Development of Smart Box of Asean Learning Media in Social Science Learning for Class VI Elementary School Students

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Development of Smart Box of Asean Learning Media in Social Science Learning for Class VI Elementary School Students

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Abstract: The purpose of this study is to design the development of the smart box of ASEAN learning media and analyze the validity of ASEAN's smart box learning media in social studies learning material on the political conditions of ASEAN countries. Learning media that can be developed are visual, audio-visual, and computer media. If these three learning media are developed innovatively, it will be possible to create a learning atmosphere that makes students enthusiastic and active. The right learning media is needed in the teaching and learning process because it can determine students' learning success. The development of students at the elementary school age is at the concrete operational stage, namely the stage where they will understand something in a tangible form rather than an abstract one. The smart box of ASEAN media is the basic concept of the explosion box: a box in the shape of a cube with several layers so that when opened, the box looks like it explodes or blooms. An explosion box is media in the form of a box. When the box is opened, the four sides will form a grid of boxes and display writing or pictures according to the theme or material. The smart box of ASEAN media gives an innovative impression in learning so that students do not get bored during the learning process. This research is a Research and Development (R&D) using the Borg and Gall method and collecting data using interviews, questionnaires, tests, and documentation. The subjects of this study were the sixth-grade students of Public Elementary School No. 2 Wilalung with a total of 30 students as the experimental class and Public Elementary School No. 3 Wilalung, Gajah District, Demak Regency, with a total of 25 students as the control class. The development results are assessed by material expert validators and media experts in the smart box of ASEAN. The results of the validity test of the smart box of ASEAN media obtained a percentage of assessment by media experts of 80.56% (valid) and material experts of 81.25% (valid). From the acquisition of the rate of material experts and media experts, an average score of 80.92% was included in the valid criteria. So the smart box of ASEAN media is valid to be used as a social media learning medium for class VI Elementary School regarding the political conditions of ASEAN countries.

Keywords: Development, learning media, a smart box of ASEAN, elementary social studies learning

1.   Introduction

Destination main learning social science, according to Kartini, Saputra, & Kurohman (2022), is to develop the ability of students to care about social problems which there is in the environment public, have an attitude which positive in repair all imbalance life which currently occurs, as well as competent in resolve problem which there is in life daily good which occurs in themselves and society. However, in social studies, students do not always read or listen to the material but understand the content of the material which has been read to develop an understanding draft. So from that, the role of the teacher here is essential in providing an experience of the things that affect student learning processes to support improving learning outcomes student (Anuar, Nizar, & Ismail, 2021).

To achieve this goal, a teacher must have skills in choosing, using media and carrying out innovations in creating an effective and efficient learning environment for students. According to Puspitarini & Hanif (2019), learning media that can be developed are visual, audio, and computer media. If these three learning media are developed innovatively, it will be possible to create a learning atmosphere that makes students enthusiastic and active. In addition, the learning media designed will make the teacher more competent as a professional teacher. One learning media that needs to be developed is visual media which helps improve student learning outcomes. However, implementation of Social studies learning that takes place in class VI in the Sultan Agung Cluster, Gajah Subdistrict, Demak Regency, in terms of the

political conditions of ASEAN countries, so far, teachers have not used media that can make students active and not bored in the learning process.

Based on the results of interviews and observations conducted in class VI at three elementary schools throughout the Sultan Agung Cluster, Gajah District, Demak Regency, it was obtained several problems in learning, of them, moment teacher convey Theory student not yet understand what which has been submitted, the lack of learning facilities for students such as learning resources which still limited on book student, lack of enthusiastic student to material that has a lot of memorization, the lack of use of learning media used teacher during social studies learning takes place, which is only sourced from the teacher's book, book students, and a map posted in front of the class (Karmintoro et al., 2021). Moreover, using less than optimal media makes students bored fast because they think the learning is monotonous and not varied. This is what affects student learning outcomes that are not optimal.

The right learning media is needed in the teaching and learning process because it can determine students' learning success. The development of students at the elementary school age is at the concrete operational stage, namely the stage where they will understand something in a concrete form rather than an abstract one. The smart box of ASEAN media is the basic concept of the explosion box. A box in the shape of a cube with several layers so that when opened, the box looks like it explodes or blooms. Zulherman et al. (2021) revealed that an explosion box is media in the form of a box; when the box is opened, the four sides of the box will form a grid of boxes and display writing or pictures according to the theme or material. The smart box of ASEAN media gives an innovative impression in learning so that students do not get bored during the learning process.

Marludia et al. (2020) who develop a surprise or magic box containing dental material. With an average validation result of 86.66 (very feasible) as a medium for promoting dental health for elementary school students. In line with several studies, Sipnaturi & Farida (2020), Pramesti (2019), and Nasriya (2018) who develops learning media with the basic concept of explosion box to improve student learning outcomes in various subjects and learning materials.

Based on the above analysis, the researcher developed a smart box of ASEAN learning media for sixth-grade elementary school students in social studies learning. The development of this Media is expected to help the implementation of learning to be more optimal and help students understand the material better so that learning objectives can be achieved optimally. The objectives to be achieved in this research are to design and analyze the validity of the smart box of ASEAN learning media in social studies learning for sixth-grade elementary school students. Instructional Media, The smart box of ASEAN developed by the researcher contains material on the political conditions of ASEAN countries in social studies subjects in theme 1 sub-theme 3 learning 1 with basic competencies, identifying geographical characteristics and socio-cultural, economic, and political life in the ASEAN region.

2. Literature Review

Pahmi et al. (2022) explains that visual-based learning media (images or parables) play an essential role in the learning process. Visual media can facilitate understanding (e.g. through structure elaboration and organization) and strengthen memory. Visuals could also foster student interest and provide a connection between the content of the subject matter and the real world. However, visuals should be placed in context to become effective, meaning students must interact with visuals (images) to ensure the information process.

Smart Box of ASEAN is media manifold visual, which basically uses the basic principles of Explosion Box. As the name suggests, the Explosion Box represents an explosion. Nasriya, Wuryandani, & Mulyono (2021) reveals that the Explosion Box is media in the form of a box; when the package is opened, the four sides of the box will form a grid of boxes and bring up text or pictures according to the theme. Safitri, Putra, & Mudiono (2021) reveals that if open the box, we will see the arrangement of the parts of the box that are blooming, stacked so that it looks gorgeous and attractive, especially when decorated with components in the form of pictures, writings, decorations, small boxes, and other things.

A learning tool known as a explosion box integrates multiple learning tools into one boxed unit. Games with learning components are included in the Explosion Box learning medium to provide the illusion of learning while having fun. presentation of information in an approachable and communicative manner (Islamy & Suputra, 2022). Additionally, the use of colour and visuals can aid in students' comprehension of the subject. These instructional resources include student workbooks, practicum manuals, and puzzle games in an explosive box format. This explosion box learning tool has the potential to reinforce the message you want to portray in a tale so that it is simpler to remember and learn. Additionally, this media might draw interest and boost students' enthusiasm to learn (Sholikah, 2020).

Explosion box media is a type of visual graphic medium composed of cardboard in the shape of a cube or box. When the box is opened, images and text customised to the subject matter or theme are displayed on all four sides or layers of the box. Explosion boxes can assist a teacher in achieving their educational goals because, in addition to being an engaging and original teaching tool, they can boost student engagement and help pupils develop a more comprehensive, distinct understanding that is not readily forgotten (Pramesti, 2019).

The unique visual appearance of other teaching tools, the combination of a box and a folding book, a construction that can be folded, pulled, and opened and closed, and the loading of solid material because it has a lot of material are the special characteristics and characteristics of Explosion Box in its use as a teaching medium (Pratiwi & Damayanti,

2019). This makes Explosion Box flexible and practical to carry and use at any time.

3.   Methodology

The research method used in this research is the research and development method according to Sugiyono's adaptation of Borg and Gall, which consists of 10 steps, as follows 1) find potential and problems, 2) data collection through observation, interviews, questionnaires and literature study, 3) designing media designs, 4) media validation by design experts, 5) design revision based on input from material and media expert lecturers, 6) small-scale product trials, 7) media revision, 8) testing the use of media, 9) product revision, 10) mass production (Sugiyono, 2017).

The research design used in this study was the Pretest-Posttest Control Group Design because this study involved two groups: the experimental and the control groups. The experimental group was given a pretest before treatment (treatment) and then a posttest after treatment (treatment). This design can be described as follows.

Class	Pretest	Treatment	Posttest
Experiment	O_1	X	O_2
Control	O_3		O_4

Description:
O_1 : The results of the pretest of students in the experimental class
O_2 : The results of the posttest of students in the experimental class
X   : The use of the learning media smart box of ASEAN
O_3 : The results of the pretest of students in the control class
O_4 : The results of the posttest students in the control class

In this study, the students who were the subjects were grade VI elementary school students throughout the Sultan Agung Cluster, Gajah District, Demak Regency, with a total of 277 students. The students who became the sample for filling out the media needs questionnaire and observation were 115 students, which were taken by random sampling. The primary schools selected were Public Elementary School No. 2 Wilalung, Public Elementary School No. 3 Wilalung, Public Elementary School No. 2 Gedangalas, and Public Elementary School No. 3 Gedangalas.

The subjects in the test were 35 students of class VI of Public Elementary School No. 2 Gedangalas. The issues of the limited product trial were 12 students of Public Elementary School No. 2 Gedangalas as the control group and 12 students of Public Elementary School No. 3 Gedangalas as the control group. The subjects in the usage test were 30 students of Public Elementary School No. 2 Wilalung as the control class and 25 students of Public Elementary School No. 3 Wilalung as the experimental class.
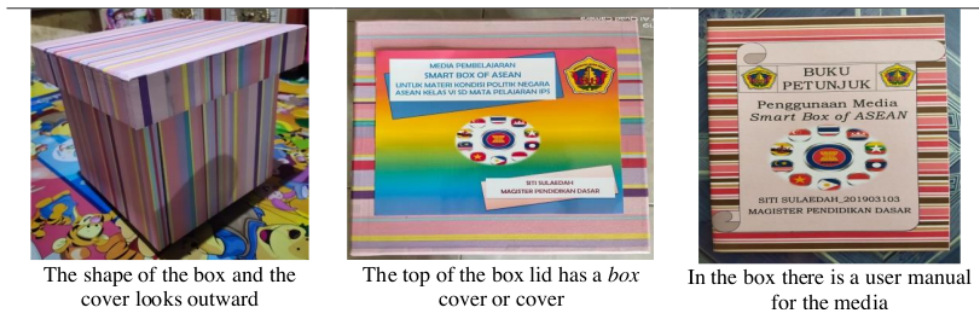
Experts/experts who are the subject of this research act as media validators and materials in the smart box of ASEAN media. The media experts in this research are Dr Nur Fajrie, M.Pd lecturer in Master of Education, Universitas Muria Kudus. The material experts in this study are Dr Erik Aditia Ismaya, M.Pd, lecturer in Master of Education, Muria Kudus University.

4.   Findings and Discussion

4.1   Product Design

Smart box of ASEAN learning media products was made by considering the needs of teachers and students to adjust the characteristics of the learning media needed in the field. The design of the smart box of ASEAN media consists of a box with a lid, a mapping of basic competencies and learning objectives, and the material's content with pictures, question cards, and puzzle games. The following is the design of the smart box of ASEAN media.

Table 1. Design of smart box ASEAN

| The shape of the box and the cover looks outward | The top of the box lid has a *box cover* or cover | In the box there is a user manual for the media |

The inside of the box lid contains core competencies, basic competencies, indicators, and learning objectives	Inside the box there is a small wire that serves as an adhesive to the sides of the box	The inside of the Smart Box of ASEAN has 3 layers of side layers and there is a puzzle box containing a puzzle envelope
The first layer has 4 sides, the second layer has 4 sides, and the third layer has 2 sides. The sum of all sides in the box contains 10 sides according to the number of ASEAN member countries. On each side there is an ASEAN country envelope	Envelopes of ASEAN member countries contained on each side of the box, each envelope containing material on political conditions according to their country	In the ASEAN country envelope, there is material on the political conditions of ASEAN countries including: state form, head of state, state capital, currency, state symbols, accompanied by pictures that support the material and there are also question cards
The puzzle box contains five envelopes containing puzzle pieces related to the material	pieces in a *puzzle box*	

4.2 Expert Validation

At the design validation stage, the product design is validated by two validators: media experts and material experts. The product validation assessment instrument used is a validation questionnaire. Design validation aims to determine the validity of the ASEAN smart box media before it is used for limited product trials and large-scale usage trials.

The assessment of the ASEAN smart box media by experts on each indicator has a score of 4 if very good, three if good, two if enough, and one if less. The results of the recapitulation of expert validation assessments are then classified into 5 criteria. The following are the criteria for the expert validation assessment.

Table 2. Criteria for expert validation

Percentage	Criteria	Description
86 %- 100%	Very Valid (A)	Without Revision
76 % -85%	Valid (B)	Revision
60 % -75%	Enough Valid (C)	Revision
55 %- 59%	Less Valid (D)	Not Valid
< 54%	Not Valid (E)	Not Valid

The validation of media and material experts on the smart box of ASEAN media obtain a valid assessment. Following the media criteria that have been set in Chapter III, the developed Media is considered valid to be used if the acquisition of the validation value reaches the minimum category of quite valid (Akbar & Wymer, 2017). The results of the media feasibility assessment that the researchers developed were material experts by Dr Erik Aditia Ismaya, MA, who gave Mark 81.25%, which is included in the valid criteria. As for the expert's media by Dr Nur Fajrie, M. Pd provides a value of 80.56 %. Based on the results of the two expert assessments, an average of 80.91% was obtained with valid criteria.

It can be concluded that the media developed by researchers regarding the smart box of ASEAN media is in the valid category and can be used as social studies learning media. Chan (2014) state that developed learning media must meet validity standards.

5.   Conclusions and Suggestions

Development of learning media for the smart box of ASEAN regarding the political conditions of ASEAN countries. The research developed by the researcher adapted the seven steps of the Sugiyono model development stage, including 1) potential and problems, 2) data collection, 3) product design, 4) design validation, 5) design revision, 6) product trial, 7) usage test. In this study the researchers limited it to testing the use of the ASEAN smart box learning media product because it's customized with the needs of researchers, which aims only to determine the validity and effectiveness of the developed media. While other considerations, namely the limited time and costs required by the researcher, produce the final product, namely the smart box of ASEAN learning media product material for the political conditions of ASEAN countries without mass production.

Smart box of ASEAN media in social studies learning material on the political conditions of ASEAN countries is valid according to the validator of material experts and media experts. The validity of material experts got a score of 81.25% with valid criteria, and media experts got a score of 80.56% with valid criteria.

Based on these conclusions, the suggestions that can be submitted are as follows, teachers and students can use the smart box of ASEAN as a learning medium because it has been proven to help teachers deliver learning materials, create fun learning, and make it easier for students to understand learning materials.

The school can provide facilities for educators by participating in training in making learning media to open up insights, as well as increasing teacher motivation to create innovative learning media.

Acknowledgement

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FINAL GRADE

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GENERAL COMMENTS

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