

## **Interactive Media For Islamic Education Dolanan Bocah Pinter (Dolpin) Based On Local Wisdom In Strengthening Pancasila Student Profile**

**Idammatussilmi,<sup>1</sup> Eko Handoyo,<sup>2</sup> Amin Yusuf<sup>3</sup>**

Universitas Negeri Semarang, Indonesia

\*idammatussilmi96@students.unnes.ac.id

\*eko.handoyo@mail.unnes.ac.id

\*amin.yusuf@mail.unnes.ac.id

### **ABSTRACT**

*The purpose of this study was to determine the improvement of the character profile of Pancasila students through Dolanan Bocah Pinter (DOLPIN) Interactive media for Islamic Education. The lack of interactive media innovation in strengthening the profile of Pancasila students is the background of this research. The method used in this research is research and development (R and D) with the ADDIE approach. Data collection techniques; observation, interviews, test questions and documentation. The data validity test uses validity and reliability with validity tests including material experts, media experts and linguists. The results of this study indicate that the development of DOLPIN interactive media based on local wisdom is effective in increasing the profile of Pancasila students seen from the results of the classical test of material achievement 87% and the results of the classical test of the character of the Pancasila student profile 88%. The increase in material achievement and character profile of Pancasila students through one group pre-test and post-test output t-test result, obtained sig value = 0.000, which means smaller than  $\alpha$  0.05. Teacher response to DOLPIN interactive media received a percentage of 97.6% (very good), and student response was 90.4% (very good). The application of DOLPIN interactive media based on local wisdom can improve the Pancasila learner profile of students in grade IV SD.*

**Keywords:** *Dolanan Bocah Pinter (DOLPIN), local wisdom, interactive media and Pancasila students' profiles*

## A. INTRODUCTION

The development of education that is advancing rapidly should adjust (*zeitgeist*) the spirit of the times. Therefore, in the process of concoction, apart from competence, character (Nashihin, 2017) and literacy, the implementation of the independent learning curriculum which has recently been implemented is also a breakthrough in advancing the world of education in Indonesia (Ardianta, 2022). The independent learning curriculum is diverse intracurricular learning with a more optimal presentation of content so that students are sufficient to explore concepts and strengthen competencies (Kemendikbudristek, 2022). This independent curriculum includes strengthening the achievement of the Pancasila learner profile. The concept of strengthening the Pancasila learner profile stems from the philosophy of Ki Hajar Dewantara, namely that education developed must be able to liberate children in learning (Rofi Rudiawan, 2022). The Pancasila learner profile is an elaboration of the national education goals that become the main reference in directing education policies and in building the character and potential of students. This Pancasila learner profile has six main characteristics, namely; faith and devotion to God Almighty and noble character, creative, independent, mutual cooperation, critical reasoning and global diversity (Noventari, 2020).

The cultivation of Pancasila character in students is also inseparable from the role of a teacher in learning. Technological advances require teachers, especially in primary schools, to be innovative and creative in using technology to improve the quality of students (Hanif, 2020) (Sarioğlu & GİrgİN, 2020). Teachers must be productive and media literate (Nashihin, 2019a). One of the actions that can be taken by teachers in strengthening the profile of Pancasila students is with digital-based interactive media in learning to pass on the character of Pancasila to students in Indonesia (Hidayah & Suyitno, 2021).

Interactive media is media that can be useful and the information conveyed is very interactive (Levy, S & Gamboa, 2013). Digital-based interactive media can be developed by teachers through various innovations developed. This interactive learning can create an educative learning atmosphere between teachers, students, and the learning environment (Wahab, 2016). Similarly, this media innovation can be developed to ground the nation's character to uphold the values of Pancasila and the spirit of love for the country as a guide to the progress of the Indonesian nation in the future (Husna Nashihin, 2017). Local wisdom becomes part of the education policy in a country (Hedegaard-Soerensen & Penthin., 2020). Local wisdom from existing regional cultures can also be an alternative for teachers in teaching the values of Pancasila education. In addition, local wisdom can also be inserted in learning where local wisdom becomes hereditary knowledge used by local communities in carrying out life that is integrated with local cultural understanding.

Internalisation of local wisdom in learning can be found in positive responses and an increase in student learning outcomes after using interactive multimedia based on local wisdom (Didit Satya Prayogi & Sumarmi, 2019). Local wisdom can be used as teaching materials in schools, and has even become part of a country's policy (Hedegaard-Soerensen & Penthin., 2020). The implementation of education must be able to integrate local wisdom (Husna Nashihin, Yenny Aulia Rachman, Betania

Kartika, Nurmasinta Fadhilah, 2023) as knowledge for students. This is because this local wisdom is knowledge for students who make learning to contribute to the social environment (Laila et al., 2021). The researchers conducted preliminary research, which was intended to see the real conditions of the Pancasila education learning process carried out in class IV in elementary schools in Tembarak District, namely SD N Kemloko, SD N Gandu and SD N Petarangan.

Based on observations made on teachers and grade IV students at SD N Kemloko, SD N Gandu and SD N Petarangan, it shows that 1) teachers lack understanding of the application of the Pancasila learner profile character as a project of the independent learning curriculum. 2) Teachers in teaching students in Pancasila education subjects are still very simple. 3) Teachers still use conventional methods in teaching so that students do not understand the lesson. 4) The learning resources used by teachers are still very limited here teachers only use electronic books provided by the government, while students do not yet have handbooks for learning resources at home. 5) Teachers have not used interactive media to support lessons so that students do not understand related to Pancasila education lessons. 6) Grade IV students mostly do not know the usefulness and application of Pancasila it self. 7) strengthening the learner profile in students has not been achieved according to learning outcomes. Based on this background, it can be seen that the understanding of class IV teachers at SD N Kemloko, SD N 1 Gandu and SD N Petarangan of the application of the Pancasila learner profile is still very simple so that students cannot reach the target according to the learning outcomes. Teachers also have not been able to introduce and utilise local wisdom optimally. There needs to be a further study of local wisdom for schools so that they can find opportunities from the rich local wisdom, especially in Temanggung Regency.

This local wisdom needs to be developed in teaching and learning activities both at school and outside school to be able to form national students with character according to the profile of Pancasila students through an understanding of Pancasila education lessons. This local wisdom is important to be integrated in the teaching and learning process at school (Nashihin, 2019b). Integrating local wisdom in the learning process is effective enough to improve student learning outcomes (Toharudin et al., 2021)(Ariyani, 2020)(Ramdiah et al., 2020). This integration process can be done by applying Dolanan Bocah Pinter (DOLPIN) interactive media based on local wisdom in strengthening the Pancasila learner profile of grade IV elementary school students. Dolanan Bocah Pinter (DOLPIN) media as a digital-based media in which it presents games that encourage enthusiasm of students in exploring and understanding the profile of Pancasila students through learning Pancasila education. Learners' understanding of Pancasila education encourages learners to behave according to Pancasila so that the character of the Pancasila learner profile will be formed. This game-based learning has a great influence on the achievement of students at all levels of education that is packaged according to the discipline in which it is in (Karakoç et al., 2022). Game-based learning is quite adaptive in the implementation of the learning process, because if packaged with the right method it can combine cognitive, emotional, social and learning environment characteristics (Greipl et al., 2020). Many benefits are obtained from

game-based learning, which can improve the learning process, knowledge, motivation and participation of students (Troussas et al., 2020).

Considering these problems, the objectives of this study are to: 1) To analyse the design of Dolanan Bocah Pinter (DOLPIN) interactive media based on local wisdom in strengthening the profile of Pancasila students. 2) To analyse the feasibility of Dolanan Bocah Pinter (DOLPIN) interactive media based on local wisdom in strengthening students' Pancasila profile. 3) To analyse the effectiveness of Dolanan Bocah Pinter (DOLPIN) interactive media based on local wisdom in strengthening students' Pancasila profile. 4) To analyse teachers' and learners' responses to the interactive media of Dolanan Bocah Pinter (DOLPIN) based on local wisdom in strengthening learners' Pancasila profile.

## **B. LITERATURE REVIEW**

### **1. Interactive Media**

Interactive media is media equipped with controllers that can be operated by users (Daryanto, 2013). This interactive media refers more to digital products and services that present more varied learning. Interactive media is also referred to as a multimedia-based learning tool to convey messages or information for teachers and students.

Interactive multimedia is a combination of several media elements, namely text, images, graphics, animation, audio and video that can be operated and controlled by its users so that it can be run according to the choices and instructions available (Bardi & Jailani, 2015). Interactive multimedia is technology-based media that presents information interactively using a laptop or smartphone that is integrated with the learning process (Wardana et al., 2023). Meanwhile, according to Munir, interactive multimedia is multimedia that is packaged with a display and message delivery function that allows users to interact with the media. Here the user has the freedom to manage the media (Deliany et al., 2019). Some of these opinions can be concluded that interactive media is digital-based media in which it presents text, images, graphics, animation, audio and video that can support students' understanding in the learning process.

### **2. Local Wisdom-Based Education**

Wisdom-based education is one of the strategies in achieving learning objectives. According to Freire, the new paradigm of global competence has key elements, namely understanding, cultural appreciation, communication skills, reflection and responsibility in dealing with the diversity of educational experiences (Darwis, 2018). Indonesian students must maintain noble culture, identity and locality by thinking openly about each other's culture to respect each other so that a positive culture can be formed that is in line with the noble culture of the nation (Majir, 2020). Therefore, this local wisdom-based learning will have a big impact on students, in addition to easily understanding learning, it can also increase the attitude of love for the nation's culture.

Local wisdom-based learning is a conscious effort that is directed through exploring and utilising the potential of the local area (Pratama et al., 2022). The utilisation of this regional potential is carried out wisely as an effort to create an active learning atmosphere for students to develop their potential

both in skills, knowledge, and attitudes to build the nation and state through local wisdom-based learning (Ginting, 2018). This opinion is reinforced by Pingge (Pingge, 2017) who states that local wisdom has pedagogical value to regulate behaviour (Julkifli, 2022) that can provide benefits to society, especially can equip students with attitudes, knowledge, and spiritual attitudes in developing and preserve the advantages of local wisdom owned by the region. The values inherited from the past contain many character education values (Kamaruddin, 2012)(Chowdhury, 2018).

Local wisdom and education have a close relationship in shaping learners' behaviour as an expected outcome (Cherng et al., 2019)(Hongcheng & Minhui, 2010). Local wisdom has the value of knowledge to regulate community behaviour (Agustina, Anisa Rachma; Ifadah, Luluk; Muanayah, 2022) as something that is beneficial in the common interest (Tilaar, 2015). Local wisdom as a means of supporting learning in producing smart and wise students. One of them is by providing learning materials based on local wisdom values inherent in society (Hasanah, A., Gustini & Rohaniawati, 2016)(Hasanah, A., Gustini & Rohaniawati, 2016)(Mubiar et al., 2020). Local culture can be a material for developing teaching materials in schools (Ho, 2006)(Ho, 2016)(Lo, 2014). Some studies apply the concept of local wisdom in the field of education. Judging from the learning process activities that tend to lead to the formation of student character through the values that exist in the local wisdom of certain regions (Murwaningsih et al., 2020)(Sugiyo & Purwastuti, 2017).

### **3. Pancasila Student Profile**

Curriculum changes in Indonesia are a challenge for educators in implementing learning in schools. The new education design implemented in Indonesia is packaged through the school programme implementation structure (Sarwadi, 2023) by promoting the transition of education units to improve student learning outcomes from cognitive (literacy and computing) and non-cognitive (character) competencies to achieve the Pancasila learner profile (Mutiarra et al., 2022). The independent curriculum is a curriculum that is implemented and based on the development of the Pancasila learner profile. The Merdeka Curriculum prioritises character education (Hafidz, 2021) through the application of the Pancasila learner profile. The development of the Pancasila learner profile aims to make students in Indonesia have the soul and values contained in the Pancasila precepts in carrying out social life (Safitri et al., 2022).

The Pancasila learner profile is an effort to shape students to obtain a level of understanding, behaviour, and character based on Pancasila values (Kurniyawati & Nugraheni, 2021). This Pancasila learner profile is a projection that reflects the character of Indonesian society. Indonesian people who uphold social attitudes in carrying out their lives. This social attitude has been brought from birth which can be learnt and formed during a person's development which takes place through social interaction in society (Uge & Neolaka, 2019). The values of Pancasila are applied to be an ideology that must be understood and applied by students in Indonesia. The Pancasila learner profile is the main goal in what education developers do in Indonesia.

## **C. METHOD**

This study developed Dolanan Bocah Pinter (DOLPIN) interactive media using the research and development method (Nashihin, 2023). This development research is used in research that produces certain products and tests the effectiveness of these products (Sugiyono, 2019b). This research produces a development product in the form of interactive media Dolanan Bocah Pinter (DOLPIN) based on local wisdom in improving the profile of fourth grade Pancasila students.

The development procedure used in this research is adapting the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation). Needs analysis, namely analysing the needs of students related to the application of the character profile of Pancasila students during the Pancasila Education learning process. Three elementary schools in Temanggung district which include SDN Kemloko, SD N 1 Gandu and SD N Petarangan, the need for the application of the Pancasila learner profile is very necessary.

Data collection techniques in this development research using observation, interviews, questionnaires, test questions (pretest and posttest), and documentation. Data collection instruments are tools used by researchers to collect data in order to be systematic. This research instrument can take the form of questionnaires, interview guidelines, observation guidelines, test questions and others. The research instruments used in the study were Test Instruments and Non-Test Instruments, namely Observation Sheets, Interview Guidelines and Documentation. The data validity test in this development research uses two kinds of tests, namely validity test and reliability test. The instrument used to test the validity of data on the character of the Pancasila student profile. The validity test of DOLPIN interactive media includes material validity, media, language and readability tests.

The data analysis technique of this research was obtained from quantitative and qualitative instruments. Quantitative data was obtained from questionnaires, pretest and posttest results. Qualitative data was obtained from responses or suggestions from experts, teachers and students after using local wisdom-based DOLPIN interactive media. Data analysis techniques for media feasibility use descriptive data analysis. while qualitative data is analysed which includes analysis of Material, Media and Language Experts, Data Analysis Techniques for Media Feasibility, Analysis of Teacher and Participant Responses.

## **D. RESULTS AND DISCUSSION**

### **1. Design of Interactive Media Dolanan Bocah Pinter (DOLPIN) Based on Local Wisdom in Strengthening Students' Pancasila Learner Profile**

Design interactive media dolanan bocah pinter (DOLPIN) based on local wisdom by going through the stages: making flowcharts, media design which includes making storyboards, interface design, cover design, main page design, application exit page design. Schlatter & Levinson guidelines in making interface design, namely consistency of appearance, hierarchical arrangement of objects contained in the application content, first impression or characteristics of the media, layout of the preparation in the

application, typography, use of colours, images and elements of the interface to interact with the system at the application layer (Schlatter & Levinson, 2013).

The design stage is the most important in development research. As the opinion of Kurniyawati & Nugraheni states that the design stage is the key to smoothness for the next stages (Kurniyawati & Nugraheni, 2021). DOLPIN interactive media product design Interactive media products developed in the form of application-based learning media that can be accessed via smartphones or android mobile phones or laptops. Users can easily use the application without any restrictions on place, time, and situation.

Interactive media dolanan bocah pinter (DOLPIN) is made using adobe animate, then the next step is to test the application. The results of the work identification of the developed interactive media are: the next display is the initial display page, main menu, "game description" menu, "information" menu, "learning outcomes" menu, "material" menu, "video" menu, "game" menu, "exercise" menu, "profile" menu and exit menu. The completion of this initial product, then continued with the validation stage. This media validation consists of validation by media experts, material experts and linguists. Followed by first stage product revision, usability testing followed by second stage product revision, small group trials and field trials followed by final product revision.

Dolanan Bocah Pinter (DOLPIN) interactive media was developed as a reference learning resource for grade IV students in improving the profile of Pancasila students. DOLPIN media is a type of media that combines music, video, learning animation, teaching modules and games. Interactive media can illustrate abstract concepts, simulate real-world processes and can assist teachers in learner learning (Cheung et al., 2017). So, according to its characteristics, this media will bring up many possibilities in accommodating the character of students in improving the profile of Pancasila learners in Pancasila Education lessons through DOLPIN media for students.

This DOLPIN interactive media consists of 85 slides. In general, this DOLPIN interactive media combines software, flip book.exe, quiz, game, video and PPT. Product development is adjusted to the independent learning curriculum which accommodates the character of the Pancasila learner profile in students. The opinion of Cogan et al., civic education is a subject designed to prepare the nation's young generation so that in the future they can play an active role in society for the progress and integrity of the country (Cogan et al., 2007). Therefore, the developer hopes that the results of DOLPIN interactive media products will not only be for understanding the material but also can improve the character of the Pancasila student profile for future generations of the nation.

## **2. Feasibility Test of Dolanan Bocah Pinter (DOLPIN) Interactive Media Based on Local Wisdom in Strengthening the Profile of Pancasila Learners.**

The feasibility test of interactive media includes material experts, media experts and linguists. Material expert validation developed in a way; media experts try to operate the material used in media development. Interactive media that has been assessed by a team of experts provides an overview that

the product that has been developed provides an attractiveness that is feasible to use as a learning support (Zaini & Widodo, 2022).

The results of the material expert validation besides using a questionnaire were also carried out in direct consultation with the validator. The data from the material expert validation results showed that the instructional aspect consisting of 10 indicators, 8 indicators scored 4 (very good) and 3 indicators scored 2 (good). The total score of the instructional aspect is 38 with an average of 3,8 which is included in the "very good" criteria. The material aspect consisting of 11 indicators, 8 indicators scored 4 (very good) and 3 indicators scored 3 (good). The total score of the material aspect is 41 with an average of 3,7 which is included in the "very good" criteria. The presentation feasibility aspect consisting of 4 indicators, 3 indicators scored 4 (very good) and 1 indicator scored 3 (good). The total score of the material aspect is 15 with an average of 3,75 which is included in the "very good" criteria. Overall, the number of material expert assessments was 94 with an average of 3,76 in the "very good" category.

The results of the media expert validation in addition to using a questionnaire were also carried out in direct consultation with the validator. Furthermore, the results of media expert validation are used as material to improve the media (Sarip et al., 2022). This media expert validation consists of 3 aspects, namely: media display, media feasibility aspects, navigation aspects and additional aspects. The data from the media expert validation showed that the media display aspect consisting of 10 indicators, 8 indicators scored 4 (very good) and 3 indicators scored 2 (good). The total score of the instructional aspect is 38 with an average of 3.8 which is included in the "very good" criteria.

The media navigation aspect consisting of 5 indicators scored 4 (very good). The total score of the material aspect is 20 with an average of 4 which is included in the "very good" criteria. The media feasibility aspect consisting of 7 indicators, 6 indicators scored 4 (very good) and 1 indicator scored 3 (good). The total score of the material aspect is 27 with an average of 3.85 which is included in the "very good" criteria. Additional aspects of the media consisting of 3 indicators, 2 indicators scored 4 (very good) and 1 indicator scored 3 (good). The total score of the material aspect is 11 with an average of 3.86 which is included in the "very good" criteria. Overall, the number of material expert assessments is 96 with an average of 3.84 in the "very good" category.

The results of linguist validation in addition to using questionnaires were also carried out in direct consultations with validators. Furthermore, the results of linguist validation are used as material to improve the language used in local wisdom-based DOLPIN interactive media in strengthening the Pancasila learner profile of students covering 2 aspects, namely: language and typography aspects. Data from linguist validation results show that the instructional aspect consisting of 7 indicators, 3 indicators scored 4 (very good) and 4 indicators scored 3 (good). The total score of the instructional aspect is 24 with an average of 3.4 which is included in the "very good" criteria.

The typography aspect consists of 3 indicators that score 4 (very good). The total score of the material aspect is 12 with an average of 4 which is included in the "very good" criteria. Overall, the number of linguist assessments was 36 with an average of 3,6 in the "very good" category. Suggestions



for improvement by linguists are 1) the material menu has several words that do not match the rules of Indonesian spelling such as republic, and property. 2) the font used in the media is adjusted to the age of grade IV elementary school students, namely replaced with times new roman font. 3) learning outcomes are accommodated in every question in the exercise and evaluation menus.

The results of the validation of 3 material experts, media experts and linguists showed very good results. The development of DOLPIN interactive media is feasible to develop with revision notes. This revision note is based on the results of comments and suggestions from experts, the revised results are then used to improve the media so that it can be tested.

Learning media is very influential on the learning process of students. For this reason, after validation, DOLPIN interactive media is tested for readability. The readability test helps developers determine the parts that need to be improved and obtain clarity of information (Riefani, 2019). This readability test was conducted to find out whether this interactive media DOLPIN both in terms of learning, material and interest can be used to understand the material in it and can improve the character of the Pancasila student profile.

Based on the analysis of the questionnaire results, it shows that in the learning aspect which consists of 5 indicators, the average score is 3,3 (very good). This is because the learning aspects presented in the media have achieved the learning objectives, and the flow of learning objectives so that the learning explanation is easy for students to follow. The material aspect consists of 5 indicators obtained an average score of 3,35 (very good). This is because the material presented in the DOLPIN media is easy to understand, uses language and words that are appropriate for the age of students. The interest aspect consists of 5 indicators obtained an average score of 3,52 including in the very good category.

The presentation aspect consists of 5 indicators with the completeness and convenience of the media, so that it can generate interest in students to operate and as a supporter of the learning process while the average result obtained is 3,94 in the very good category. Using good video image illustrations according to the material, besides that the appearance of the application is also made as attractive as possible so that students are not bored when operating the media. The results of this readability test questionnaire test show that DOLPIN interactive media is a medium that is easily understood and accepted by students both in terms of learning, material and aspects of interest in the use of media.

The practicality of DOLPIN interactive media is related to the ease of use in the learning process. This practicality test consists of the practicality of teachers and students. This practicality questionnaire includes; 1) learning aspects, 2) material aspects, 3) aspects of interest. The results of the practicality analysis were obtained from the practicality questionnaire in the small-scale trial to the fourth-grade teacher and 31 fourth grade students at SDN Kemloko, Tembarak District, Temanggung Regency.

The results of the teacher practicality test show that the learning aspect includes five indicators related to the learning process. The average result obtained is 4 including in the very practical category. The material aspect includes five indicators related to Pancasila education learning materials that focus

on improving the character of the Pancasila student profile. The average result obtained is 3.8 including in the very practical category. The attraction aspect includes five indicators related to the completeness and convenience of the media, so that it can generate interest for students to operate and support the learning process. The average result obtained is 4 including in the very practical category.

The results of the practicality test for students in the learning aspect obtained were 3,3 including in the very practical category. The material aspect of the average obtained is 3,35 including in the very practical category. the average obtained is 3,52 including in the very practical category. Based on the assessment of the trial subjects, there were 28 students (90,3%) who obtained a very good category, 3 students obtained a practical category (9,6%). Overall, it can be obtained that the heterogeneity of the results of the small-scale test of DOLPIN interactive media is very practical, namely 3,39.

Based on the results of the practicality questionnaire analysis, it shows that this local wisdom-based DOLPIN interactive media is practical to use in learning Pancasila education and increasing the profile of Pancasila students in grade IV elementary school. Research from Chan et al. which shows that the level of practicality of interactive multimedia seen from the results of the students' questionnaire if it gets a very good category the media can be developed and can be used (Chan et al., 2019).

### **3. Test of the Effectiveness of Dolanan Bocah Pinter (DOLPIN) Interactive Media Based on Local Wisdom in Strengthening the Pancasila Learner Profile of Students**

DOLPIN interactive media that has been carried out validation tests and has carried out small-scale trials, then the next stage is tested on a wide scale. The broad trial is the implementation of the main trial conducted to measure the quality of whether or not the DOLPIN interactive media product based on local wisdom that has been developed. The implementation of this broad trial is expected to find out which parts do not need to be revised. This broad trial was conducted by 2 elementary schools, namely SDN Gandu and SDN Petarangan, which totalled around 70 students. This broad trial was randomly selected, so that the participants selected were students with different or heterogeneous abilities. The implementation of this broad-scale trial was carried out on 18 May to 10 June 2023, this broad-scale test was carried out to determine the effectiveness of DOLPIN interactive media for strengthening the profile of Pancasila students in Pancasila education subjects in grade IV SD. The effectiveness of DOLPIN interactive media includes classical completeness test and improvement test.

As for the trial procedure, it is no different from the readability test or small group test. Before the trial, the development adjusted to the class teacher's schedule when the delivery of material with the developed interactive media would be delivered. The trials in the two schools turned out to be carried out on different days, namely on the same week, Monday to Thursday.

This broad group trial was conducted in two schools with the assistance of the class teacher. The implementation time of this broad group trial was carried out as in the actual classroom situation. Grade IV students as test subjects were given directions about the purpose and objectives to be achieved. Furthermore, students were asked to conduct interactive learning in accordance with the developed media. The test subjects operated the media by listening, observing, studying, and completing tasks and

evaluation questions. After the learning is complete, students are asked to provide feedback and fill in the questionnaire sheet that has been provided.

a. Classical Trial

Classical trials are used to determine the completeness of students classically based on post-test scores. As for obtaining clear responses, the developer conducted interviews and questions and answers to several trial subjects by providing positive feedback on the DOLPIN interactive media developed. The results of this assessment are said to be complete if students have reached the learning achievement target of 75% of students who are complete. The results of the classical completeness test in this development research are two types, namely 1) the classical completeness test of the material achievement results, 2) the completeness test of the Pancasila learner profile character. the results of the classical test can be seen in Table 1 as for the complete calculation can be seen in the Appendix. The percentage of classical completeness test results of the Pancasila student profile character is 88% more than 75%. Thus the use of DOLPIN interactive media based on local wisdom in strengthening the profile of Pancasila students through Pancasila Education learning is said to be classically complete.

b. Improvement Test

The results of the improvement test with one group pre-test and post-test to determine the increase in the character of the Pancasila student profile of grade IV SD students before and after the use of DOLPIN interactive media based on local wisdom. The results of the improvement test in this development research are two types, namely 1) the test of improving the results of material achievement, 2) the test of improving the character of the Pancasila student profile. the results of the classical test can be seen in Table 1 and Table 2 as for the complete calculation can be seen in the Appendix.

**Table 1 Results of One Group Pre-Test and Post-Test Test of Material Achievement**

<i>Pre-Test</i>	<i>Post-Test</i>	<i>Maximum Score</i>	<i>One Group Pre-Test and Post-Test</i>
68,20	81,33	100	0.000

Based on Table 4. 21, it can be seen that the results of the one group pre-test and post-test output t test results, obtained a sig value = 0.000, which means it is smaller than  $\alpha$  0.05. Thus, Ho is rejected and Ha is accepted. Based on the results of descriptive analysis, the average value of students' pre-test = 68,2 and post-test = 81,33. Thus, it can be concluded that the use of DOLPIN interactive media based on local wisdom has a significant effect on increasing the achievement of the material "Negaraku Indonesiaku" and "Let's Build a Mutual Life Pattern" learning Pancasila Education.

**Table 2 Results of One Group Pre-test and Post-Test Test of Student Profile Character of Pancasila Education**

<i>Pre-Test</i>	<i>Post-Test</i>	<i>Maximum Score</i>	<i>One Group Pre-Test and Post-Test</i>
57,54	80,99	100	0.000

Based on Table 4. 21, it can be seen that the results of the one group pre-test and post-test output t test results, obtained a sig value = 0.000, which means it is smaller than  $\alpha$  0.05. Thus, Ho is rejected and Ha is accepted. Based on the results of descriptive analysis, the average value of students' pre-test

= 57,54 and post-test = 80,99. Thus, it can be concluded that the use of DOLPIN interactive media based on local wisdom has a significant effect on improving the character profile of Pancasila students.

Based on the results of the analysis, it can be seen that the use of DOLPIN interactive media based on local wisdom is effective in strengthening the profile of Pancasila students through Pancasila education learning in grade IV students. This is in accordance with the research of Zaini & Widodo Character-based interactive multimedia is effectively used in Civics learning in improving student learning outcomes (Zaini & Widodo, 2022).

#### 4. Teacher and Learner Responses to Local Wisdom-Based Dolanan Bocah Pinter (DOLPIN) Interactive Media in Strengthening the Pancasila Learner Profile of Learners

Teacher results relate to teacher responses as users of local wisdom-based DOLPIN interactive media related to aspects of content, language, interactive and local wisdom. The teacher response questionnaire has 10 questions given to 3 fourth grade teachers from SDN Kemloko, SDN Gandu and SDN Petarangan. The results of the teacher response questionnaire can be seen in Table 3. complete calculations can be seen in the Appendix.

**Table 3 Results of Teacher Response Questionnaire**

Learner's Score	Maximum Score	Result	Criteria
70	71	97,6%	Sangat Baik

Based on Table 3 above, it shows that the teacher's response to the development of DOLPIN interactive media based on local wisdom of 97,6% is included in the very good category. Learner results are related to teacher responses as users of local wisdom-based DOLPIN interactive media related to aspects of lessons, materials, and interactive presentation. The learner response questionnaire has 18 questions given to 3 grade IV teachers and 101 grade IV students from SDN Kemloko, SDN Gandu and SDN Petarangan. The results of the learner response questionnaire can be seen in Table 4 the full calculation can be seen in the Appendix.

**Table 4 Results of the Learner Response Questionnaire**

Skor Peserta Didik	Skor Maksimal	Hasil	Kriteria
65	69	90,4%	Sangat Baik

Learners' response to this local wisdom-based DOLPIN interactive media developed received a percentage of 90,4% with very good criteria. The score shows that DOLPIN interactive media attracts the attention of students in increasing the profile of Pancasila students through Pancasila Education learning.

The results of students' responses to each aspect of the content obtained results with very good criteria, namely getting a percentage of 81,8%. The acquisition of this score shows that DOLPIN interactive media is in accordance with the expectations and needs of students in learning Pancasila education. Learners' responses to aspects of the material obtained very good criteria, namely with a presentation of 88%. The acquisition of this score shows that the material presented in the DOLPIN interactive media is easy for students to understand in learning Pancasila Education, especially in improving the Pancasila Student Profile. The use of appropriate learning media can generate interest,

knowledge, attention and response from students so that the learning process can run well (Irawati et al., 2023). The learners' response to the interactive aspect is 96% which shows that DOLPIN media is not boring and makes learners interactive. The local wisdom aspect obtained very good criteria, namely 97%.

## E. CONCLUSION

DOLPIN interactive media design based on local wisdom Developed through stages: making flowcharts, media design which includes making storyboards, interface design, cover design, main page design, application exit page design. The feasibility test of interactive media which includes material experts, media experts and linguists with very good results. The results of increasing material achievement and increasing the character of the Pancasila learner profile through the one group pre-test and post-test output t test results, obtained a sig value = 0.000, which means it is smaller than  $\alpha$  0.05. Thus,  $H_0$  is rejected and  $H_a$  is accepted. The use of DOLPIN interactive media based on local wisdom has a significant effect on increasing material achievement and character profiles of Pancasila students. The teacher's response to the local wisdom-based DOLPIN interactive media for Islamic education consisting of aspects of content, material, interactive and local wisdom received a percentage of 97.6% with very good criteria. Learner responses consisting of aspects of content, material, interactive and local wisdom media get a percentage of 90.4% with very good criteria.

## DAFTAR PUSTAKA

- Agustina, Anisa Rachma; Ifadah, Luluk; Muanayah, N. A. (2022). Habituaasi Metode Lips Reading Pada Pembelajaran BTQ Bagi Santri Tunarungu di Pondok Pesantren Abata Temanggung. *AMORTI: Jurnal Studi Islam Interdisipliner*, 1(2), 92–102.
- Ardianta, S. (2022). Strategies for Utilizing Fiction Literature as an Antidote to Radical Islamic Understanding among Students of UIN KHAS Jember. *AMORTI: Jurnal Studi Islam Interdisipliner*, 1(2), 122–130.
- Ariyani, F. (2020). Values of character education in Nyirok tradition of Negara Batin customary community and its implications in the local wisdom and ethics education course. *2020*, 10(1), 38–46. <https://doi.org/https://doi: 10.23960/jpp.v10.i1.202005>
- Badan Standar, Kurikulum, dan Assesment Pendidikan Kementerian Pendidikan, Kebudayaan, Riset, dan T. T. I. (2022). *capaian Pembelajaran Mata Pelajaran Pendidikan Pancasila Fase A Fase F*. Badan Standar, Kurikulum, dan Assesment Pendidikan Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Terepublik Indonesia.
- Bardi, B., & Jailani, J. (2015). Development of Computer-Based Multimedia for Learning Mathematics for High School Students. *Jurnal Inovasi Teknologi Pendidikan*, 2(1), 49–63.
- Chan, F., Budiono, H., & Setiono, P. (2019). Pengembangan Multimedia Interaktif Berbasis Keterampilan Proses Dasar pada Materi Tumbuhan dan Bagian-bagiannya di Sekolah Dasar. *ELSE: Elementary School Education Journal*, 3(1), 9–17.
- Cherng, H. S., Hannum, E., Lu, C., Kong, P. A., & Yu, X. (2019). The Palgrave Handbook of Race and Ethnic Inequalities in Education. In *The Palgrave Handbook of Race and Ethnic Inequalities in Education*. <https://doi.org/10.1007/978-3-319-94724-2>
- Chowdhury, M. (2018). Emphasizing morals, values, ethics, and character education in science education and science teaching. *MOJES: Malaysian Online Journal of Educational Sciences*, 4(2), 1–16. <https://doi.org/doi: 10.19105/karsa.v19i1.78>
- Cogan, J., J., & Dericott, A. (2007). *Citizenship Education for the 21st Century. Setting the Contexts*. Kogan Page.
- Darwis, M. (2018). Paradigma Baru Pendidikan dalam Perspektif Pemikiran Paulo Freire. *Fitra*, 2(2), 62–68.

- Daryanto. (2013). *Media Pembelajaran peranannya Sangat Penting dalam Mencapai Tujuan Pembelajaran*. Gava Media.
- Deliany, N., Hidayat, A., & Nurhayati, Y. (2019). Penerapan Multimedia Interaktif untuk Meningkatkan Pemahaman Konsep IPA Peserta Didik di Sekolah Dasar. *Educare*, 17(2), 90–97.
- Didit Satya Prayogi, S. U., & Sumarmi. (2019). Internalisasi Kearifan Lokal Dalam Pembelajaran melalui Pengembangan Multimedia Interaktif Muatan Pembelajaran IPS. *Jurnal Pendidikan*, 4(11).
- Ginting, S. J. B. (2018). Media Pembelajaran Berbasis Kearifan Lokal pada Pembelajaran Bahasa Sastra Indonesia di SMP Negeri 1 Berastagi. *Prosiding Seminar Nasional Pendidikan Bahasa Dan Sastra Indonesia I*.
- Greipl, S., Moeller, K., & Ninaus, M. (2020). Potential and limits of game-based learning. *International Journal of Technology Enhanced Learning*, 12(4), 363–389. <https://doi.org/10.1504/IJTEL.2020.110047>
- Hafidz, H. N. (2021). IMPLEMENTASI TOTALQUALITY MANAGEMENT (TQM) DI MADRASAH IBTIDAIYAH DARUL HUDA YOGYAKARTA. *As-Sibyan*, 3(2), 37–50. [https://doi.org/10.52484/as\\_sibyan.v3i2.189](https://doi.org/10.52484/as_sibyan.v3i2.189)
- Hanif, M. (2020). The Development and effectiveness of motion graphic animation videos to improve primary school students' sciences learning outcomes. *International Journal of Instruction.*, 13(3), 247–266.
- Hasanah, A., Gustini, N., & Rohaniawati, D. (2016). Cultivating character education based on Sundanese culture local wisdom. *Jurnal Pendidikan Islam*, 2(2), 231–253. <https://doi.org/doi: :10.15575/jpi.v2i2.788>
- Hedegaard-Soerensen, L., & Penthin., S. (2020). Student-teacher dialogue for lesson planning: inclusion in the context of national policy and local culture. *Nordic Journal of Studies in Educational Policy*, 6(1), 25–36.
- Hidayah, Y., & Suyitno. (2021). Kajian Media Pembelajaran Berbasis Interaktif Untuk Memperkuat Profil. *Jurnal Pendidikan Kewarganegaraan*, 11(2), 22–30.
- Ho, W.-C. (2006). The Politics of Implementing Local Cultures in Music Education in Taiwan. *Research and Issues in Music Education*, 4(1), 1–14. <https://doi.org/https://commons.lib.jmu.edu/rime/vol4/iss1/4>
- Ho, W.-C. (2016). National identity in the Taiwanese system of music education. *In Patriotism and Nationalism in Music Education*, 59–76.
- Hongcheng, S., & Minhui, Q. (2010). The other in education: The distance between school education and local culture. *Chinese Education and Society*, 43(5), 47–61. <https://doi.org/10.2753/CED1061-1932430503>
- Husna Nashihin, Yenny Aulia Rachman, Betania Kartika, Nurmasinta Fadhilah, T. H. (2023). *Pendidikan TPQ Kontra Radikalisme berhaluan Aswaja* (M. D. Yahya (ed.)). Academia Publication.
- Husna Nashihin. (2017). *Pendidikan Akhlak Kontekstual*. CV. Pilar Nusantara. <https://books.google.co.id/books?id=UBWiDwAAQBAJ>
- Irawati, Nisa, K., & Jaelani, A. K. (2023). *Pengaruh Media Interaktif Animasi Terhadap Minat Belajar Muatan Pembelajaran PPKn Siswa*. 5(2).
- Julkifli. (2022). Kedudukan dan Tugas Manusia dalam Perspektif Tafsir al-Qur'an Zubdatu At- Tafsir Karya Muhammad Sulaiman Abdullah Al Asyqar. *AMORTI: Jurnal Studi Islam Interdisipliner*, 1(2), 103–110.
- Kamaruddin, S. A. (2012). Character education and students social behavior. *Journal of Education and Learning*, 6(4), 223–230. <https://doi.org/doi: 10.11591/edulearn.v6i4.166>
- Karakoç, B., Eryılmaz, K., Turan Özpolat, E., & Yıldırım, İ. (2022). The Effect of Game-Based Learning on Student Achievement: A Meta-Analysis Study. *Technology, Knowledge and Learning*, 27(1), 207–222. <https://doi.org/10.1007/s10758-020-09471-5>
- Kemendikbudristek. (2022). Buku Saku: Tanya Jawab Kurikulum Merdeka. *Kemendikbudristek*, 9–46.
- Kurniyawati, S. U., & Nugraheni, A. S. (2021). Pengembangan Media Pembelajaran Interaktif Berbasis Gawai Pada Pembelajaran Ppkn Kelas 3 Sd/ Mi Di Masa Pandemi Covid-19. *ELSE (Elementary School Education Journal) : Jurnal Pendidikan Dan Pembelajaran Sekolah Dasar*, 5(2), 159. <https://doi.org/10.30651/else.v5i2.7099>

- Laila, A., Budiningsih, C. A., Syamsi, K., & Info, A. (2021). *Textbooks based on local wisdom to improve reading and writing skills of elementary school students*. 10(3), 886–892. <https://doi.org/10.11591/ijere.v10i3.21683>
- Levy, S & Gamboa, F. (2013). *Quality Requirements For Multimedia Interactive and Applications*, (online).
- Lo, L.-I. . (2014). *Music education reform in Taiwan: beginning music teachers' perceptions of their teacher preparation at National Taiwan Normal University*. Boston, Massachusetts.
- Majir, A. (2020). *Paradigma Baru Manajemen Pendidikan Abad 21*. Deepublish.
- Mubiar, M., Mamat, N. Bin, & Syaodih, E. (2020). Exploring “Kaulinan Barudak” to Develop Children’s Character Values in Islamic Early Childhood Education. *Jurnal Pendidikan Islam*, 6(1), 13–26.
- Murwaningsih, T., Fadhilah, S. S., & Sholeh, A. R. (2020). The Implementation of Characters’ Values Through Local Wisdom of Sadranan in Elementary Schools. *International Journal of Multicultural and Multireligious Understanding*, 7(1), 450–458.
- Mutiara, A., Wagiran, W., & Pristiwati, R. (2022). Pengembangan Buku Pengayaan Elektronik Cerita Fabel Bermuatan Profil Pelajar Pancasila Elemen Gotong Royong Sebagai Media Literasi Membaca di Sekolah Dasar. *Jurnal Basicedu*, 6(2), 2419–2429. <https://doi.org/10.31004/basicedu.v6i2.2455>
- Nashihin, H. (2017). *Pendidikan Karakter Berbasis Budaya Pesantren*. Formaci. <https://books.google.co.id/books?id=X27IDwAAQBAJ>
- Nashihin, H. (2019a). *Analisis Wacana Kebijakan Pendidikan (Konsep dan Implementasi)*. CV. Pilar Nusantara. <https://books.google.co.id/books?id=SXcqEAAAQBAJ>
- Nashihin, H. (2019b). Character Internalization Based School Culture of Karangmloko 2 Elementary School. *Abjadia*, 3(1), 81–90. <https://doi.org/10.18860/abj.v3i2.6031>
- Nashihin, H. (2023). *Metode Penelitian (Kualitatif, Kuantitatif, Eksperimen, dan R&D)*. PT GLOBAL EKSEKUTIF TEKNOLOGI. [https://www.google.co.id/books/edition/Metode\\_Penelitian\\_Kualitatif\\_Kuantitatif/w-bFEAAAQBAJ?hl=id&gbpv=0](https://www.google.co.id/books/edition/Metode_Penelitian_Kualitatif_Kuantitatif/w-bFEAAAQBAJ?hl=id&gbpv=0)
- Noventari, W. (2020). Konsepsi Merdeka Belajar Dalam Sistem Among Menurut Pandangan Ki Hajar Dewantara. *Progresif: Jurnal Pemikiran Dan Penelitian Kewarganegaraan*, 15(1), 83. <https://doi.org/https://doi.org/10.20961/pknp.v15i1.44902>
- Pendidikan, K., Teknologi, D. A. N., Standar, B., & Pendidikan, D. A. N. A. (2006). Capaian Pembelajaran Kurikulum Merdeka. In *In Vitro Cellular and Developmental Biology--Animal* (Vol. 42, Issue ABSTRACT). [https://doi.org/10.1290/1543-706x\(2006\)42\[39-ab:p\]2.0.co;2](https://doi.org/10.1290/1543-706x(2006)42[39-ab:p]2.0.co;2)
- Pinge, H. D. (2017). Kearifan Lokal Dan Penerapannya Di Sekolah. *Jurnal Edukasi Sumba*, 1(2), 128–135.
- Pratama, N., Syafii, M., Qur, A.-, Arab, B., Arab, B., & Umar, S. (2022). Problematika Pembelajaran Mahasiswa Lulusan Sekolah Umum pada Program Studi Pendidikan Bahasa Arab di Sekolah Tinggi Ilmu Tarbiyah Madani Yogyakarta. *JIPSI: Jurnal Ilmu Pendidikan Dan Sains Islam Interdisipliner*, 1(2), 117–124.
- Ramdiah, S., Abidinsyah, A., Royani, M., Husamah, H., & Fauzi, A. (2020). South Kalimantan local wisdom-based biology learning model. *European Journal of Educational Research*, 9(2), 639–653. <https://doi.org/https://doi.org/10.12973/eu-jer.9.2.639>
- Riefani, M. K. (2019). Validitas dan Kepraktisan panduan Lapangan “Keragaman Burung” di Kawasan Pantai Desa Sungai Bakau. *Jurnal Vidya Karya*, 34(2), 193–204.
- Rofi Rudiawan, A. P. A. (2022). Peran Guru Pendidikan Pancasila Dan Kewarganegaraan dalam Penguatan Profil Pelajar Pancasila di Sekolah. *Jurnal Eduoedia Universitas Muhammadiyah Ponorogo*, 6(1).
- Safitri, A., Wulandari, D., & Herlambang, Y. T. (2022). Proyek Penguatan Profil Pelajar Pancasila: Sebuah Orientasi Baru Pendidikan dalam Meningkatkan Karakter Siswa Indonesia. *Jurnal Basicedu*, 6(4), 7076–7086. <https://doi.org/10.31004/basicedu.v6i4.3274>
- Sarioğlu, S., & GİrIn, S. (2020). The effect of using virtual reality in 6th grade science course the cell topic on students’ academic achievements and attitudes towards the course. *Journal of Turkish Science Education*, 17(1), 109–125.
- Sarip, M., Amintarti, S., & Utami, N. H. (2022). Validitas dan Keterbacaan Media Ajar E-Booklet untuk

- Siswa SMA/MA Materi Keanekaragaman Hayati. *JUPEIS: Jurnal Pendidikan Dan Ilmu Sosial*, 1(1), 43–59.
- Sarwadi, H. N. (2023). *Character Education between The Western Context and Islamic perspective*. 4(1), 1–12.
- Schlatte, T., & Levinson, D. (2013). *Visual Usability: Principles and Practices for Designing Digital Applications*. Elsevier.
- Sugiyono, R., & Purwastuti, L. A. (2017). Local wisdom-based character education model in elementary school in Bantul Yogyakarta Indonesia. *Sino-US English Teaching*, 14(5), 299–308. <https://doi.org/doi:10.17265/1539-8072/2017.05.003>
- Sugiyono. (2019a). *Metode Penelitian Pendidikan (Kuantitatif, Kualitatif, Kombinasi, R&B dan Penelitian Pendidikan)* (A. Nuryanto (ed.); 3rd ed.). Alfabeta.
- Sugiyono. (2019b). *Metode Penelitian Pendidikan (Pendekatan Kualitatif, kuantitatif, dan R&D)*. Alfabeta.
- suharsimi arikunto. (2019). *prosedur penelitian suatu pendekatan praktik*. PT. Rineka Cipta.
- Tilaar, H. A. . (2015). *Pedagogik Teoritis untuk Indonesia*. Buku Kompas.
- Toharudin, U., Kurniawan, I. S., & Fisher, D. (2021). Sundanese traditional game “Bebentengan” (Castle): Development of learning method based on sundanese local wisdom. *European Journal of Educational Research*, 10(1), 199–209. <https://doi.org/10.12973/EU-JER.10.1.199>
- Troussas, C., Krouska, A., & Sgouropoulou, C. (2020). Collaboration and fuzzy-modeled personalization for mobile game-based learning in higher education. *Computers and Education*, 144(February 2019), 103698. <https://doi.org/10.1016/j.compedu.2019.103698>
- Uge, S., & Neolaka, A. (2019). *Development of Social Studies Learning Model Based on Local Wisdom in Improving Students ' Knowledge and Social Attitude*. 12(3), 375–388.
- Wahab, R. (2016). *Psikologi Belajar*. PT RajaGrafindo Persada.
- Wardana, A., Ramadhan, M. R., Aznur, M., Putri, R. A., & Ikhwan, A. (2023). Media Pembelajaran Multimedia Interaktif Menggunakan Metode MDLC Pada Zoom Meetings. *Jurnal Hasi Penelitian Dan Pengkajian Ilmiah Eksakta*, 2(1), 25–29. <https://doi.org/Jurnal Hasi Penelitian Dan Pengkajian Ilmiah Eksakt>
- Zaini, F. M., & Widodo, S. T. (2022). *Multimedia Interaktif Articulate Storyline Berbasis Karakter Muatan Pembelajaran PPKn Kelas III Sekolah Dasar*. 11(1), 32–37.