Student Response to Booklet Learning Media Butterfly Pea Flower (Clitoria ternatea L.)

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Abstract. Learning media is a means to facilitate teachers in providing material, create enthusiastic and motivated students in accomplishment learning, therefore can improve their abilities and skills in receiving the learning provided. The utilization of booklets as learning media creates interest in learning and a positive response. This study aims to find out the students’ response to the booklet of butterfly pea plant (Clitoria ternatea L.) as a learning media. The instrument used was a questionnaire with three aspects of response, namely affective, cognitive, and conative which existed additional developed into 11 statements items. The average percentage obtained for each aspect of response, namely affective, cognitive, and conative response aspects, was 75.89%; 67.11%; 70.98% with the overall response having an average of 71.33%. It can be concluded that the booklet developed into learning media received a positive response from students.

Keywords: Booklet, Learning Media, Response

Introduction

In growing students’ enthusiasm for obtaining knowledge, righteous communication is needed between teachers and students. According to Duta, Panisoara, & Panisoara (2015) this communication is expected to create students who are enthusiastic and motivated in acknowledgment of learning so that they can improve their abilities and skills in acceptance the learning provided. Ability and skills in obtaining this learning will more effective if supported by suitable learning tools and one of them is the growth of learning media (Sapriyah, 2019). Besides that, development media in learning is also the skill and strong point of educators in providing learning knowledge that is adapted to the conditions of the students they teach (Lijana et al., 2020).

Learning media is a means to make it easier for teachers to provide material and also a solution so that students can learn in a planned and systematic manner with the intention of activities can be carried out learning becomes more effective and efficient (Harvey & Carpenter, 2020; Puhka et al., 2022). Learning media is known to have an influence in optimizing the success of student learning outcomes (Kusumawardhani et al., 2022). This is reinforced by the statement of Hanifah et al. (2020) regarding the use of e-booklet learning media in plant material which can increase the success of students’ biology learning outcomes.

Media is a tool or means used to convey messages with the aim of stimulate the mind, increase the enthusiasm, interest and passion of students to motivate themselves in...
learning activities (Suryani, 2016). Use media this learning activity is carried out with the aim of making it easier for teachers to provide object lesson material (Paramita et al., 2018). When viewed from the type, various forms of media are divided into four, namely audio, visual, audiovisual and miscellaneous (Rahmi & Samsudi, 2020; Suryanda, 2020; Titin & Dara, 2016). The various types of learning media available to understand the material require teachers to pay more attention to accuracy, harmony, convenience and attention in choosing media (Krismadana et al., 2021). One of these types of learning media is **booklet**.

**Booklets** are a visual type of media that are printed in small sizes and are composed of pictorial and written representations that contain certain information that can influence students' interests (Panjaitan et al., 2021a; Aini & Habibi, 2020; Nisa et al., 2020). **Booklets** were chosen as a medium to increase knowledge and provide more specific information than other printed media. **Booklets** also have a language structure that much easier to understand than others media and a simple presentation made the **booklets** are interesting and easy to use (Putri et al., 2021; Krismadana et al., 2021). The supporting advantages of **booklets** are being able to carry anywhere and at any time to be read without electricity or internet (Primadeka et al., 2017).

The use of **booklets** as a learning media is creating the interest in learning and positive responses. Response is a individual's perception or view, both positive and negative, who has carried out an activity using the five senses (Khairiyah, 2018). The response at this point can be seen from the facial expressions, students' sense of interest, and students' ability to perceive learning as well as responses to the learning media used (Gola et al., 2022). This response is divided into three, namely, affective, cognitive, and conative (Lu et al., 2015). Affective responses and responses conative according to Mangei, Komariyah, & Goma (2021), an effective response is a person's response related to intuition, behavior and assessment of an object that involves feelings or emotions and a conative response is a person's response related to activities or habits resulting from certain real attitudes. So, a cognitive response is response which is related to a individual's understanding or knowledge of information about an object (Putri et al., 2020).

This **booklet** is the end result of development from research on the butterfly pea flowers plants which is known to be useful by the public as a medicinal plant. The most frequently used organs of the butterfly pea flower are the leaves and flowers. There are many literatures which note that butterfly pea flowers have a multitude of benefits and natural properties against several internal diseases body human. Viewed from the content, butterfly pea flower leaves consist of alkaloids, flavonoids, saponin, quinone, polyphenolates, and triterpenoids (Nurgustiyanti et al., 2021). However content butterfly pea flowers themselves consist of phenolic acids, stilbenes, anthocyanins, flavonols, flavanones, flavonoid glycosides, such as routine, delfidin, kaempferol, quercetin and malvidin (Morais et al., 2020; Nithianantham, 2013). The various compound content in the butterfly pea flowers plants makes the butterfly pea flowers plant an antioxidant, antidiabetic, antiobesity, antihypelipidemic, cholesterol regulation, anticancer, anti-inflamatory, analgesic, antiasthmatic, antimicroorganism, hepatoprotective, anthelmintic and antidepressant (Marpaung, 2020; Purba, 2020).

They are so many benefits and properties of butterfly pea flowers. This obtained from gathering results of studies literature and research which are neatly arranged into **booklets** as a form of learning media. After validation by experts, students' responses to the **booklet** as a learning media are also needed. Therefore, this research aims to find out students' responses to **booklets on** butterfly pea plants as a media in learning.
Methods

This research based on the use of descriptive research with a cross-sectional survey method (Panjaitan et al., 2021b). The points of this research start from determining the research subject, preparation hot response, collection data response in the field, and data processing and data analysis. Data collection uses indirect communication techniques. The subjects of this research consisted of students from Department of Biology Education in Faculty of Teacher Training and Education, Tanjungpura University, Pontianak as many as 42 students. Points of creating this booklet started from analysis determination and collection picture from butterfly pea plant determination title booklet, arranging the elements in the booklet, editing illustrations, photo documentation, color, and margin implementation of validity tests results to defining the suitability of booklets as learning media. The booklet is said to be worthy as media learning if the validity test results are valuable 1.00 (Panjaitan & Tenriawarau, 2022).

The next stage is to conduct a survey to see and identify student responses as a booklet evaluation. This survey used an instrument in the form of a questionnaire with three aspects of response which were further developed into 11 statement items.

<table>
<thead>
<tr>
<th>Criteria Evaluation</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree (SS)</td>
<td>4</td>
</tr>
<tr>
<td>Agree (S)</td>
<td>3</td>
</tr>
<tr>
<td>Disagree (TS)</td>
<td>2</td>
</tr>
<tr>
<td>Strongly Disagree (STS)</td>
<td>1</td>
</tr>
</tbody>
</table>

(Putri et al., 2022)

The response aspects tested in questionnaire consists of affective, cognitive and conative aspects as well as comments and suggestions if necessary. Analysis of response test data refers to the presentation of value interpretation criteria in Table 2.

<table>
<thead>
<tr>
<th>Interpretation (%)</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 40.99</td>
<td>Not Positive</td>
</tr>
<tr>
<td>41 - 60.99</td>
<td>Less Positive</td>
</tr>
<tr>
<td>61 - 84.99</td>
<td>Positive</td>
</tr>
<tr>
<td>85 - 100</td>
<td>Very Positive</td>
</tr>
</tbody>
</table>

(Riduwan, 2015)

Results and Discussion

The use of booklets as a learning media can be influences students' enthusiasm and interest through informative knowledge and attractive illustration colors, then arranged into a small book to make students interested in learning the material being taught (Ante et al., 2021; Rahmatih et al., 2017). In this research, a booklet was created from the results of a literature study regarding butterfly pea flowers and their health benefits. Formerly, the booklet was created using microsoft word 2019 and aligned for phytochemistry study. The results of the analysis of student responses to the booklet are presented in Table 3.
Table 3. Validator Assessment of Booklet Media

<table>
<thead>
<tr>
<th>No</th>
<th>Aspect</th>
<th>Indicator</th>
<th>Average indicator (%)</th>
<th>Average aspect (%)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Affective</td>
<td>Students' interest in <em>booklets</em></td>
<td>68.75</td>
<td>75.89</td>
<td>P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students' curiosity</td>
<td>83.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students' perceptions of information presented inside <em>booklet</em></td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Cognitive</td>
<td>Participants' perceptions educate to knowledge presented in <em>booklet</em></td>
<td>84.23</td>
<td>67.11</td>
<td>P</td>
</tr>
<tr>
<td>3</td>
<td>Conative</td>
<td>Student tendencies For use <em>booklet</em></td>
<td>70.98</td>
<td>70.98</td>
<td>P</td>
</tr>
</tbody>
</table>

Average Response (%) 71.33 P

Information:
P: Positive

The analysis results obtained from three aspects of the response with 11 statement items acquired a response value of 71.33 in the positive category.

Aspects of Affective Response

An affective response is an individual's response related to intuition, behavior and assessment of an object that involves feelings or emotional, mental and conscious awareness (Mangei et al., 2021; Bistari, 2017). The results are from the average aspect of the response affective results obtained were 75.89% with positive category. Indicators in the affective response aspect are divided into two, namely students' interest in *the booklet* and students' curiosity. In terms of indicators of student interest in *booklets*, an average indicator value of 68.75% was obtained. Here it shows that *booklets* as a learning media substitute a sense of interest in students. Supported by the color composition, the illustration of medicinal plants is in accordance with native plants, and a writing structure that remains to the size and type of letters to substitute students' enthusiasm in using *booklets* as a learning media. A colorful learning media can attract students' interest and attention (Lia et al., 2016). In this research, *the booklet* contains an explanation of the butterfly pea flowers plant and its benefits for health with the intention of required that it will be able to create a sense of interest and curiosity in learning of students.

Formerly, on the student curiosity indicator, an average indicator value of 83.04% was obtained. This shows that students' curiosity about *booklets* is very high. Students' curiosity in the learning process is very important because it significantly influences students' activity and enthusiasm. Students with excessive curiosity will use various ways to fulfill their curiosity therefore they will use a number of reference sources and media (Nehru & Irianti, 2019). *Booklets* will be one of these reference sources and media. *Booklets* have a language structure that is much easier to understand than other media and their presentation is concise, thus students are interesting and easy to use (Putri et al., 2021; Krismadana et al., 2021). The advantage of this *booklet* that it resolves sustenance students fulfill their curiosity because that it is easy to receive and understand effectively and efficiently.
Figure 1. Use of letters, colors and illustrations in the booklet Aspects of Cognitive Response

Cognitive responses are responses related to a person’s ability to understand or know how to use information about an object (Putri et al., 2020; Bistari, 2017). Cognitive responses are also related to students’ insight into abilities and perceptions of information in the learning process (Panjaitan et al., 2021). The response test results on the overall cognitive response aspect were 67.11% in the positive category. Indicators in the cognitive response aspect are divided into two, namely students’ perceptions of the information presented in the booklet and perceptions to the knowledge presented in the booklet.

In terms of indicators of students' perceptions of the information presented in the booklet, an average result of 50% was obtained. This booklet contains a general description of the butterfly pea plant and its uses for health. As one of the learning media, booklets contain summarized information to easy understand and efficient. Hence, through this advantage students can understood about their perception and communicate their thoughts, opinions and assumptions in great way (Triyono & Febriani, 2018).

The second cognitive response indicator is students' perceptions of the knowledge presented in the booklet, producing an average result of 84.23%. It can be supposed that the results obtained are quite high, means that the booklet has a positive perception regarding the knowledge within. The knowledge provided in this booklet is about a general description of the butterfly pea flower plant and its benefits for health. The presentation of information in this booklet is enveloped precisely, concisely and efficiently, so that it is easy to understand and significantly increases knowledge.
Conative Response Aspects

A conative response is a person's response related to activities or habits resulting from attitudes real certain (Mangei et al., 2021). Conative response is also related to habitual action and related to the attitude of the object (Amir, 2015). The results of the test on the conative response aspect with the one indicator, namely the tendency of students to use booklets, have an average of 70.98% in the positive category. The category indicates that the student shows behavior interest and enthusiasm for the booklet. The supporting advantages of booklets is made into a small book with summarizing and combined with interesting picture illustrations and can be used independently by students so that it is easy to study on their own at anytime and anywhere (Paramita et al., 2018).

Based on the results test of response from three aspects, namely affective, cognitive and conative with 11 statement items, the average response test result for all response aspects was 71.33% in the positive category. This means *Clitoria ternatea* booklet L. and its benefits for health obtained a positive response from students with an assessment based on three aspects of the response which were divided into several indicators such as students' interest in the booklet, students' curiosity, students'
perceptions of the information presented in the booklet, students' perceptions of the knowledge presented in booklets, and students' tendencies to use booklets as learning media. This remains with the components of a learning media that must be concrete therefore the delivery of teaching material in the learning process is delivered well and efficiently (Istifarida et al., 2017).

Conclusion

Response test results students' response to the use of booklets as learning media obtained an average percentage of positive response with an average percentage each aspect of response, namely the affective response aspect worth 75.89%, the cognitive response aspect is 67.11%, and the conative response aspect is 70.98%. Overall responses have an average of 71.33% with positive category.

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References


