



The Instructional Media Development of *Digital Pop-Up Book PowerPoint* in Islamic Religion Education and Character Subject at The Vocational High School

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Abstract

Pop-Up Book Digital is an electronic learning media developed from PowerPoint software. Pop-Up Book Digital is modeled into a digital media that when operated displays a 3-dimensional structure resembling a book. The digital Pop-Up Book PowerPoint media model is developed to address the low interest in learning and student interaction in Islamic Education (PAI) due to less engaging media. This product is also in line with the vision and mission of SMK 2 Pancasila Jember, which emphasizes character building, especially the value of tolerance, and supports teachers in presenting relevant learning media in the digital era.. Based on the results of the validation test and response test, this Pop-Up Book Digital product was declared very interesting, very practical and suitable for use as a learning medium. In this study, researchers developed a PowerPoint learning media product using the Pop-Up Book Digital model for Islamic Religious Education and Ethics subjects for class XI of SMK Negeri 2 Pancasila Jember. The type of research used is research and development (R&D) with the Planning, Production, Evaluation (PPE) stages developed by Richey and Klein. The validity test was carried out by three expert validators, namely, one expert validator for learning media and two expert validators for material. The product response test was carried out on PAI teachers and class XII Marketing students in 2024-2025. The results of the teacher response test obtained a score of 98%, while the small-scale student response test and the large-scale student response test obtained average scores of 86.60%, all categorized as "Very Good." The results of the expert validation test yielded an average score of 96.80%, both categorized as "Very Valid."

Keywords: Digital Pop-Up Book, Islamic Education, Instructional Media Development

Abstrak

Pop-Up Book Digital merupakan media pembelajaran elektronik yang dikembangkan dari perangkat lunak PowerPoint. Pop-Up Book Digital dimodelkan menjadi media digital yang ketika dioperasikan menampilkan struktur 3 dimensi menyerupai buku. Media digital model Pop-Up Book PowerPoint ini dikembangkan untuk mengatasi rendahnya minat belajar dan interaksi siswa pada mata pelajaran Pendidikan Agama Islam (PAI) akibat media yang kurang menarik. Produk ini juga sejalan dengan visi dan misi SMK Negeri 2 Pancasila Jember yang menitikberatkan pada pembentukan karakter, khususnya nilai toleransi, dan mendukung guru dalam menyajikan media pembelajaran yang relevan di era digital. Berdasarkan hasil uji validasi dan uji respon, produk Pop-Up Book Digital ini dinyatakan sangat menarik, sangat praktis dan layak digunakan sebagai media pembelajaran. Dalam penelitian ini, peneliti mengembangkan produk media pembelajaran PowerPoint dengan model Pop-Up Book Digital untuk mata pelajaran Pendidikan Agama Islam dan Etika kelas XI SMK Negeri 2 Pancasila Jember. Jenis penelitian yang digunakan adalah penelitian dan pengembangan (R&D) dengan tahapan Perencanaan, Produksi, Evaluasi (PPE) yang dikembangkan oleh Richey dan Klein. Uji validitas dilakukan oleh tiga validator ahli, yaitu satu validator ahli untuk media pembelajaran dan dua validator ahli untuk materi. Uji respons produk dilakukan terhadap guru PAI dan siswa kelas XII Pemasaran tahun 2024-2025. Hasil uji respons guru memperoleh skor 98%, sedangkan uji respons siswa skala kecil dan uji respons siswa skala besar memperoleh skor rata-rata 86,60%, semuanya berkategori "Sangat Baik". Hasil uji validasi ahli menghasilkan skor rata-rata 96,80%, keduanya berkategori "Sangat Valid".

Kata Kunci: Buku Pop-Up Digital, Pendidikan Islam, Pengembangan Media Pembelajaran

Introduction

Education can be said to be the result of reasoning and feeling about how natural events can be known and can become lessons for every faithful and knowledgeable human being. Indeed, Islam has taught humanity to always use reason in doing everything. Moreover, by using reason, it is possible to create a civilization of knowledge through the development of knowledge that is entirely digital for the benefit of the community in today's era.

The utilization of technology in the context of education can be applied in the development of digital-based media. As stipulated in the Government Regulation of the Republic of Indonesia Number 19 of 2005 concerning National Education Standards, every educational unit is required

to use adequate educational media. In the standards for the basic and secondary education process, teachers are encouraged to use learning media.

Starting from the Islamic values that emphasize the importance of reason and knowledge in building civilization, the utilization of digital technology in education becomes a strategic step to address the challenges of contemporary learning. This is increasingly relevant when the learning media used have not been able to attract students' interest, especially in understanding noble values such as tolerance, thus requiring innovations in media that not only align with the principles of Islamic scholarship but also effectively enhance the quality of learning in the digital era.

The subjects included in this learning media development product are Islamic Religious Education and Character Education (PAI and BP) for grade XI of Pancasila 2 Vocational High School (SMK) Jember. The content used in this product development is material about tolerance with the title of the chapter "Cultivating Tolerance to Reconcile the Nation". One of the considerations researchers chose tolerance material is that the vision and mission carried by Pancasila 2 Vocational High School Jember are in alignment.

SMK 2 Pancasila is one of the private vocational high schools located at Jalan Lumba-lumba Number 9, Sempusari, Kaliwates District, Jember Regency, East Java Province, Indonesia. The goals of SMK 2 Pancasila Jember are aligned with the development of this learning media, which is outlined in points one and two as follows: (1) to improve educational and teaching facilities and to create a learning atmosphere using Information and Communication Technology (ICT) that refers to student independence, (2) to realize the school as a stronghold of the nation's morality and to shape the profile of Pancasila students. Meanwhile, the choice of Digital Pop-Up Book media is based on various reasons, including making it easier for students to understand the material, increasing interest in learning, and contributing to the mission it carries.

In reality, based on the results of the initial observation data conducted by the researcher in the Islamic Education and Character Education learning process at SMK 2 Pancasila Jember for the 2023-2024 academic year, the media used consisted only of whiteboards and

PowerPoint text. The inappropriate use of media results in a lack of interaction between teachers and students. Another issue shows that most students have a low interest in learning during the process. Students rarely ask questions after the material is presented. It is common for students to joke around during class. Therefore, engaging media is necessary, especially media that can attract students' interest in understanding the learning material.

The researchers conducted a needs analysis for PAI teachers in grade XI and a needs analysis for students involving 18 students. The results showed that in practice, teachers face various challenges such as a lack of training in the development of teaching media and limited time to create teaching media that meets the needs of students. In the student needs analysis, a total of 94.44% of students felt bored when learning only used teaching materials in the form of textbooks. 94.44% needed engaging teaching media for the subjects of PAI and BP on the topic of tolerance. 83.32% of students were interested and pleased when engaging teaching media was presented, which was also reflected in the total percentage of 100% of students strongly agreeing that teaching media for PAI and BP on the topic of tolerance should be developed and presented.¹

Based on the results of this study, it aims to develop digital pop-up book model PowerPoint learning media for the subject of Islamic Education and Moral Character for the XI grade of SMK 2 Pancasila Jember, specifically on the topic of tolerance, in order to increase student learning interest, strengthen interaction in the learning process, and provide engaging media that aligns with the developments in digital technology. This media is expected to support the school's vision and mission in shaping students' character to be ethical and uphold national values.

Method

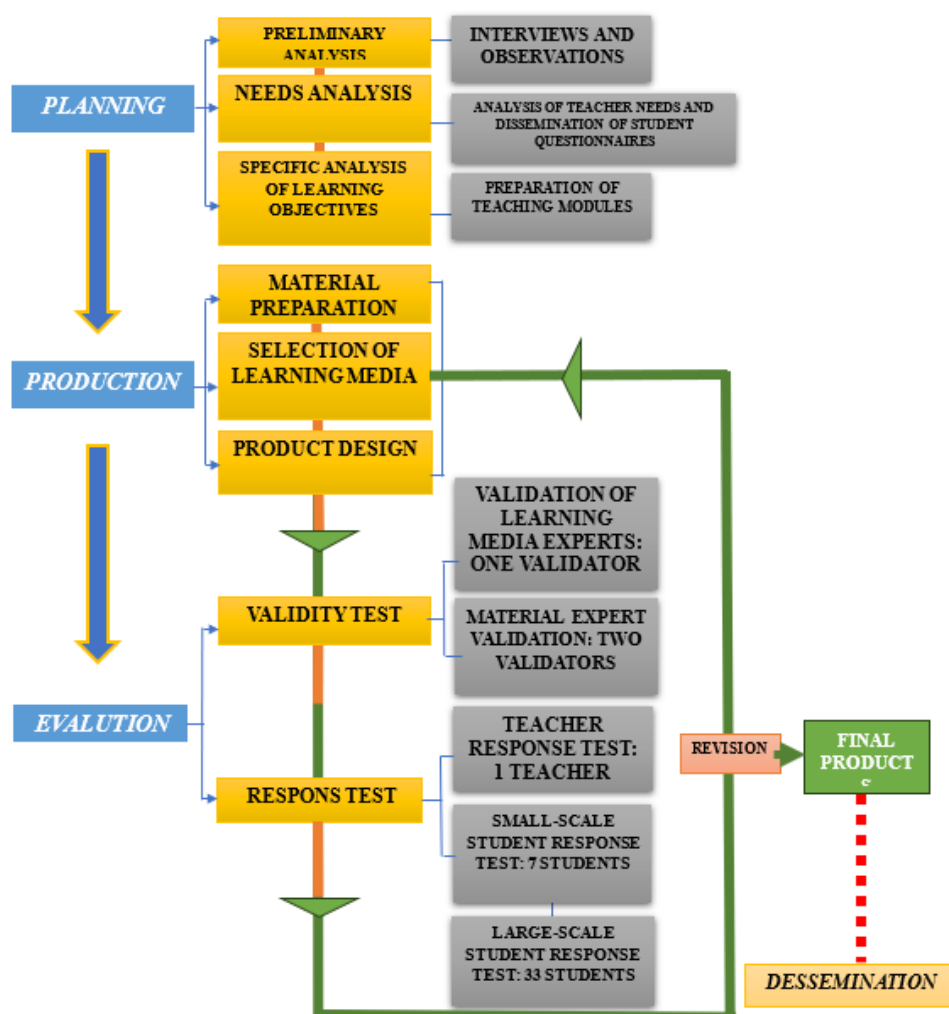
This research uses research and development type or Research and Development (R&D). Research and development is a process of investigating

¹ Gita Magfiroh, Hasil Analisis Kebutuhan Siswa di SMK 2 Pancasila Jember, 14 Juni 2024.

a field of science implemented with systematic principles and developed step by step until it is feasible for use. The model used is the PPE model from Richey and Klein. The PPE model (Planning, Production, Evaluation) from Richey & Klein was chosen because it is simpler and more flexible compared to other R&D models, which have more complex and lengthy stages. The PPE model allows researchers to focus directly on planning, product development, and the systematic evaluation of the effectiveness of learning media, making it more suitable for practical needs in school environments and the time constraints of research. This approach is also relevant for producing ready-to-use products that are easily adaptable by teachers. In addition to producing products, this method can also be used with the aim of improving existing products. This research produces a product in the form of a PowerPoint learning media model Pop-Up Book Digital on the topic of tolerance. This research can be used in the subjects of PAI and BP in class XI at SMK 2 Pancasila Jember.

The stages of product development used in this study are the PPE stages. The PPE development stages were developed by Richey and Klein. Below is the Adaptation Chart of the PPE Stages

Chart 1. Adaptation Chart of PPE Phase Development Flow



The PPE stages are the stages of product development that focus on analysis from start to finish. The PPE stage includes: (1) Planning Stage covers Initial Analysis, Needs Analysis, Analysis of Learning Objectives Specifications (2) Production Stage includes, preparing Materials, Selecting Learning Media, Product Design Stage. (3) Evaluation Stage includes, Validity Testing conducted by expert validators, namely Lecturers from UIN Kiai Haji Achmad Siddiq Jember. The criteria for selecting expert media

validators are that they must be lecturers with at least a master's degree (S2) who understand and are experts in the field of learning media and have taught the course on Learning Media Production or Learning Media Development. Similarly, for content expert validators, they should be lecturers from the PAI Study Program with at least a master's degree (S2) who understand the indicators and the content of PAI, especially the material on tolerance. Teacher response testing conducted on PAI and BP teachers of class XI at SMK 2 Pancasila Jember, small-scale student response testing conducted on 7 students from the Marketing class of the 2024-2025 academic year, and large-scale student response testing conducted on 33 students from the Marketing class of the 2024-2025 academic year to assess the practicality of the developed product. Product testing is conducted by distributing assessment questionnaires using a Likert scale.

Data analysis was carried out to determine the level of validity and feasibility of the media developed. The sheet given is a sheet using a likert scale

Table 1. Assessment Scale of Validity Test and Response Test

Score	Information
1	Very inappropriate
2	Not right
3	Quite right
4	True
5	Very appropriate

Data analysis techniques include analysis of students' initial needs data, expert validation analysis, teacher response analysis, and student response analysis. This analysis is conducted by testing the product through experts. The purpose of the data analysis is to identify the weaknesses and shortcomings of the product being tested. The implementation involves the researcher creating questionnaires for needs assessment, validation, and responses. Then, the validators and respondents fill out the questionnaire by providing a checklist assessment in the available columns.

The assessment formula is by summing, the number of values obtained divided by the maximum number of values multiplied by 100%. The percentage of results is obtained by summing the following:²

$$V = \frac{TES}{TMES} \times 100$$

Information:

V = Validity

TSE = Total Empiric Score

TSH = Total Maximal Expected Score

The results of obtaining a score based on the formula are then adjusted to the following validity criteria:

Table 2. Acquisition Value Criteria

Nu.	Criteria for Achievement of Values	Rate of Results
1	86% – 100%	Excellent to use
2	71% – 85%	Well, can be used with minor revisions
3	56% - 70%	Good enough, can be used with major revisions
4	41% – 55%	Not Good, cannot be used.
5	25% – 40%	Not Good, Not Usable

Result And Discussion

Product Validity Test Results Data

1. Validation of Learning Media Experts

Validation of Learning Media Experts is carried out by competent PAI lecturers in the development of learning media. Learning media experts conduct tests by observing and analyzing the relevance aspects, quality aspects, and presentation aspects. The validation expert questionnaire instrument contains 16 items of questions answered by marking a check in the Likert scale score column of 1-5. The results of the validation by learning media experts indicate that the percentage value is 93.75%. This result shows

² Ana Tri W., "Pengembangan Media Pembelajaran Rolling Ball Pada Pembelajaran Tematik Kelas V Madrasah Ibtidaiyah Miftahul Huda Sukoreno Umbulsari Jember" (Skripsi, Jember, Universitas Islam Negeri Kiai Haji Achmad Siddiq, 2023).

that the learning media in the Digital Pop-Up Book product is categorized as 'Very Valid' because it falls within the validation criteria range of 86% - 100%. Thus, it can be concluded that the learning media can be used by teachers and students in the learning process.

Based on the results of the learning media validation, it explains that the development of Digital Pop-Up Book learning media is relevant to the current digital era. In fact, the comparison can be seen as very significant; the Pop-Up Book, which is usually found in physical form, can be developed into digital format. The Digital Pop-Up Book media is in line with the existing learning objectives. According to Sapriyah, an educator must be skilled in adjusting the use of learning media in order to achieve the learning objectives.³

2. Validation by Subject Matter Experts

Validation by Subject Matter Experts was conducted by two qualified PAI lecturers who are proficient in the subjects of PAI and BP on the topic of Tolerance and are experts in the development of PAI and BP curricula. The Subject Matter Experts conducted tests by observing and analyzing aspects of relevance, material accuracy, and material presentation. The expert validation questionnaire instrument contained 12 questions that were answered by marking checkboxes in the 1-5 Likert scale rating columns. The results of the validation by the learning media expert revealed that the percentage result from the first validator showed a score of 100% and the percentage result from the second validator showed 96.66%. This result indicates that the learning media in the Digital Pop-Up Book product is categorized as 'Very Valid' because it falls within the validation criteria range of 86%-100%. Thus, it can be concluded that the learning media can be used by teachers and students in the learning process.

The data results indicate that the three aspects of the score achieved a value of 100% on the first material expert validity test and received a value of 96.66% on the second material expert validity test. This assessment was made

³ Supriyah, "Media Pembelajaran Dalam Proses Belajar Mengajar," *Prosiding Seminar Nasional Pendidikan FKIP* 2, no. 1 (2019): 470–77, <https://jurnal.untirta.ac.id/index.php/psnp/article/view/5798/4151>.

without any interpretation from the developers. The achievement of the obtained scores resulted in a total average overall assessment from both material expert validators of 98.33% and falls within the validity criteria of 'Very Valid'.

According to material experts, the developed learning media products have met the curriculum demands, the accuracy of the material is appropriate, and the concepts have been presented in a logical order as per the existing curriculum. In terms of material accuracy, the developed media has been accurate in accordance with the provided teaching materials. Both material expert validators agree on the presentation aspect of the material. The material is presented simply but is easy to understand. The presentation of concise yet solid material aligns with one of the elements of PowerPoint.

In the results of the first expert validity test of the digital Pop-Up Book learning media, a perfect score was obtained. Therefore, based on the perfect score of the expert validity results, the researcher took action by conducting a second expert validity test with a different expert validator. The second expert validity test was carried out to strengthen the data results from the first expert validity. In addition, the second expert validity test was conducted so that the developed media would receive further improvement suggestions related to the presentation of the material.

According to the material expert, the second Digital Pop-Up Book developed needs revisions in terms of the presentation of materials regarding the accuracy of terms and the presentation aspect. Thus, during the validation instrument by the second material expert, comments and suggestions emerged. The validator expert commented on the sub-material concerning various types of tolerance and the lack of explanations for the images. The first suggestion from the second material validator is to add examples of various types of tolerance, both examples of tolerance among different religions and examples of tolerance among followers of the same religion. The second suggestion from the second validator is that if there are images that require explanations, it is better to provide captions except for the brainstorming slide.

Table 3. Validity Results by Expert Validators

Nu.	Validators	Percentage	Criteria	Total Percentage
1.	Learning Media Specialist	93,75%	Very Valid	96,80%
2.	First Subject Matter Expert	100%	Very Valid	
3.	Second Subject Matter Expert	96,66%	Very Valid	

The average percentage score obtained from the validators is 96.80%. Based on the average score obtained and matched with the validity criteria of the Pop-Up Book Digital learning media products, it falls within the range of 86% - 100% and is classified in the 'Very Valid' category. Therefore, the Pop-Up Book Digital learning media developed by the researcher is suitable for use and can proceed to the stage of student response testing.

Product Response Test Result Data

1. The teacher response test

The teacher response test was conducted by PAI teachers of grades XI and XII at SMK 2 Pancasila Jember. PAI teachers carried out the response test by observing and analyzing material aspects, language aspects, media design aspects, and aspects of usefulness and ease of use. The teacher response questionnaire instrument contains 20 items of questions that are answered by marking a check in the rating column of the Likert scale 1-5. The questionnaire is designed systematically based on indicators of the needs and effectiveness of learning media, considering aspects of student interest in learning, involvement in the learning process, as well as the visual appeal and interactivity of the media.

The results of the teacher response test showed that the percentage result indicated a value of 98%. The results showed that the educational media in the Digital Pop-Up Book product is categorized as 'Very Interesting, Very Practical, Worth Using,' because it falls within the validation criteria range of 86% - 100%. Therefore, it can be concluded that the educational media can be used by teachers and students in the learning process.

The results of the data collection show that the four aspects of the score received a total value of 98%. This assessment was made without any

interpretation from the developers. According to the PAI teacher, the developed learning media is very good and very interesting. The assessment from the content aspect got a score of 93.33%. The material presented is simple and relevant to the learning objectives. However, it is considered lacking in terms of content. The teacher desires additional material on the boundaries of tolerance between religions in terms of ideology. In the language aspect, according to the teacher's response, the explanations or information presented are brief, concise, and not verbose. In terms of media design, the developed PowerPoint contains attractive innovations that can serve as an example in the development of PowerPoint media for other teachers. Regarding its usage, the teacher finds it very easy to use. Additionally, the explanation is brief, concise, and not verbose.

Table 4. Teacher Response Test Results

Nu.	Assessed Aspects	Score
1.	Material	28
2.	Language	35
3.	Media Design	20
4.	Benefits and Ease of Use	15
Total Score		98
Total Maximum Score		100
Presentase (%)		98%

The results of the teacher response test show that the percentage result is 98%. The results from table 4.8 show that the learning media in the Digital Pop-Up Book product is categorized as "Very Interesting, Very Practical, Can Be Used," because it falls within the validation criteria range of 86% - 100%. Therefore, it can be concluded that the learning media can be used by teachers and students in the learning process.

2. Small-scale student response test

The results of the small-scale student response questionnaire showed an average score percentage of 86.90%. This score can be categorized as 'Very Interesting, Very Practical, Acceptable for Use,' because it falls within the validity criteria range of '86%-100%'.

Table 5. Results of the Combined Score of the Small-Scale Student Response

Test					
Number	Aspects	Question Nu.	Total Score	Presentase	Category
	Material	1	2	80%	Interesting
		8			
		2	3	88,57	Very Interesting
		1	%		
		3	3	94,28	Very Interesting
		3	%		
	Media Appeal	4	3	94,28	Very Interesting
		3	%		
		5	2	77,14	Interesting
		7	%		
		6	2	74,28	Interesting
		6	%		
		7	3	88,57	Very Interesting
		1	%		
		8	3	94,28	Very Interesting
		3	%		
		9	2	74,28	Interesting
		6	%		
	Benefits and Ease of Use	1	3	94,28	Very Interesting
		0	3	%	
		1	3	88,57	Very Interesting
		1	1	%	
		1	3	94,28	Very Interesting
		2	3	%	
Total Score		1	3		
		2	65		
Average		1	3	86,9%	Sangat Menarik
Percentage		2	0,4		

Thus, the digital pop-up book learning media can be tested for broader response or large-scale student response with several revisions.

Documentation 1. Small-Scale Response Test



3. Large-Scale Student Response Test

A large-scale student response test was carried out to obtain interesting data from the Digital Pop-Up Book learning media product which was carried out in a wider test. The results of the large-scale student response test questionnaire on students were obtained with a percentage with a score of 92.32%. The acquisition of these scores can be categorized as "Very Attractive, Very Practical, Usable", because it is in the range of the value criteria of "86%-100%". So that the Digital Pop-Up Book learning media product can be disseminated and used in the learning process of PAI and BP at VHS 2 Pancasila Jember as a learning medium for class XI tolerance material.

The total result of the overall score was obtained with an average percentage of 92.31%. The data analysis with these acquisitions is included in the category of "Very Interesting, Very Practical, Usable" because it is vulnerable to "86% - 100%". That the value of the material coverage aspect obtained a total score of 463. The value is obtained from three aspects: the aspect of material attractiveness, the aspect of media, and the aspect of benefits and ease of use. If the value is changed in the form of a percentage, the average score will be 93.53%.

The following are the results of the combined scores of large-scale student response tests:

Table 6. Results of the Combined Score of the Large-Scale Student Response Test

Number	Aspects	Question Nu.	Total Score	Presentase	Category	
1	Material	1	54	1 %	93	Very Interesting
		2	50	1 %	91	Very Interesting
		3	59	1 %	96	Very Interesting
2	Media Appeal	4	52	1 %	92	Very Interesting
		5	54	1 %	93	Very Interesting
		6	43	1 %	87	Very Interesting
		7	55	1 %	94	Very Interesting
		8	52	1 %	92	Very Interesting
		9	53	1 %	93	Very Interesting
3	Benefits and Ease of Use	10	53	1 %	93	Very Interesting
		11	56	1 %	95	Very Interesting
		12	47	1 %	89	Very Interesting
		13	47	1 %	89	Very Interesting
Total Score		14	828	1 %	92,3%	Very Interesting
Average Percentage						

The results of the large-scale student response test questionnaire on students were obtained with a percentage with a score of 92.32%. The acquisition of these scores can be categorized as "Very Attractive, Very Practical, Usable", because it is in the range of the value criteria of "86%-

100%". So that the Digital Pop-Up Book learning media product can be disseminated and used in the learning process of PAI and BP at VHS 2 Pancasila Jember as a learning medium for class XI tolerance material.



Documentation 2. Large-Scale Student Response Test

The PowerPoint Learning Media product in the Digital Pop-Up Book model developed by the researcher can be accessed through the link. <https://drive.google.com/drive/folders/1339jdfC7vqTwgVRyBFGgxO1K1IAAbRK>



Document 5.1 Final Product QR Code Development

In the media aspect, it was developed using Microsoft PowerPoint 2019 and Canva applications. The Digital Pop-Up Book contains a cover,

instructions for use, a menu, an introduction, prompt 1, a video of Quran Surah Yunus/10: 40-41, the meaning of tolerance, prompt 2, types of tolerance, stories of the Prophets, interactive dialogue, prompt 3, the wisdom of being tolerant, emphasis, brainstorming, additional materials, conclusion, and back cover. The selection of images, illustrations, and animations is tailored to the educational level and its relevance to the material. Original images based on student needs analysis are also presented to enable students to apply tolerance in daily life. Moreover, the presence of original images can help students understand the material better. This aligns with the opinion of Indrianto and Kurniawati that original images presented in teaching media aim to make it more real and easier for students to understand.⁴

The material aspects are developed based on the teacher's book and the student book of the Merdeka Curriculum by the Ministry of Education, Culture, Research, and Technology, the Standards Agency, the Curriculum, and the Assessment of Education Pusat Perbukuan in collaboration with the Ministry of Religious Affairs of the Republic of Indonesia in 2021.⁵ In addition, the material is arranged based on the analysis of the needs of teachers and students. According to the first material expert, the Digital Pop-Up Book developed based on the results of the media learning validation assessment is suitable without any revision in terms of material presentation. However, according to the second material expert, the developed Digital Pop-Up Book is suitable for use with revisions. According to Torang Siregar, the product revision stage is carried out if there are deficiencies that need to be corrected.⁶

⁴ Nino Indrianto dan Kurniawati, "Pengembangan Media Pop-Up Book Untuk Meningkatkan Hasil Belajar Tema Peristiwa Alam Siswa Kelas I MIN 4 Jember," *Jurnal Pendidikan Dasar Nusantara* 5, no. 2 (Januari 2020): 287–88, <http://ojs.unpkediri.ac.id/pgsd>.

⁵ Abd. Rahman dan Herry Nugroho, *Pendidikan Agama Islam dan Budi Pekerti* (Jakarta: Kurikulum Merdeka Kementerian Pendidikan, Kebudayaan, Riset, Dan Teknologi Badan Standar, Kurikulum, Dan Asesmen Pendidikan Pusat Perbukuan yang bekerjasama dengan Kementerian Agama Republik Indonesia, 2021).

⁶ Torang Siregar, "Stages of Research and Development Model Research and Development (R&D)," *Jurnal of Education, Social Sciences & Humanities DIROSAT* 1, no. 4 (2023): 48, <https://doi.org/10.58355/dirosat.v1i4.48>.

Conclusion

Digital Pop-Up Book has gone through research and development procedures. Based on the validity test and response test data obtained, some comments and suggestions were found for product improvement. Therefore, the researcher has made revisions to produce a better final development product. Consequently, the final product can be used appropriately in the learning process.

In the validation of the assessment by learning media experts, three aspects were evaluated: the relevance aspect, the quality aspect, and the appearance aspect, which received a score with a percentage of 93.75% with the criterion of 'Very Valid'. The results of the first material expert's validation yielded a percentage of 100%. The results from the second material expert validator produced an average percentage of 96.66%. Based on the validity tests from the two material expert validators on the relevance aspect, the accuracy of the material, and the presentation of the material, an average score of 98.33% was achieved, with the criterion of 'Very Valid'. The assessment results from the three validators resulted in an average percentage of 96.80% and met the 'Very Valid' criteria. In conclusion, based on these results, the Digital Pop-Up Book learning media can be categorized as suitable for use in the learning process by teachers and students.

The results of data collection from teacher responses based on assessments of the scope of material aspects, language aspects, media design aspects, and aspects of usefulness and ease of use. The teacher response test received a total score of 98 with a percentage of 98%. Based on the score obtained, the teacher response test meets the assessment criteria of 'Very Interesting, Very Practical, Can Be Used'.

The students' responses were provided based on the aspects of material, media attractiveness, and the benefits and ease of operating the PowerPoint Pop-Up Book Digital learning media. In the small-scale student response test, a total score of 365 was obtained or with a percentage of 1.041%, and an average result of 86.90% which meets the criteria of 'Very Interesting, Very Practical, Can Be Used.' In the large-scale student response test, responses were given based on aspects of material, media attractiveness, and benefits as well as ease of use. In the large-scale student response test, a total

score of 1,828 was obtained or with a percentage of 1.108%, and an average result of 92.32% which meets the criteria of 'Very Interesting, Very Practical, Can Be Used.' Thus, it can be categorized that the PowerPoint Pop-Up Book Digital learning media developed by the researcher is 'Very Interesting' and suitable for the learning process.

The development of PowerPoint media in the form of a Digital Pop-Up Book model in the learning process at SMK 2 Pancasila Jember received good responses. The PAI and BP teachers were pleased with the introduction of interesting learning media. This can enhance a pleasurable learning experience for students. The use of this learning media can be accessed independently, thus attracting students to think independently and actively understand the material on tolerance. According to most students, they find it easier to understand the material presented in the PowerPoint learning media in the Digital Pop-Up Book model. The presentation of slides containing many images and various designs adds to the attractiveness of student learning.

This research successfully developed a PowerPoint learning media model of Digital Pop-Up Book that is effective and engaging to enhance student interest in learning about tolerance in the subject of Islamic Education and Character Education for class XI at SMK 2 Pancasila Jember. This media has proven capable of increasing learning interaction and is in line with the needs of students in the digital era. For further development, it is recommended to enhance the interactivity aspects of the media, for example by adding audio elements, animations, or interactive quizzes to make it more engaging. Further research could also test the effectiveness of this media on other materials in Islamic Education and Character Education or in different educational levels. Additionally, other teachers can implement this Digital Pop-Up Book model by adjusting the content to fit the characteristics of the students and the curriculum while attending simple training so they can independently develop similar media.

After going through the data analysis process on the development of the Digital Pop-Up Book learning media, it can be concluded that the product has both advantages and disadvantages as a learning medium. The advantages of the product include the material, where the tolerance material

taught using the Digital Pop-Up Book PowerPoint learning media is easier to understand. In terms of attractiveness, the digital pop-up book features colors and images that can capture students' attention. There are images, backgrounds, audio, videos, and layouts that are presented in an engaging manner with imagery and text that are not monotonous. It also includes images that illustrate examples of tolerance, making it easier for students to relate their learning to everyday life. The transition settings that open like a three-dimensional structure add a unique and interesting impression compared to ordinary PowerPoints. In addition to the advantages found in Digital Pop-Up Books, there are also some drawbacks, including typographical errors in the text, background choices that make the three-dimensional effect less visible, various image elements, videos, audio, and other elements, which require a large amount of storage space.

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