The Beauty of Diversity in My Country Class IV Elementary School". This pocket book was created as an additional learning medium so that students do not always depend on teachers and books whose material coverage is limited. The information in this pocket book does not only cover learning material, but is integrated into the problem based learning (PBL) learning model and evaluation questions so that it can improve cognitive, affective knowledge, interest and instill character in students.

## **Methods**

The research method developed in this research is Research and Development (R&D). Research & development according to Seels and Richey (in Tatik Sutarti and Edi Irawan, 2017, p.6) is defined as a systematic study of the design, development and evaluation of learning programs, processes and products that meet the criteria of validity, practicality and effectiveness. Research and Development is development research used to improve an existing product. Researchers use the ADDIE model which consists of five stages, namely Analysis, Design, Development, Implementation, and Evaluation. (Budiyo Saputro, 2017, p. 8).

Respondents are parties involved in the research and development process to assess the product being developed. In this research, there are test respondents and user respondents, where the test respondents are parties who are experts in their fields to assess a product. Meanwhile, the user respondents were fourth grade students at SDIT Scholar Islamic School Bekasi. The PBL-

based digital pocket book media being developed will be tested by three experts, namely a lecturer in the field of Civics as a material expert, a lecturer in the learning media field as a media expert, and finally a lecturer in the Indonesian language field as a media language expert.

The data collection technique used in research and development of PBL-based digital pocket book media is a quantitative descriptive analysis technique. The data analyzed in the processing of quantitative descriptive techniques was obtained from the results of questionnaires given to experts as validators and student respondent data. The data analysis technique used is in the form of a scale. The scale used in the questionnaire distributed to respondents was the Likert scale. The Likert scale is a tool used to measure the attitudes, opinions and perceptions of a person or group of people about an event or social phenomenon (Sudaryono, 2016, p.100). The Likert scale used in the questionnaire distributed to respondents is a Likert scale with a range of 1 to 5.

**Table 1. Interpretation of Score Range**

Percentage Score Range	Information
0%-20%	Very Inadequate
21%-40%	Not Worth It
41%-60%	Decent Enough
61%-80%	Worthy
81%-100%	Very Worth It

### Results and Discussion

This research and development produced a learning media product in the form of a digital pocket book which is flexible in its use, that is, it can be used or accessed anywhere and at any time. This digital pocket book media contains PPKn class IV elementary school lesson content with the theme 7 The Beauty of Diversity in My Country which presents material on the diversity of ethnic groups and languages in Indonesia which is bound by unity and oneness. The material presented in digital pocket book media is arranged according to the components and stages of Problem Based Learning (PBL), so the name of the media is entitled "PBL-based digital pocket book".

Research and development of PBL-based digital pocket book media uses the ADDIE model stages. The first stage in this model is Analysis. Researchers conducted a needs analysis through observations and interviews with teachers and fourth grade elementary school students at SDIT Scholar Islamic School Bekasi. The following are several stages of analysis carried out by researchers:

The first stage carried out by the researcher was field observation by conducting interviews with one of the class IV teachers and several class IV students. During the teaching and learning process, SDIT Scholar Islamic School usually uses theme books that have been prepared by the school. Thus, it is necessary to have additional media in the form of pocket books or PBL-based digital pocket books which can be used as additional learning media for students. This PBL-based digital pocket book media can train students to think critically, be able to face and solve problems, as well as train students' cognitive and affective knowledge which can then be applied in everyday life. Apart from that, it is hoped that this PBL-based digital pocket book media can provide motivation for teachers to be able to create learning media in digital form according to learning developments.

Next is the student analysis stage. Based on the results of observations and interviews, researchers obtained information that the number of class IV students at SDIT Scholar Islamic School Bekasi was 25 students. Where there are 14 male students, while there are 11 female students. Fourth grade elementary school students are generally 10 years old. The characteristics of class IV students are at the concrete operational stage, where at this stage the student's level of thinking increases. At this stage too, students begin to be independent in doing things, starting to

be able to solve the problems they face, such as being able to complete assignments themselves, being able to read, write and count, although some students still need assistance.

The next stage is material analysis. At this stage, the researcher obtained the results that the appropriate material to use in developing PBL-based digital pocket book media is material about ethnic and linguistic diversity in Indonesia which is bound by unity and integrity. This material was chosen based on the results of interviews with fourth grade students at SDIT Scholar Islamic School Bekasi who stated that some students had difficulty understanding the material on ethnic and linguistic diversity in Indonesia. Other data was also obtained from the results of interviews with class IV teachers at SDIT Scholar Islamic School Bekasi who stated that the results of the Daily Assessment (PH) and Mid-Semester Assessment (PTS) of class IV odd semester students on the subject of ethnic and linguistic diversity in Indonesia are bound by unity and the unit is still under the KKM.

The next stage is design. Researchers analyze and determine core competencies, basic competencies, and learning objectives. The next step is research to collect PPKn material from various sources that are in accordance with the focus of the material presented, namely the diversity of ethnic groups and languages in Indonesia which are bound by unity and integrity. The material in digital pocket book media is in accordance with the indicators and learning objectives. After that, the next stage is to determine the software. In developing PBL-based digital pocket book media, researchers determined various software and applications that would be used to design PBL-based digital pocket book media, namely Canva, Google Form, CapCut Video Editor, Autodesk Sketchbook, Adobe InDesign, and Flip Pdf Professional.

The third stage is development. At this stage, there are three series of stages, the first is the pre-production stage. The first stage that the researcher carried out was to re-prepare the material that the researcher had previously compiled in Microsoft Word. Before entering the material into the software, the researcher first prepared several illustrations which were used as supporting images in the PBL-based digital pocket book media. In creating image illustrations on PBL-based digital pocket book media, researchers used the Autodesk Sketchbook application in their creation. Autodesk Sketchbook is a raster graphics program application or a type of digital drawing that is used to simulate real-world art techniques, such as pencil sketching, painting or airbrushing in a simple and practical way (F Cala-Riquelme, 2021: 577-586)

Next, after completing all the required image illustrations in PBL-based digital pocket book media, the next stage is layout. At the layout stage, researchers used the Adobe InDesign software application in its creation. . This software makes it easier for designers to organize the layout and layout page by page (Yori Pusparani, 2021, 23-27).

After the stage of creating image illustrations and media page layouts, the next step that researchers took in developing PBL-based digital pocket book media was to create learning videos. At the stage of the learning video creation process, researchers used the CapCut video editor application via a mobile device or smartphone. The CapCut video editor application is an application used for editing videos and has several advantages including being easy to use, has various features, one of which is the green screen feature, and the CapCut video editor application uses Indonesian (Ismaun, et al, 2023, p.79 ).

The next stage is that the researcher creates practice questions on the Google Form software. Google Form or Google Form is a communication tool that can be used to process data such as questionnaires or evaluations (Bayu Febriadi and Nurliana Nasution, 2017, p.69). To use Google Form software, you must be connected to the internet. Practice questions that have been created in Google Form software will be one of the supporting aspects of PBL-based digital pocket book media.

The next series is the production stage. At this stage, researchers begin to realize the media products that researchers have previously designed. The researcher chose and used the Flip PDF Professional software application for the final result of the digital pocket book media product. This



Flip PDF Professional software application is because this application is easy for beginners to use, apart from that there are many optional features that support researchers in using it, such as adding audio, video, images, text, open links, and so on. Also, the Flip PDF Professional software application can be accessed for free.

After completing the production stage of the media product, the next stage is the implementation of PBL-based digital pocket book media for students. Implementation is carried out with students directly in the classroom. The following is the application of the PBL stage in the implementation of digital pocket book media with fourth grade students at SDIT Scholar Islamic School Bekasi, 1) orienting students towards the problem presented, 2) organizing students to study, 3) teacher guiding the investigation, 4) developing and presenting the results of the work, 5) analyze and evaluate the problem solving process.

The fourth stage, namely implementation, PBL-based digital pocket book media was implemented to user respondents, namely class IV students at SDIT Scholar Islamic School Bekasi. The implementation is carried out offline or face to face in the classrooms of class IV students, which in its implementation uses several trial stages, namely one to one by 3 students, small group by 7 students, and field test by 15 students.

The final stage is stage five evaluation. At this stage there is validation data from expert review tests, namely material expert, language expert and media expert tests. Apart from expert review test results, there are also validation results from students and teachers in the form of questionnaires. The following is a validation table for expert review tests, student responses and teacher responses.

**Table 2. Expert Test Validation**

<b>Trial Phase</b>	<b>Result</b>	<b>Criteria</b>
Materials Expert	77,8%	Worthy
Linguist	85,4%	Very Worth It
Media Expert	88,75%	Very Worth It
<b>Average</b>	<b>84%</b>	<b>Very Worth It</b>

In table 2, it can be seen that the PBL-based digital pocket book media obtained an average result from the expert review test, namely material experts, language experts and media experts of 83.98%. If the result of the value refers to the interpretation table of criteria eligibility scores, then the value is included in the Very Eligible criteria.

**Table 3. Results of Student Response Questionnaire Data**

<b>Respondent</b>	<b>Result</b>	<b>Criteria</b>
<i>One to One</i>	81,3%	Very Worth It
<i>Small Group</i>	86%	Very Worth It
<i>Filed Test</i>	91,3%	Very Worth It

Based on table 3, the results of the student response questionnaire data, it can be seen that the PBL-based digital pocket book media has reached the Very Appropriate criteria. With the existence of digital pocket book media based on PBL, it can increase students' interest in learning, increase students' cognitive and affective knowledge, and this digital book media also provides new learning experiences for students, namely the use of electronic learning media in PPKn content regarding ethnic and linguistic diversity in Indonesia which bound by unity and oneness.

**Table 4. Results of Teacher Response Questionnaire Data**

<b>Respondent</b>	<b>Result</b>	<b>Criteria</b>
RS	92%	Very Worth It

---

FH	86,7%	Very Worth It
IMH	92%	Very Worth It
TN	92%	Very Worth It
MA	92%	Very Worth It

---

In table 4, it can be seen that the PBL-based digital pocket book media has also obtained teacher response questionnaire data results. If the result of the score refers to the interpretation table of criteria eligibility scores, then the score is included in the Very Appropriate criteria to be used as additional learning media for students on PPKn content regarding ethnic and linguistic diversity in Indonesia which is bound by unity and oneness.

### Conclusion

The research that the researchers developed was entitled "Development of Digital Pocket Book Media Based on Problem Based Learning in Civics Learning Theme 7 The Beauty of Diversity in My Country Class IV Elementary School". The PBL-based digital pocket book media that researchers have developed can be used as additional learning media. PBL-based digital pocket book media was developed using the ADDIE development model which consists of 4 stages, namely 1) Analysis, 2) Design, 3) Development, 4) Implementation, 5) Evaluation (Evaluation). This development research involves expert review tests including tests by material experts, language experts and media experts. Apart from expert review experts, the media test also involved class IV students and teachers at SDIT Scholar Islamic School Bekasi as user respondents.

### References

- Amir, M. Taufiq. (2009). *Inovasi Pendidikan Melalui Problem Based Learning: Bagaimana Pendidik Memberdayakan Pemelajar di Era Pengetahuan*. Jakarta: KENCANA
- F Cala-Riquelme. (2021). *Autodesk Sketchbook: An application that minimizes time and maximizes results of taxonomic drawing*, Zootaxa 49963 (3), 577-586.
- Febriadi, Bayu dan Nurliana Nasution. (2017). *Sosialisasi Dan Pelatihan Aplikasi Google Form Sebagai Kuisioner Online Untuk Meningkatkan Kualitas Pelayanan*. *Jurnal Invotek Polbeng*. 2(1) : 69.
- Ismaun, dkk. (2023). *PENINGKATAN KEMAMPUAN PERSONAL BRANDING MELALUI APLIKASI CAPCUT VIDEO EDITOR PADA ANGGOTA KAWAO ART MANAGEMENT*, *Jurnal Pengabdian Kepada Masyarakat, Teknik Informatika, Universitas Sulawesi Barat*. 2(2). 79.
- Maryati, Iyam. (2017). *Penerapan Model Pembelajaran Berbasis Masalah Pada Materi Pola Bilangan Di Kelas VII SMP*. *Jurnal Mosharafa*. 7(1), 65.
- Pusparani, Yori, dkk. (2021). *PELATIHAN ADOBE INDESIGN PADA GURU SMKN 58 UNTUK PENINGKATAN KOMPETENSI GURU PRODUKTIF, ARTINARA*, *Fakultas Ilmu Komunikasi, Universitas Budi Luhur*, 1(1), 23-27
- Saputro, Budiyo. (2017). *Manajemen Penelitian Pengembangan (Reaserch & Development) Bagi Penyusun Tesis dan Disertasi*. Yogyakarta: Aswaja Pressindo.
- Sudaryono. (2016). *Metode Penelitian Pendidikan*. Jakarta: Kencana.
- Suharyanto, Agung. (2013). *Peranan Pendidikan Kewarganegaraan Dalam Membina Sikap Toleransi Antar Siswa*. *Jurnal Ilmu Pemerintahan dan Sosial Politik*, 2(1), 192-203.
- Sutarti, Tatik dan Edi Irawan. (2017). *KIAT SUKSES MERAH HIBAH PENELITIAN PENGEMBANGAN*. Yogyakarta: Deepublish.