



Development of E-Jobsheet on the Creation of Basic Patterns of Women's Pants Digitally Using the Canva Application

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Abstract

Describe the validity level of the E-Jobsheet for making digital women's pants patterns using the canva application at SMKN 2 Jombang so that it is suitable for use as learning media in terms of media experts, linguists and material experts. 2. Describe student learning outcomes after applying the E-Jobsheet for making women's pants patterns digitally using the canva application at SMKN 2 Jombang. This research is an R&D research with the ADDIE method. The subjects of this research were students of class XII Fashion 2 of SMKN 2 Jombang. The results of this study are: 1) E-Jobsheet for making pants patterns digitally is declared feasible to use as learning media. This is evidenced by the results of media expert validity of 4.41 with a very valid category, material expert validity reached 3,59 with a very valid category and linguists reached 4.08 with a very valid category. The average of the three experts reached 4.02 with a very valid category. 2) The learning outcomes of students of SMKN 2 Jombang showed that 33 students were declared complete with a percentage of 100%. Thus, it can be concluded that the development of E-Jobsheet on making women's pants patterns digitally using the canva application in industrial fashion subjects contributes positively to improving student learning outcomes at SMKN 2 Jombang.

Keywords: E-Jobsheet, Canva, Pattern, Women Pant's

Abstrak

Tujuan dari penelitian ini 1) Mendeskripsikan tingkat validitas E-Jobsheet pembuatan pola celana wanita secara digital menggunakan aplikasi canva di SMKN 2 Jombang sehingga layak untuk digunakan sebagai media pembelajaran ditinjau dari ahli media, ahli bahasa dan ahli materi. 2) Mendeskripsikan hasil belajar siswa setelah diterapkan E-Jobsheet pembuatan pola celana wanita secara digital menggunakan aplikasi canva di SMKN 2 Jombang. Penelitian ini merupakan penelitian R&D dengan metode ADDIE. Subjek penelitian ini adalah siswa kelas XII Tata Busana 2 SMKN 2 Jombang. Hasil dari penelitian ini adalah: 1) E-Jobsheet pembuatan pola celana secara digital dinyatakan layak digunakan sebagai media

pembelajaran. Hal ini dibuktikan dengan hasil validitas ahli media sebesar 4,41 dengan kategori sangat valid, validitas ahli materi mencapai 3,59 dengan kategori sangat valid dan ahli bahasa mencapai 4,08 dengan kategori sangat valid. Rerata dari ketiga ahli mencapai 4,02 dengan kategori sangat valid. 2) Hasil belajar siswa SMKN 2 Jombang menunjukkan bahwa 33 siswa dinyatakan tuntas dengan persentase 100%. Dengan demikian, dapat disimpulkan bahwa pengembangan E-Jobsheet pada pembuatan pola celana wanita secara digital menggunakan aplikasi canva dalam mata pelajaran busana industri berkontribusi positif terhadap peningkatan hasil belajar siswa di SMKN 2 Jombang.

Kata Kunci: *E-jobsheet, canva, pola, celana wanita*

Introduction

SMKN 2 Jombang is one of the vocational high schools that has 3 majors, including culinary majors, fashion design and production, as well as beauty and spa (Alfia et al., 2023). The fashion design and production expertise program at SMKN 2 Jombang consists of 4 classes, in grade 10 using an independent curriculum called phase E, grade 11 using an independent curriculum called phase F, while grade 12 uses an independent curriculum, called phase F.

The fashion design and production expertise program, especially in grade 12, has several subjects, one of which is industrial fashion. This subject teaches practical learning that is useful for its graduates who will enter the world of the fashion industry (Samala et al., 2021). The practice is carried out from designing, making patterns to fashion production. Industrial fashion is applied to the independent curriculum by mentioning the creation of a product pattern manually and digitally, therefore it is necessary to learn to make CAD-based digital patterns to answer the demands of all-digital development. The creation of CAD-based digital patterns is one of the characteristics in today's industrial fashion production process. (Rahmasari & Yogananti, 2021)

The production of clothes made in grade 12 is in the form of women's robes and pants. Learning the practice of making robes previously had no obstacles, both from the design process, making manual and digital patterns, to the production process (Liu et al., 2022). In contrast to the time of pants making, there are several obstacles when practicing digital pattern making using the help of the RichPeace CAD application, students have difficulty operating computer hardware and software, and do not understand the basic tools in the RichPeace-DGS application which is used as a medium for making basic patterns of CAD-based women's pants. This happened because in the previous process of making digital robe patterns, students made them by photographing small patterns which were then made lines manually using the IbisPaint application. (DONG et al., 2018)

Observations made by researchers on students and teachers at SMKN 2 Jombang, show several other indications of problems seen during the learning process of making CAD-based digital patterns. The practice of making digital patterns carried out on 33 students showed less than optimal results. The gap between theory and practice in learning to make digital-based

patterns, especially in grade 12 fashion 2, can occur due to several factors. These factors include teachers who rarely enter class and students who do not pay attention when the material is delivered, the way the material is delivered in a demonstration makes students easily bored in class, and the media used is less interesting. This results in the practical material that should be known and mastered in class IX is not delivered optimally.

Learning innovation is indispensable in facing the era of the industrial revolution 4.0., where digital learning provides a new situation and atmosphere in learning. Various types of learning media can be developed, one of which is e-jobsheets. School regulations that allow students to bring smartphones are one of the reasons why researchers use e-jobsheets to deliver materials for making basic patterns of women's pants digitally. E-jobsheet is a development of the form from a printed jobsheet to an electronic jobsheet or e-jobsheet. E-jobsheets were chosen because they can convey material simply and concisely, are not easily damaged and lost, students can reopen the material that has been taught at any time, and its attractive appearance makes students not easily bored. (McQuerry et al., 2023)

The creation of e-jobsheets takes advantage of the help of an internet-based application, namely Canva. Canva is one of the applications that can be used in designing learning media in the form of videos, presentations, etc. The Canva application provides various file forms such as presentations, resumes, posters, pamphlets, brochures, banners, labels, and so on. Canva can be used by educators to design learning materials through the templates provided, the many attractive designs in the Canva application can make it easier for educators to design e-jobsheets as a medium for delivering learning materials easily. This problem finally attracted the attention of researchers to conduct a research entitled "Development of E-Jobsheet on the Creation of Basic Patterns of Women's Pants Digitally Using the Canva Application at SMKN 2 Jombang".

Research Method

Research Design

This research uses R&D (Research and Development) research methods. This research uses the ADDIE development model, this model was developed by Dick and Carry, which is commonly used for various research on the development of learning products. The ADDIE model consists of 5 stages, namely 1) Analysis, 2) Design, 3) Development, 4) Implementation, 5) Evaluation. ADDIE's research is quite comprehensive in a systematic and simple sequence.

Data Collection Instruments

The instrument in this study uses an e-jobsheet validity questionnaire assessment sheet with 2 validators, namely media experts and material experts as well as performance sheet instruments. The validity assessment sheet is used to determine the level of validity of the e-jobsheet media filled out by three experts, namely media experts, material experts and linguists. The media experts of this research are 3 lecturers of fashion education at the State University of Surabaya, the experts of this research material are 2 teachers of industrial fashion

subjects from SMKN 2 Jombang and 1 lecturer of fashion education at the State University of Surabaya, linguists are 2 lecturers of fashion education at the State University of Surabaya and 1 alumnus of students majoring in Indonesian at the State University of Surabaya. The assessment method was only limited to the performance test of making the basic pattern of women's pants digitally (psychomotor test).

Participants/sample

Sugiyono (2020) Samples are part of the number and characteristics possessed by the population. The sample that will be used by students in grade XII Fashion 2 SMKN 2 Jombang is 33 students.

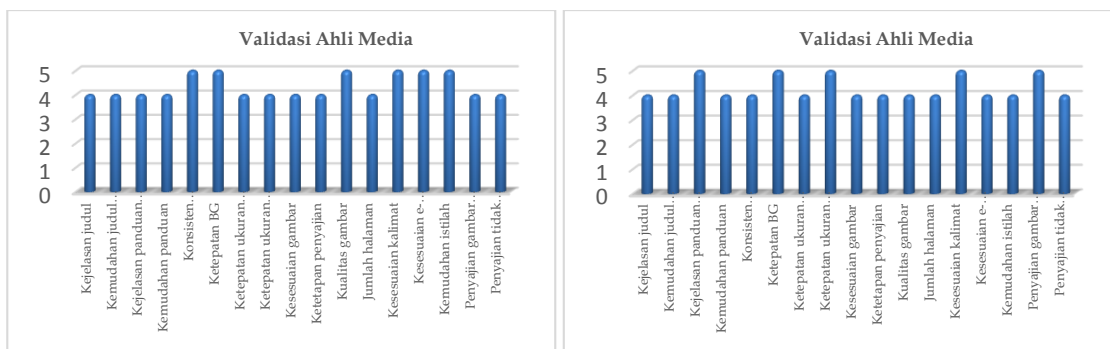
The Procedure of Data Collection

The data collection techniques in this study are validation by experts and student learning outcome tests. The expert test of this research was carried out by the test of media, material and language experts. Expert tests are used to determine the feasibility level of the developed media. Student learning outcomes were assessed from the performance test of digital pattern making women's pants digitally. The following data was collected in this study, in the form of: Media experts in this study were evaluated by expert judgement, 3 lecturers of Fashion Design, State University of Surabaya. The material experts in this study were evaluated by expert judgement, 2 Fashion Designers of SMK Negeri 2 Jombang and 1 Fashion Designer lecturer of the State University of Surabaya. The linguists in this study were evaluated by expert judgement, 1 alumnus of the Indonesian Department of Surabaya State University and 2 lecturers of Fashion at Surabaya State University. The assessment of student learning outcomes is in the form of the results of the practice of making basic patterns of women's pants digitally.

Data Analysis

The data analysis technique of this study uses quantitative descriptive data analysis techniques. Quantitative data is data obtained through validation and learning outcomes of students, then the results are calculated on average. The average results obtained prove whether the e-jobsheet is valid to be applied or not.

Results and Discussion



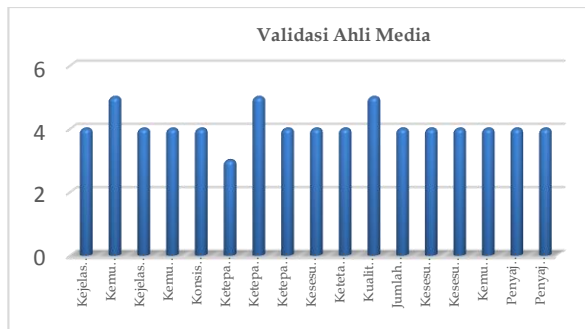


Figure 1 Media Expert

The results of the E-Jobsheet validation carried out by media expert 1 obtained a score of 4.35 with a very valid category used with revisions. The results of the E-Jobsheet validation carried out by media experts 2 obtained a score of 4.7 with a very valid category used according to the suggestion. The results of the E-Jobsheet validation conducted by 3 media experts obtained a score of 4.2 with a very valid category used with revisions. Based on the validation results of the three experts, it can be concluded that the average score of the media validation results is 4.41 with a very valid category, so it can be interpreted that the e-jobsheet for making the basic pattern of women's pants is suitable for use by students.

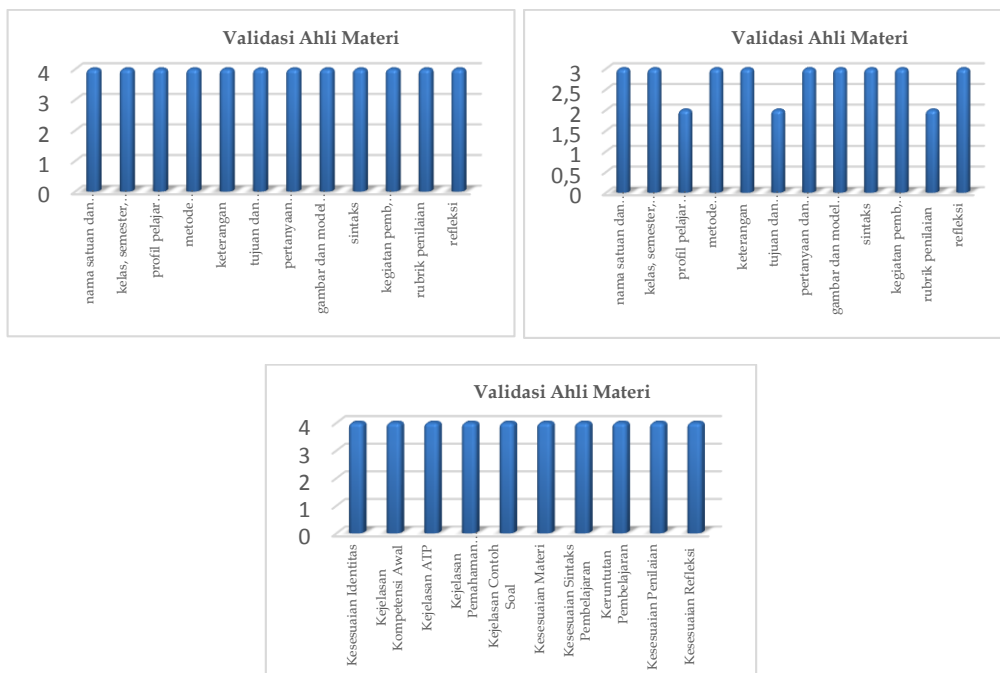
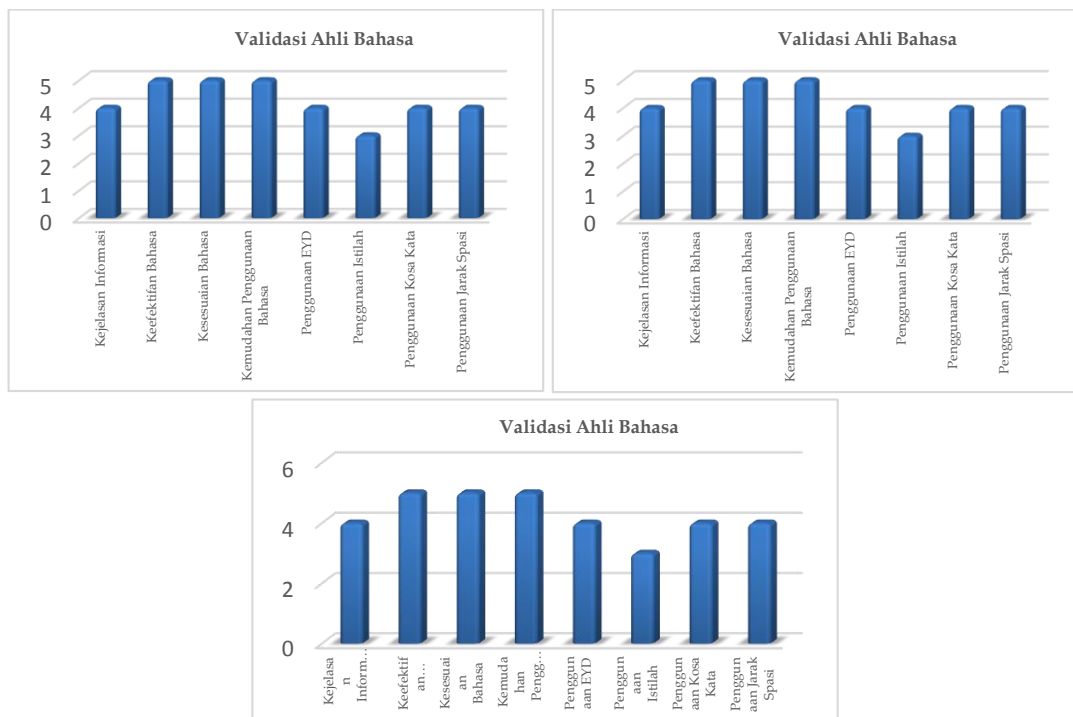


Figure 2 Subject Expert

The results of the E-Jobsheet validation carried out by subject matter expert 1 obtained a score of 4 with a very valid category used with revisions. The results of the E-Jobsheet validation conducted by subject matter expert 2 obtained a score of 2.78 with a valid category used with revision. The results of the E-Jobsheet validation conducted by subject matter expert 3 obtained a score of 4 with a valid category used with revision. Based on the results of the three expert validators, it can be concluded that the average score obtained from the results of the material validation is 3.59 with a very valid category, so it can be interpreted that the e-

jobsheet for making the basic pattern of women's pants is suitable for use by students.



The results of the E-Jobsheet validation conducted by linguist 1 obtained a score of 4.25 with a very valid category used with revisions. The results of the E-Jobsheet validation carried out by linguist 2 obtained a score of 3.75 with a very valid category used with revisions. The results of the E-Jobsheet validation conducted by linguist 3 obtained a score of 4.25 with a very valid category used with revisions. Based on the results of the three linguist validators, it can be concluded that the average total score obtained from **the language validation results is 4.08** with a very valid category, so it can be interpreted that the e-jobsheet for making the basic pattern of women's pants is suitable for use by students.

The results of the validity of this study are in line with the research conducted by Cahya Rahmawati (2023) stating that the score of the material expert validator obtained a percentage of 100%, the score of the media expert validator obtained a percentage of 88.2%. The average validation value of the overall jobsheet media is 90.5%, thus the feasibility of the developed jobsheet media is declared very feasible (SL). Another study conducted by Halimul Bahri Validated results of media experts (0.91%); 3) The results of the validation of the material expert (0.97%), hereby declare that the media is suitable for use.

The assessment of student learning outcomes was measured from the evaluation of the results of the performance test in the competency of making the basic pattern of women's pants digitally, elements of fashion manufacturing production at SMKN 2 Jombang. The benchmark of students in mastering the material can be identified if the student is able to meet the criteria for completeness of the learning objectives, which is 82. The following are the learning outcomes of students using e-jobsheet media for making basic patterns of women's pants digitally using the Canva application as shown in the table as follows:

X ≥ 82	33	Tuntas
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Based on the table, it is known that students who are complete and incomplete will be counted as follows:

$$P = \frac{33}{33} \times 100\% \\ = 100\%$$

Based on the results of the calculation of the percentage of classical learning completeness of students, the results were obtained of 100%. The following is a diagram of the results of classical learning completeness of students:



Figure 3 Result of Classical Learning

Based on the graph displayed, the learning outcomes of SMKN 2 Jombang students showed the highest score reaching 91 and the lowest score of 75. The average learning outcome in the psychomotor realm reaches 100%. For class XII fashion 2 consisting of 33 students, it was declared complete with a **percentage of 100%**. This shows that the completeness of student learning has met the criteria for completeness of learning objectives (KKTP). Thus, it can be concluded that the development of e-jobsheets on the creation of digital archetypes of women's pants using the Canva application has contributed positively to improving student learning outcomes at SMKN 2 Jombang.

The expected learning outcomes reflect good and maximum achievements. Student understanding can be seen from satisfactory learning outcomes, which are shown by high grades and active participation in the learning process (Mayasari, 2021). Research also shows that the development of e-jobsheet media for making the basic pattern of women's pants in custom-made fashion learning contributes to improving student learning outcomes (wulandari, 2023). The improvement of student learning outcomes is also influenced by the characteristics of E-Jobsheet which is adaptive and user-friendly so that students can learn easily anywhere and anytime. This study also shows that the use of appropriate media can increase classical learning outcomes by 100% (Putri, 2023).

Conclusion

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The development of e-jobsheets in making the basic pattern of digital pants can improve student learning outcomes, so that they can be an alternative teacher in teaching. Provides more examples and variations of patterns accessible through E-Jobsheet, so students have more options in their design experiments. Students need to be challenged in the learning process so that students do not feel bored and hesitant and can increase curiosity in students. Build collaborative collaborations with the local fashion industry to provide students with practical insights into the latest trends and market needs, as well as help them understand the real applications of the skills learned.

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