# Solo Bridal Make-up e-Book on 'My Paes Go Application' for Online Learning

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**Abstract.** During the pandemic season, all learning activities are carried out online. Online learning for practical courses poses several obstacles for lecturers/instructors and students (beginners to make-up). One of the obstacles experienced by beginner make-up artists in learning Solo bridal make-up in the pandemic season includes making paes and learning resources. This study combined e-books and tools to make paes in one application. This study aimed to see the validity of the e-book for female Solo bridal make-up. The education book assessment indicators consist of covers, basic competencies and objectives, materials, graphics, language, evaluation tools, and references. The validation process was carried out through Forum Group Discussion (FGD) activities. The results showed that the solo bridal make-up e-book was declared suitable for use with an average of 88.3 in the very feasible category.

Keywords: E-Book, Learning Media, Solo Bridal Make-up.

## **1** Introduction

The development of technology in the digital era is currently growing rapidly. As a result of the digital challenges, the education sector must adapt quickly and develop innovative actions. The developments in the digital world play as both a challenge and motivation in education. This technology can bring changes to the world of teaching. Even under certain conditions, technology-based learning media can help lecturers in teaching.

During this pandemic, all learning activities are carried out online. Online learning for practical courses poses several obstacles both lecturers/instructors and students face. This makes lecturers/instructors who support practical courses creative so that learning can take place well and minimize existing deficiencies or obstacles. There is one material in the Javanese bridal make-up course, namely Solo bridal make-up. The obstacles for students in this material are making *paes* and learning resources.

The first obstacle is making *paes* that are always experienced by students who are just learning *maes* (the paes making process). Making *paes* takes accuracy, experience, and feeling. So this is difficult for students who just learn Solo bridal make-up a few times through online learning only. The shape of the *paes* is very influential on the final result because if the shape is disproportionate, then the bride will look weird. The problems novice make-up artists face in making Solo bridal *paes* are labor-consuming, untidy and disproportionate shape, imprecise direction of the *paes* falling, and asymmetrical paes.

The second problem is learning resources. During this pandemic season, students learn Solo bridal make-up through YouTube. As is well known, not every student is in the same financial condition. Students who are less fortunate financially but should learn from YouTube need to buy a data plan, which many students object to as for buying books since the high price.

The researchers combined e-books and tools for making *paes* in one application to overcome this issue. An e-book was developed, which included in a *paes* go application. The *paes* go application is an Augmented Reality (AR) based application that students can use in making *paes*. From the research results, using AR as a learning medium can increase students' motivation and attention in learning [1] [2]. AR learning media is a face recognition application that combines biometric face recognition and Face Detection. Facial recognition technology applications are now cost-effective, reliable, and highly accurate [3]. The reported average face detection accuracy was 89.0%, and the processing time was about 5.56 seconds [4].

The advantage of this application is that students can quickly make *paes* in a proportional form while equipped with e-books that can be used as a student resource. They can read a Solo bridal make-up book without consuming data plan, credit, and smartphone memory. Later, the application would be embedded in the smartphone to make it easier and more flexible. This application can reduce the burden of lecturers in online learning and increase student independence in learning. Therefore, this study aimed to examine the validity of the e-book on the *My Paes Go* application.

## 2 Digital books and smart phones

E-books are electronic texts that can be read on electronic screens such as computers, laptops, smartphones, etc. E-books use various file formats and incorporate other features, such as annotations, audio and video, and hyperlinks. Moreover, e-books can be added with links to external sources and include comments and chat tools that allow interaction between readers. Some e-book products are tied to software to read them, and some provide e-books in formats, such as HTML [5]. E-books offer several benefits for readers, including audio, video, and simulation features that facilitate a deeper understanding of the subject matter. It provides opportunities for students to improve their understanding of the subject matter rather than just reading the text. In addition, the function of e-books can be applied to express the meaning of various tools, and readers can experience and interact with the content of the e-book itself. E-books encourage readers to be active and independent in learning and free them to make decisions through the text (Educause Learning Initiative, 2005). Android is an Operating System (OS) or operating system that has been very popular lately. It is undeniable that this operating system has taken a lot of attention from the world community and the Indonesian people of course. Gadget and cellular phone companies compete to make devices using the Android

operating system. Therefore, new gadgets on the market that use the operating system made by Google seem to be released constantly. In this study, students can download the bridal make-up e-book through the My Paes Go application found in the Playstore. My Paes Go is an AR-based application that can be used to make it easier to make paes. The e-book display on the My Pay Go application is shown in **Figures 1**, **Figure 2** and **Figure 3** [6].



Fig. 1. My paes go available on playstore.

# 3 Solo bridal make-up

Make-up is a branch of art, namely the art of bridal make-up or *paes* art. All make-up, clothing and traditional ceremonies have artistic value or prioritize aesthetics. Solo bridal make-up has aesthetic value because it has aesthetic characteristics. According to Beardsley [7], aesthetic value has the following characteristics: (1) unity, the object has a perfect shape and is well structured and has a harmonious form; (2) complexity, objects are rich in elements that are opposite to each other, for example, have contrasting colors; (3) seriousness (intensity), the object has quality, intensive, and symbolic.

The Liang Gie [8] argues that an object's general characteristics that have aesthetic value are unity, harmony, pairs, balance, and resistance/contrast. In general, the greater the unity, complexity, and intensity of an object, the greater its aesthetic value is [9]. All parts of Solo bridal make-up and dress have harmony. The harmony in Solo bridal make-up is a combination of leaves and flowers, bridal clothing, and accessories. Solo *paes* consists of *gajahan*, *pengapit*,

*penitis*, and *godeg*, where the right and left parts must be symmetrical to show balance. The combination of striking colors and materials used in Solo brides has contrasting characteristics. For example, the combination of red and green in Solo wedding dresses with *basahan* patterns. Overall, bridal make-up is a unity that cannot be separated. Therefore, all these elements are made separately with various shapes and colors that fulfill the elements of complexity and sincerity as a symbol of human life.

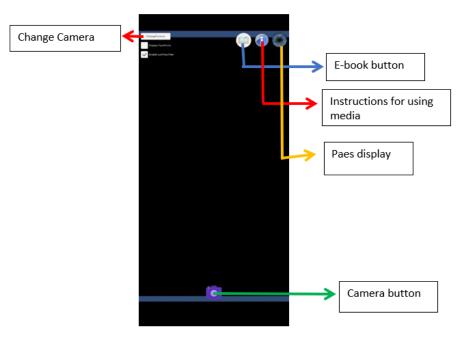


Fig. 2. My paes go application.

# **4 Research methods**

This research was a descriptive study aimed at obtaining data on the validity of the e-book both qualitatively and quantitatively before the e-book applied to the actual learning process. The validation process was carried out through a Forum Group Discussion (FGD) activity on February 18, 2021. The FGD was attended by six validators from the world of vocational education and practitioners of traditional bridal make-up. The validators provided input or suggestions on the e-book of Solo bridal make-up. When the validation process was completed, this e-book was uploaded to the Solo bridal *paes* making application called 'My Paes Go'. The aspects assessed by the validator include cover, basic competencies, materials, graphics, language, evaluation tools, and references.

In order to test the validity of the media and learning models, respondents were given a questionnaire with each statement having a value of 1 to 4. The score has the following criteria:

(1) inappropriate/ inappropriate/ incomplete/ not good; (2) less precise/not appropriate/incomplete/not good, (3) correct/appropriate/complete/good, and (4) very precise/very appropriate/very complete/very good.

From the results of the model's validity, the percentage was then calculated. The percentage was calculated both from the value of each item and the total validation value. Based on the percentage calculation, it was then confirmed with the validity criteria. This percentage criterion was used to assess media, models, and learning tools.

**Table 1.** Eligibility category of product.

Scale	Eligibility Category
80% - 100%	Very Worth
66% - 79%	Worth
56% - 65%	Not Worth
0% - 55%	Very Unworthy

## **5** Results and discussion

#### 5.1 Solo bridal make-up e-book validation analysis

The Solo bridal make-up e-book is a guidebook for students, especially when studying Augmented Reality (AR)-based Solo bridal make-up. This e-book consists of six chapters, namely (1) Bridal Make-up; (2) History and Meaning of Solo Bridal Make-up; (3) Make-up for Female Solo (Solo Putri) Bride; (4) Paes Go Application; (5) Hairdressing; and (6) Solo Bridal Make-up Clothing. Overall, the Solo Bridal Make-up E-Book has been validated by experts from both DUDI and academics through Forum Group Discussion (FGD) activities. The results of this textbook validation are shown in Table 2.

From Table 2, it can be seen that for the aspect of the e-book cover, the e-book gained an average score of 87.5%. In terms of percentage, the cover of the textbook has actually obtained the approval of the experts convincingly, because the cover has clearly shown the identity of the teaching material and clearly shows the target users of the teaching material; but from qualitative data, experts tend to suggest changing the cover so that it is not too simple, and shows illustrations that can motivate students to learn bridal make-up. By changing the cover according to the experts' advice, it can be stated that the cover of the textbook is declared very suitable to use.

In the aspect of basic competence and its objectives, the e-book gained an average score of 92.6%, indicating that both aspects' formulation was very feasible as part of the developed e-book component. It is based on the results of expert assessments which showed that the e-book contained the formulation of competencies to be achieved and learning objectives at the beginning of the chapter. Learning objectives have been formulated with simple, operational sentence structures, communicative language, motivating students to achieve them gradually and showing clear stages towards competency achievement.

On the material aspect, the e-book gained an average score of 90.6%. This shows that the material compiled in the textbook was very suitable to be used as a Solo bridal make-up material. The results of the expert assessment showed that: (1) the description of the material was in

accordance with the learning objectives to be achieved, (2) the materials contained in the textbook were valid in accordance with the development of science and technology, (3) the pictures listed were in accordance with the material described, (4) the materials were able to develop academic skills including cognitive, affective and psychomotor aspects.

On the graphic aspect, the e-book gained an average score of 89% with very decent criteria. This feasibility level was based on: (1) the display of tables and images were numbered so as to facilitate searching, (2) the images used were given descriptions or explanations to make it easier for students to understand the Solo bridal make-up material, (3) the size and type of letters had a high legibility level.

On the presentation aspect, the e-book gained an average score of 87.5%. This shows that the presentation aspect of the female Solo bridal make-up e-book was in the very feasible category. The aspects contained in the presentation consist of (1) presenting the material in a coherent and gradual manner from easy to difficult, from simple to complex, or from concrete to abstract, (2) attracting students' interest and attention, (3) being organized and systematic so that it is easy to understand.

		Validator						
No	Indicator	Expert in AR Media	Expert in the Field of Study	Expert in the Field of Study	Bridal Make- up Artist	Bridal Make- up Artist	Expert in Instructio- nal Design	Averag e
1	Cover	90.7	83.3	90.7	91.7	91.7	87.3	89.2
2	Basic Competence	90.7	83.3	81.3	100	100	100	92.6
3	Material	85.7	83.3	90.7	100	96.4	87.5	90.6
4	Graphics	100	83.3	87.5	96.7	70.8	95.7	89.0
5	Presentation	100	82.1	75	87.5	95	85.3	87.5
6	Languages	87.5	75	96	81.3	75	82.1	82.8
7	Evaluations	100	75	87	83.7	95	85.1	87.6
8	Reference	100	70.8	90.7	97.9	75	90.3	87.5
	Average	94.325	79.5125	87.3625	92.35	87.3625	89.1625	88.3
	Criteria	Very Worth	Worth	Very Worth	Very Worth	Very Worth	Very Worth	Very Worth

Table 2. Summary of FGD's experts on solo bridal make-up e-book.

Furthermore, on the language aspect, based on the evaluation of the e-book expert, the female Solo bridal make-up e-book gained an average score of 82.8% with a very decent category. If further observed from the results of expert assessments or judgments, bridal make-up artists

gave a value of 75% with a decent category. This shows the language used in The Solo bridal make-up e-book has been written in a communicative language, which means it does not contain any double meanings and is easily understood by readers. Based on the evaluation tool, although the experts in the field of study gave a consensus level of 75% or appropriate, the average consensus of all experts reached 87.6%, which means that the evaluation tool developed was considered very suitable to be used as a part of the e-book components. The feasibility of this aspect of the evaluation tool was based on the results of expert assessments which show that the e-book provides questions that are: (1) in line with the learning objectives, (2) in line with the concepts of the material provided, (4) can encourage students to think critically, logically, systematically and analytically, and (5) providing varying levels of difficulty.

Meanwhile, the e-book gained an average score of 87.5% from the reference aspect, which indicates that the bibliography used in the textbook was very feasible. The feasibility of this aspect was based on the results of expert judgments, which showed that the bibliography in the textbook has been listed systematically and was relevant to all existing materials. Based on the analysis of the validity of each aspect as stated above, the average for all aspects was 90.2%. It can be stated that the digital engineering textbook developed in this study was very suitable to be used as a learning tool to support the developed learning media.

## 5.2 Product revision

Based on the analysis data obtained through FGD with six experts, it can be stated that the product of this research in the form of a Solo bridal make-up e-book was declared very feasible. This was implemented with several accompanying suggestions for improvement. Suggestions for improvement for the female Solo bridal make-up e-book product in the form of qualitative data were obtained through questionnaires and interviews from established experts. Based on the experts' suggestions, the revised e-book is described in Table 3.

Suggestion	Revision
The cover has not shown the augmented reality	The cover has been replaced with a design that
part, it is too simple and less artistic.	makes augmented reality clearer and more artistic.
Foreign words should be in italics.	Foreign words have been revised in italics.
The technical drawing for making <i>paes</i> needs to be enlarged.	The technical drawing for making <i>paes</i> has been enlarged.
Typing technical check.	Fixed typos.
Material about making <i>paes</i> using the application does not yet exist.	Material for making <i>paes</i> using the application has been added.
There are still a few questions containing images.	More questions in the form of images have been added.
Instructions for filling out instruments/questions can be added to make it easier for participants to answer.	Instructions for filling in questions have been added.
There is no explanation for each picture/table.	The presentation of tables and images has been added with adequate explanations.

Table 3. Revision of the solo female bridal make-up e-book.

The e-book learning media in this study cannot be separated from learning objectives both in general and specifically. Adjustment of the material was made in accordance with topic matter and student needs. The research results above showed that the use of learning media that meets the using media principles can increase motivation and learning outcomes. Basically, the use of learning media for students is to make them easier to understand the material; in line with the learning objectives, materials, students' needs; concern to effectiveness and efficiency.

Technology has become an important aspect of the world of education. Technology can be used as a good and effective learning medium in the learning process. Digital books or e-books (electronic books) are one of the technologies that can be used as alternative learning media, both for students and lecturers [10]. The use of e-books can increase reading interest, and it is easier to carry everywhere so that it is more practical [11].

## **6** Conclusion

Based on the results of the study, in general, it can be stated that the product was very feasible to be implemented to support Solo bridal make-up learning in universities. In particular, according to the research questions that have been constructed, the conclusions were as follows: the results of the validation of the experts stated that all e-books developed through this research were suitable to be used as the learning supplement of Solo bridal make-up courses.

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