



Designing Teaching Materials for Children's Parties Clothing Based on Comics

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ABSTRACT

The present study discusses the relatively low literacy skills and reading interest of students in children's fashion lectures. The learning process is not yet fully optimal because the level of understanding and psychomotor abilities of students still vary. The research purpose is to produce comic-based teaching materials for students of the Fashion Education study program to produce products that can be used by students as independent learning resources. The development model used in designing comic-based children's fashion teaching materials is the 4-D model consisting of four stages, namely 1) Define (definition), 2) Design (design), 3) Tell (development), and 4) Disseminate (dissemination). Data collection was carried out using a validation questionnaire from material and media experts. Data analysis techniques used include qualitative data analysis with descriptive methods and quantitative data analysis with validity and feasibility tests. The results of the validity test conducted by material experts produced a score of 91.5% in the very valid category. The results of the media expert validation obtained 94.46% in the very valid category. The practicality test obtained a score of 80%, included in the practical category and the effectiveness test produced a score of 80 in the Good category. Thus, it can be concluded that comic-based teaching materials are suitable for use in children's fashion learning. This product has the potential to be a source of independent learning that supports increasing literacy and reading interest in children's fashion lectures.

Keywords: *teaching materials, children's clothing, comics*

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INTRODUCTION

Law Number 20 of 2003 mandates that education is a conscious and planned effort to create a learning atmosphere and lecture process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, and noble morals. , and skills needed by himself and society. By implementing the National Education System Law no. 20 of 2003, then as an educator we consciously develop teaching materials. As an educator who plans learning, he must be able to design teaching materials that utilize various types of media and appropriate learning resources to create an effective and efficient learning process (Lin et al., 2017; Sutarto et al., 2019). Learning media can be an alternative in providing interesting and simple educational resources to students (Yulianti & Wulandari, 2021). This learning activity will run or take place well through media or intermediaries (learning media) to facilitate what will be conveyed in learning. However, we need to know that not all media is liked by students. We must consider the components, needs and interests of students when we want to use learning media so that it can run effectively. Therefore, you must use practical and selective learning resources according to the subjects being taught (Shofwan et al., 2019).

It is hoped that continuously developing teaching material media can help in solving problems in learning activities (Risnawaty et al., 2021). With good education, the resulting graduates have good skills, skills and creativity as well as good characteristics so they are able to compete in the current and future world of work. The development of a country towards independence in life is determined by the success of education. Among the indicators of the success of education is the formation of creativity and independence by individuals through a learning process. Therefore, the development of teaching materials is needed to

create continuity of learning with innovative and interesting activities ((Maskur et al., 2020). Using appropriate teaching materials will encourage students to produce interesting and enjoyable learning experiences (Rahmawati et al., 2019; Suciana, 2018). One of the learning processes referred to in this case is learning children's fashion in the fashion education study program. Students study theory and practice in children's fashion courses to provide creativity and independence to become skilled in making children's clothing.

Children's clothing is everything worn by babies and children from head to toe, which includes accessories and millinery. Infants' ages range from 0-2 years and children's ages range from 5-12 years. Children's fashion has certain criteria that characterize clothing that is suitable for a child to wear. The choice of material needs to be considered so that it can provide comfort to babies and children. As well as choosing the right motif/pattern for babies and children so that it is beautiful to the eye.

Furthermore (N. L. Ramadhani & Prahesti, 2022) classifies clothing into several groups, including based on the age of the wearer, namely baby clothing, children's clothing, children's clothing, youth clothing, adult clothing, old age clothing. Each group has certain criteria according to its age grouping. To make baby and children's clothes, patterns are also needed as for making adult clothes. Patterns are made based on a person's measurements, from upper to lower body size, then patterns are developed with various models and variations, according to body posture. Determining the right pattern and choosing good materials can be a reference in making further children's clothing. Everyone, both adults and children, needs to know a pattern system that is suitable for themselves and used as a basic pattern when making clothes, so as to produce clothes that are comfortable to wear, not too tight or loose.

In carrying out lectures on the theory and practice of children's clothing, students need a high level of understanding to be able to understand every step in making baby and children's clothing. Lack of interest in reading in studying the material provided by educators causes the learning process to become hampered due to not achieving targets in implementation, which results in the collection of assignments not meeting the predetermined time limit.

Interest in reading and literacy skills which are still relatively low is one of the problems felt in children's fashion lectures for both theoretical and practical material. Reading means providing nutrition to one's mind, with which one can gain various kinds of new knowledge about science, technology, and world progress and so on. If we look deeper, several factors influence the low reading scores of Indonesians, one of which is the availability of reading materials and interest in reading (Dermawan et al., 2023).

The lack of sewing skills and different understanding also has an impact on students' practicum results which are not optimal, because they are in a rush to complete assignments because the submission deadline has passed. Limited time for learning activities also has an impact on students in completing assignments on campus. Because students cannot be guided directly considering the large number of lecture groups. There is also a lack of willingness to ask questions from students to lecturers and students tend to be passive and less active in lectures.

As stated by (Daeli et al., 2022) Active learning by starting with lots of reading is expected to help improve students' ability to understand lesson material. In active learning students solve problems themselves, find examples, try skills and perform tasks. Furthermore (Muhaimin et al., 2023) explained that, along with the development of science and technology, the implementation of education can be carried out through any media, whether mass media such as magazines, books, newspapers, or also through electronic media such as radio, television, internet and so on.

In terms of delivering lesson material, if you only use printed books with a lecture method delivered by educators both classically and individually, it will be difficult for students to understand the material (Handrianto et al., 2020; D. Ramadhani et al., 2022). Therefore, teaching materials are needed that make it easier for students to learn and assimilate all knowledge. To increase students' interest in learning, views and information in teaching materials are presented in a more interesting way. One way is to package comic-based teaching materials (Al-Adiyah et al., 2018). Currently, the media that is not widely used and developed

in Indonesia is comics media. According to (Negrete, 2013), light reading has become popular reading, such as gossip tabloids, business magazines, fashion magazines and comics. Comics have become a favorite reading material for teenagers as well as a means of communication favored by various groups of society. The combination of images and a little text means that students do not need to exert high concentration to understand the content and information. This makes comics so easy to understand.

Based on the description above, it is felt that there is a need for learning media that can stimulate students' interest in reading. Comics are a practical choice for developing teaching materials and can increase student creativity and increase their ability to absorb the material presented (Darniyanti et al., 2022; Sari et al., 2022). As stated by (Rahim et al., 2022), comics have the potential to attract students' attention, with interest in teaching materials they can influence learning outcomes. The images contained in comics can enliven students' enthusiasm for learning. (Nurseto, 2011) said that learning comics have the function of conveying learning messages. In this context, learning occurs in the communication process between students and learning resources (learning comics) so that communication will run optimally if the learning message is conveyed. Complicated explanations related to the learning topics that are read will become easier and more enjoyable for students.

Furthermore, he stated that (Wahyuni et al., 2023) The use of visual media as a writing guide does not have to be limited to just a series of images. If teachers want to maximize more interesting learning and student-centered learning, a variety of learning media and resources are really needed. There are many variations of visual media that can replace serial images, one of which is comics. Comics can trigger students' imagination and creativity when used as a learning medium. The purpose of this study is to develop comic-based teaching materials to improve students' understanding, skills, and learning interests in designing children's party dresses, while providing interactive and innovative independent learning resources.

METHOD

The research carried out is development research (Research and Development). The development model was developed in this study using the 4-D Thiagrajan development model which went through a series of development stages, namely 1 Define stage, 2 Design stages, 3 Development stages and 4 Dissemintane stages. (Muchayat in Ferdianto & Setiyani, 2018). This research was conducted on fashion education students of Medan State University in the odd semester of 2023/2024 in September-October 2023.

The media developed in this research is comic-based teaching materials taking into account students' interest in reading and diversity of understanding in carrying out structured work processes in practicums in children's fashion courses. Comic-based teaching material media was developed using the Thiagrajan 4-D development model which went through a series of development stages, namely 1 Define stage, 2 Design stage, 3 Development stage and 4 Dissemintane stage. by Muchayat in (Ferdianto & Setiyani, 2018). The stages in developing comic-based teaching materials in this research are; 1) define stage, namely carrying out an RPS analysis for children's fashion courses, then determining the material for which teaching materials will be developed; 2) design stage, at this stage drafting comic-based teaching materials in detail, followed by the process of designing comic-based teaching materials; 3) hold development, this stage aims to measure product validity and make improvements according to validator input. Then measure the practicality of the product by giving a questionnaire to users, namely lecturers and students. Next, measure the effectiveness of the product by focusing on evaluating the comic-based teaching materials used to achieve learning objectives; 4) disseminate stage, aims to disseminate teaching materials so that other people can use them.

Data collection was conducted through interviews, questionnaires and observations. The data collection instrument was a questionnaire used for material validation and media validation. This instrument aims to see the feasibility of the media so that the media can be used for children's fashion learning.

Table 1. Subject matter expert validation questionnaire

Assessment Aspects
Material suitability
Comic Characteristics
The Attractiveness of Teaching Materials
Language

Table 2. Media expert validation questionnaire

Assessment Aspects
Benefits
Media Design
Layout of Media
Eligibility Percentage

Data collection techniques and data analysis on the instruments used in this research are validity questionnaires, practicality questionnaires and performance observation sheets for making children's party clothes. The validity assessment of all aspects assessed is presented in table form. Next, find the average score obtained using the formula as proposed by Djatun (1999) in (Asmunah 2019) as follows:

$$M_x = \frac{\sum x}{N}$$

Information:

- M x = Group average x
- $\sum x$ = Score
- N = Number of items

The psychomotor learning outcomes are seen in observing the performance of making children's party dress patterns. The scale used to determine performance results in learning activities is as follows;

- 0% : didn't do it at all
- 1% - 25% : unable
- 26% - 50% : able to do with a lot of help
- 51% - 75% : able to do with a little help
- 76% - 100% : capable (Asmunah, 2019)

RESULTS AND DISCUSSION

Results and discussion are the most important parts of the entire content of a scientific article. The purpose of the discussion is: Answering research problems, interpreting findings, integrating findings from research into existing bodies of knowledge and developing new theories or modifying existing theories.

a. Definition stage

The definition stage is carried out by analyzing the RPS for the Children's Fashion course for the material to be developed. The results of the discussion decided to develop teaching materials for making children's clothing. This material was chosen because this competency is a competency that is very suitable for assessing students' abilities in making children's party clothing patterns. This research develops teaching materials for making children's party clothes. The material developed regarding children's clothing is; 1) children's fashion concept; 2) children's clothing criteria; 3) materials for children's clothing; 4) children's clothing patterns; and 5) sewing techniques for children's party clothes.

b. Design Stage

Design stage, the stage of designing research products in the form of comic-based children's clothing teaching materials. Teaching materials designed using Microsoft Word and Canva applications. The teaching materials designed feature different headers and footers and background colors for each chapter as an aesthetic

element and different from teaching materials in general. The fonts used are Oen Sans Light and Alegreya with sizes; 22, 25, 28 and 30. Each font size is adjusted to the subject or sub-subject.

- 1) Create teaching material components, the developed comic-based children's fashion teaching material components include; cover page, foreword, table of contents, materials, practice questions, bibliography and author biodata. Learning material is obtained from various sources, both books and journals. Meanwhile, images and videos that have special features are dominated by images designed and created specifically by the author for the learning media being developed. The comic-based children's fashion teaching materials designed are as follows;



Figure 1. Cover appearance of comic-based teaching materials

Figure 1. Shows the cover of comic-based teaching materials which includes the title, a picture of a mother sewing, a picture of children's clothing, the name and agency of the author and the year the teaching material was developed. The background colors in teaching materials are dominated by soft pastel colors. Pastel colors were chosen because they represent the cheerful and gentle characteristics of children. This is in accordance with the opinion of (Dewi & Marsudi, 2023) The choice of color is very important because it will affect the image and readability value. If the colors chosen do not match each other, the colors can affect the visual image of a work. Therefore, choosing good colors is very important so that people who see or read feel at home looking at the work and add to the attraction for those who see it.

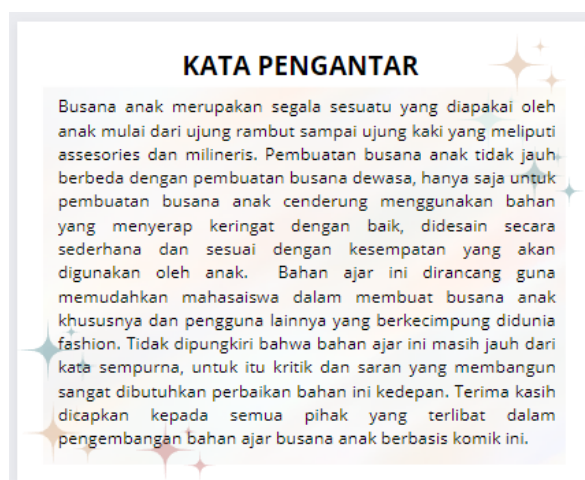


Figure 2. Display of the Foreword Page for Comic-Based Teaching Materials

Figure 2. Displays the foreword page for teaching materials which briefly explains the entire teaching material being developed. The foreword displays a background with a cover page and in the top and bottom corners of the teaching materials there are illustrations of stars as the aesthetic value of children's fashion teaching materials.



DAFTAR ISI	
1	Konsep Busana Anak
2	Kriteria Busana Anak
3	Bahan Busana Anak
4	Pola Busana Anak
5	Membuat Busana Anak

Figure 3. Display of Table of Contents in Comic-Based Teaching Materials

Figure 3. Displays a list of contents of the material that students will study. In the teaching materials developed there are 5 chapters, the first is about the concept of children's clothing, the second is the criteria for children's clothing, the third is materials for children's clothing, the fourth is children's clothing patterns and the fifth is the process of making children's clothing.



Figure 4. Comic page appearance in children's fashion teaching materials

Figure 4. Showing comic pages in children's fashion teaching materials. This comic page is designed as an opening page and an attraction that stimulates reading interest for users in studying children's fashion material. This is in line with what was stated by (Allawiyah et al., 2023) that, the use of illustrations in comics can improve students' analytical skills and find the information contained in them. Comic media can stimulate students' interest in studying the material presented in comics. Through comic media, students become more interested, because comic media is a media that many children like. Apart from being full of pictures, comic

media is also able to convey learning material and objectives in a more enjoyable way. Comic pages are available in each chapter of comic-based children's fashion teaching materials.



Figure 5. Display of material in comic-based teaching materials

Figure 5. Displays the material in the order of subject matter in the children's fashion course. For each subject, student worksheets are provided to measure their learning abilities. In the fifth topic, student worksheets are presented to carry out performance activities in making patterns and sewing children's party clothes.



Figure 6. Final page display of comic-based teaching materials

Figure 6. Shows the author's profile of comic-based children's fashion teaching materials as the final page. The author profile briefly explains the author's background and other information related to the author. Users of teaching materials can also communicate with the author by accessing the author's social media account to obtain further information related to learning.

c. development stage

The development stage carried out the development of comic-based children's clothing teaching materials that had been planned previously. After the product has been developed, product validation is then carried out by material experts and media experts by filling out a validation questionnaire sheet. Revisions have been carried out based on the assessments and suggestions given by each validator until the resulting

teaching materials are valid and suitable for testing. Material validation was carried out by 3 material experts and media validation was carried out by 2 media experts.

1) Expert Team Validation Results

The validation stage was carried out by 3 material experts, namely 2 children's fashion lecturers and 1 fashion design lecturer. Revisions have been made based on the assessments and suggestions given by each validator in order to obtain good media. The following are the results of validation carried out by experts which include several indicators in the development of comic-based children's fashion teaching materials. The validation questionnaire uses a Likert scale with assessment aspects; score 4: Strongly Agree (SS), score 3: Agree (S), score 2: Disagree (TS), score 1: Strongly Disagree (STS). The results of the media validation analysis are presented in the following table

Table 3. Assessment Results of 3 Material Experts

Rated aspect	Validation Score	Criteria
Material suitability	89,67%	Very Valid
Comic Characteristics	93,33%	Very Valid
The Attractiveness of Teaching Materials	89,67%	Very Valid
Language	93,33%	Very Valid
Overall Score	91.5%	Very Valid

Based on the assessment results above, showing that all aspects assessed show a validity value of 91.5%, it is found that each of the aspects assessed, namely the suitability of the material, aspects of comic characteristics, aspects of the appearance of teaching materials and linguistic aspects, have very valid criteria. Based on BSNP regulations (2014) in (Safitri & Harmanto, 2022) it is stated that the assessment of language accuracy is related to the accuracy of spelling, word order, sentence structure, accuracy of terms. Thus, the comic-based children's fashion teaching materials that have been developed are suitable for use in accordance with the assessment of linguistic appropriateness aspects. Furthermore, as stated by (Wahyuni et al., 2021) to produce learning media requires designing the structure, content and appearance in accordance with the specified competencies.

Media validation was conducted by 2 media experts, namely 1 lecturer of learning media and 1 lecturer of fashion computers. The assessment was based on several aspects, namely Benefits, Media Design, Media Layout and Percentage of Eligibility.

Table 4. Assessment Results of 2 Media Experts

Rated aspect	Validation Score	Criteria
Benefits	98,35 %	Very Valid
Media Design	96 %	Very Valid
Layout of Media	89 %	Very Valid
Eligibility Percentage	94,5%	Very Valid
Overall Score	94,46%	Very Valid

From the data above, it shows that from 4 aspects of the assessment, the average assessment from 2 media experts is 94.46%. This shows that the media developed is feasible to be used in children's fashion learning. Media that is said to be very feasible is media that provides good aspects of the benefits and functions of the media (Mawaddah et al., 2019).

2) Results of Student Practicality Questionnaire Analysis

At the implementation stage, a practicality questionnaire was used to find out the extent of students' responses to comic-based children's clothing teaching materials. A practicality questionnaire sheet was given after students used comic-based children's clothing teaching materials.

Table 5. Expert Assessment Results Using the Practicality Questionnaire

Rated aspect	Practicality Score	Category
Ease of use	73%	Practical
The attractiveness of the dish	85%	Practical
Benefits obtained	81%	Practical
Average	80%	Practical

Based on the table above, the practicality assessment shows that all aspects assessed show an average practicality value of 80% in the "Practical" category.

3) Results of Effectiveness Analysis

Assessment of the effectiveness of comic-based children's clothing teaching materials is directed through student performance in using teaching materials. Work performance is assessed using an observation sheet for observers who observe the work process of making patterns and sewing children's clothing. The observers in this activity were two children's fashion lecturers. The observation sheet uses a Likert scale with a score of 4 (capable); score 3 (capable with a little help); score 2 (capable with lots of help); and score 1 (unable). The calculations are as follows;

Table 6. Results of student performance observation sheets

Practice	Score	Criteria
Make children's clothing patterns	80	Good
Sewing children's clothing	80	Good
Average	80	Good

Based on the table above, it can be concluded that the overall results of student performance in learning using comic-based children's clothing teaching materials were obtained on average 90 with a score of 80. This indicates that if viewed from the results of student performance, the effectiveness of using children's clothing-based teaching materials is comics are in the "Good" criteria.

Disseminate (spread) this activity is carried out by disseminating products that have been developed and have been tested for use by other people. Products that have been tested for validity, practicality and effectiveness, then these products are disseminated so that they can be used and benefit other people. Dissemination is also carried out by registering the ISBN to then print comic-based children's fashion teaching materials.

Discussion

Open materials play a very important role in supporting independent learning. Teaching materials contain materials that are systematically packaged to help students understand the learning content. Open materials also help students to be actively involved and allow students to learn independently based on their abilities and interests. According to Budiarmo (2016) in open materials there is content that contains information to achieve certain goals. Therefore, open materials are needed that can make it easier for students to learn and absorb all information. The appearance of teaching materials must be packaged more attractively, such as teaching materials in the form of comics.

Comics are images that reflect characters, act out a story connected with word balloons, and are made to provide entertainment to readers (Buchori, 2015). Comic media can attract readers' attention, the character's

actions are made more alive with the use of color so that the image looks clear. The stories presented in comics are also very imaginative. Comics are liked by all ages from children to adults because they can be entertaining but there is a seriousness to obtain the contents of the reading. Comics can be used by teachers as a tool to increase students' interest in learning in learning (Utariyanti, 2015). The appearance of comics can attract students' attention to learn so that it will help students understand the material presented. The use of comics is very effective in fun learning and is able to attract interest in reading and help students understand the concept of the material presented (Susanti, et al. 2016).

The development of comic-based teaching materials in children's fashion courses is carried out using the 4-D development model. Validation of material experts was carried out by three validators. Based on the results of the validation of material experts, a score of 91.5% was obtained in the valid category. The results of the validation of media experts obtained a score of 94.46% in the valid category. From this data, it is known that comic-based teaching materials can be used in children's fashion learning.

The practicality of learning media was carried out to determine the practicality of using the product "Comic Based Children's Fashion Teaching Materials". The product practicality test was carried out by providing a practicality questionnaire which was filled out by 30 students who had been given teaching materials. Based on the results of the questionnaire on the practicality of teaching materials "Comic Based Children's Fashion Teaching Materials", a percentage of 80% was obtained in the "Practical" category. This indicates that the media developed is practical for use in learning children's fashion.

The effectiveness of teaching materials aims to determine the effective use of the product "Comic-Based Children's Fashion Teaching Materials". The product effectiveness test was carried out by performing work on making children's party clothes. Factor analysis of performance results is obtained by providing an observation sheet. Based on the results of students' performance in learning using comic-based teaching materials, an average of 85 was obtained with a score of 85 with the criteria "Good". This indicates that the media developed is effective for use in learning children's fashion. In line with this, as stated by (Haristah et al., 2019) that learning media is categorized as valid if the media is in the good or very good category. It is categorized as practical if the student response and the use of media in learning is classified as good, and is categorized as effective if the media used is able to teach students and improve learning outcomes. This means that comic-based open materials for fashion learning are already suitable for use in learning.

The comic-based teaching materials developed contain images and texts and are equipped with teaching material features such as sample questions, practice questions, experiments, and others that can help students improve their understanding of student concepts. Comic-based teaching materials packaged in a combination of images and text that form a storyline make it easy for students to remember and understand the concepts explained in order to improve students' understanding (Yulianingsih & Ikhsan, 2018). This is in line with the results of research (Lesmono, et al. 2021) which states that comic-based teaching materials are suitable for use in learning and are able to improve students' understanding and motivation classically. Therefore, comic-based teaching materials must be utilized by students as a source of independent learning.

CONCLUSIONS AND RECOMMENDATION

Based on the results and discussion of the study, it can be concluded that the development of comic-based teaching materials uses the Thiagrajan 4-D development model. The results of the validation by material experts obtained 91.5% valid category and the results of the validation by media experts were 94.46% valid category. These data indicate that comic-based teaching materials are suitable for use in children's fashion learning. The Practicality Test for the use of Comic-Based Teaching Materials obtained 80% practical category. This is indicated by the results of student performance using comic-based teaching materials being higher than the learning outcomes of students who did not use Comic-Based Teaching Materials. The effectiveness of using Comic-Based Teaching Materials obtained a score of 80 in the effective category in the learning process. This can be seen from the results of students' work in making patterns and sewing children's party clothes. For further development, it is recommended to design open materials based on electronic comics

in other courses so that students can also improve their skills in using technology. It is hoped that comic-based teaching materials can help the process of learning children's fashion and improve student learning outcomes and provide innovation in enjoyable learning.

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