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# Interactive Multimedia as Autonomous Learning Resource in the South Slope of Kelud Mt. In Blitar Regency

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**Abstract**

Instructing Social Studies (IPS) going on in the school recently is often conducted conventionally, merely focused on page sequence on text book, it does not notice its content cohesiveness. Instructional material of Social Studies (IPS), that should, be explained by medium is merely committed., it makes instructional activity mere rely on teacher explanation. It makes instructional activity less effective, students feel difficulty when they want to comprehend the content. This research method and developing uses Borg and Gall model by taking material from Field Laboratory of FIS, in the south slope of Kelud Mt. in Blitar regency. This research and developing research shows that if multimedia product developed gains good testing result of product based on conspicuousness aspect gains 3.6 score or 89%, efficiency aspect 3.3 or 82%, and effective aspect 3.4 or 85%. While total average of final test of product gains 3.4 or 85%. From mentioned result, instructional multimedia of Social Studies (IPS) can be developed well, effectively, efficiently, and appropriate used as instructional medium of Social Studies in junior high school (IPS SMP). It is not surprising if students response when instructional activity is going on is extremely interested. When a teacher explains instructional material by multimedia, students can be discipline, active to ask, and respond.

**Keywords:** Multimedia, Interactive, Kelud

## 1. Introduction

Technological, informational, and entertainment development at the recent time is so rapid, until our children prefer to watch cinema, film, playing game, and internet. This generation is called as *Gadget generation*, their teacher is virtual space. Therefore, there are many experts conclude that instructional activity faces couple of challenges, perception change about learning, and rapid technological and informational development. Basically, the first challenge can be covered by constructivism learning model, by redefining learning as constructive process, in which an information is changed into knowledge by interpreting, corresponding, representing, and elaborating process. While in the educational technological development, Idris (2008) explains that, "Rapid technological, and informational development offers new various easiness in the instruction, such as enabling to replace leaning orientation from *outside guided* to *self guided* and *knowledge as possession* to *knowledge as construction*". Technology plays important role in the upgrading truth conception which is in the early focussed on instruction as merely presenting knowledge to instruction as a guidance in order to enable to explore knowledge.

Development of educational technology study results various concept and educational practice utilised as learning resource, such as *article, blog, website, e-learning, instructional software*. Medium as a tool to facilitate conveying information and instructional material. Creating and using media is easier because it can be operated by computer integrating text, picture, voice, and video for presenting media used as a help tool for instructional activity.

Problems related to instructional medium usage are availability and utilization. Less availability of medium encourages an instructor uses merely medium exists. Medium is often used is printed medium (picture, map, poster), supported by simple tool used as *white board* and chalk/board marker. While audio and visual medium or both are more known as multimedia is not still intensively used.

The second problem, related to medium utilizing. Printed medium is medium is often used by instructor, because it is easy to be developed, or looked from various source. But, much printed media extremely rely on *verbal symbols* which tends to be abstract form, it encourages students to have high abstraction competence. The research conducted by *Program of International Student Assessment (PISA)* and Research and Developing Educational National Department of Republic of Indonesia shows that skilfulness of 15 years old in Indonesia is ironic. Approximately 37,6% are only able to read without understanding its meaning, and 24,8% are only able to make relation of red text to an information of

 

knowledge (Toyamah & Usman, 2004). It will make students feel difficult. Therefore, in the utilising this medium, instructor creativity and instructional consideration are needed. The fact used to be found is there are many instructors use merely medium exists without instructional consideration.

Instructing Social Studies (IPS) which is going on in the school recently is often conducted conventionally, merely focused on page sequence on text book, it does not notice its content cohesiveness. Instructional material of Social Studies (IPS), that should, be explained by medium is merely committed, it makes instructional activity mere rely on teacher explanation. It makes instructional activity less effective, students feel difficulty when they want to comprehend the content.

Whereas, according to mandate of curriculum of 2013 (K-13), all instruction, including Social Studies (IPS) must refer to technology, information, and communication. The reason of this policy existence is *Educational Technology*, or *Instructional Technology* encourages instructional activity uses *instructional media* and *sophisticated tools*. It aims to create effective, efficient, innovative instructional media for resulting good quality of alumnus.

As attempt for enhancing quality of instructing Social Studies (IPS), various innovation are needed, such as developing curriculum, instructional innovation, instructional media, and accomplishing educational tool and infrastructure. Thus, Social Studies (IPS) instructor is encouraged to create more innovative instruction that encourages students to learn optimally, either autonomously or collaboratively in the class. This objective needs effective instructional media which are appropriate with the topic of instructional activity.

One of instructional media is developing at the recent and used by teacher within instructional process is multimedia. According to Handoyo (2003): ”Multimedia is presenting information by text, image, and voice collaboratively (*integrated*) to make it more effective and efficient”. Multimedia involves integrated various medium. Each its component can stimulate one or more of human sense. Cottrell (1999) explains that, ”More and more of sense participated in the learning process, makes the learning process more effective”.

Multimedia existence in the instructional process has made different circumstance in the class, because material is usual taught by monotonous speech, can be varied by presenting integrated text, voice, budging image, and video. It makes students interesting to the instructional activity. Sujito (2008) explains that: ”In the field testing, multimedia can enhance students enthusiasm to learn”. It is also explained that,

> “Multimedia is utilised to enhance students’ learning motivation through developing and creating learning tool, learning resource, and present rapid technology advancement. Instructional CD resulted can be used as additional instructional tool and enhance students’ creativity and motivation to learn”.

That why multimedia existence in the school is beneficial for instructional process. Effective instruction happens because students can observe variety of data, such as image, text, voice, and motion related to conducting procedure of *tune up*, it is expected can help students enable to comprehend instructional material.

## 2. Method

This research uses research and development method. Putra (2012:67) defines research and development as “research method intentionally, systematically, aims to be directed to look for and find, formulate, correct, develop, result, examine certain product, model, method, strategy, manner, service, or procedure to make them more useful.” While model conducted in this R & D research is model development by Borg and Gall. Based on *guide-line* Borg and Gall, there are ten stages that must me conducted in *Research and Development* (R & ) . Those stage are: (1) Introductory Study; observing and collecting information, including reading literatures, material analysis, observing class, preparing developmental requirement; (2) developing of synopsis and scenario of product; (3) developing the early prototype; (4) restricted testing for the early model; (5) revising the early model; (6) testing in the field; (7) revising product; (8) examining in the field operationally; (9) final revision for the model (this stage is conducted by the researcher and party that assesses process and product resulted by valid model); (10) dissemination and spreading to various party.

The stages in the developing interactive instructional multimedia in this research modify and simplify development model existed. This simplification is conducted by abolishing fourth and eighth stage, both are restricted testing and testing in the field operationally. This abolishing is conducted because of assumption that testing of product in the field once is enough to represent response of field subject in the assessing product expedience developed.

This developing instructional multimedia would take material from Field Laboratory of FIS, in the south slope of Kelud Mt. in Blitar regency. The reason of selecting Field Laboratory of FIS is that it is area determined as place of implementing *Tridarma Perguruan Tinggi*. Field Laboratory of FIS is area determined as place of instructional activity, research, societal service by *civitas academica.* That's why it is called as field laboratory.

Data used in developing interactive instructional multimedia is quantitative data, then changed into qualitative data by percentage descriptive technique. While instruments used to collect data in this research are questionnaire and document. For attempt to collect data for evaluation, the researcher uses some instruments, they are: (1) for revising media product by expert on media field, questionnaire is used consists of corrective suggestion description from, discussion, and consultation, (2) for assessing product acceptance rate by students and teacher, questionnaire of field testing is used.

## 3. Result And Discussion

### 3.1 Quality of Instructional Multimedia

Before medium product is used in the field testing, it is validated by material and media expert. This step aims to understand validity of tool for collecting data in order to be able to be gained correct conclusion. Instrument of validation is nor used scoring, but it uses qualitative descriptive method, analysed by expert overall, then given repairing suggestions for product reparation.

Product validation is used to examine product expedience from its content presented and its displaying design on multimedia. This repairing suggestion from the validator is examined on the field to check students' response toward product revised by the validator, media and material expert.

After revising product has done, field testing is conducted. Based on testing result, instructional multimedia product developed gains good result, based on interesting aspect, it gains 3.6 or 89%, efficiency aspect 3.3 or 82%, and effectiveness aspect 3.4 or 85%. While the average of final testing of the product, it gains 3.4 or 85%.

From this result, instructional multimedia of Social Studies (IPS) can be concluded that it can be developed extremely well, interesting, effective and efficient. It is appropriate to be used as instructional medium of Social Studies of Junior High School (IPS SMP) grade VII BC 3.1, it is about understanding spatial aspect and connectivity between space and time in the regional scope, and change and sustainability of human life (economy, social, culture, education, politic).

### 3.2 Effectiveness of Instructional Multimedia as Autonomous Learning Resource

According to Handoyo (2003): "multimedia is presenting text, image, and voice collaboratively (*integrated*) until becoming effective and efficient". Multimedia includes integrated various media. Multimedia existence as instructional media in the class becomes extremely effective to arouse students' learning motivation. Arsyad (2013:19-20) explains that instructional media usage in the instructional orientation stage would be useful for conveying material and helping students to enhance learning motivation and understanding. Thus, instructional media is an important aspect needed in the instructional activity.

Based on research result, instructional activity using multimedia is very interesting, pleasing, and effective. Beside information and knowledge in the multimedia is *up-to-date* and contextual. It is not surprising if students' response in the instructional process is full of enthusiasm. When their teacher were explaining instructional material by multimedia help, students showed discipline, active to ask and respond. Piaget in Thobroni (2015:82) explained cognitive instructional theory that up to 11 years old, reasoning skill abstractly is increasing s child can think deductively. In this stage, a child is able to consider some aspects od circumstance collaboratively. It is appropriate to cognitive development of students of $7^{th}$ grade. In the group discussion and tasking activity, they seemed active to learn by each group to look for information, concept, answer, and presenting their autonomous argument.

By utilising multimedia continually can encourage instructional activity and facilitate students to accomplish competence determined by curriculum. Daryanto (2013:52) stated that generally, benefit gained from instructional multimedia usage is more interesting, more interactive, efficient, effective instructional process, and the most beneficial point gained is students' learning motivation can be improved.

## 4. Conclusion

As an attempt for enhancing quality of instruction of Social Studies (IPS), various innovation are needed, such as developing curriculum, instructional innovation, instructional media, and accomplishing educational tool and infrastructure. One of instructional media is developing at the recent and used by teacher within instructional process is multimedia.

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