Developing Contextual Learning Videos on Course of Administration Education Research Methodology

Muhyadi, Sutirman, Isti Kistiananingsih

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Universitas Negeri Yogyakarta, Sleman, Indonesia

Abstract
This study aimed to produce and determine the feasibility of contextual learning video on course of Administration Education Research Methodology. The research method was research and development of ADDIE model. The stages of this research and development consisted of Analysis, Design, and Development. The data collection techniques in analysis stage were interview and observation, while questionnaire was used in development stage. Data collection instruments were inventory questionnaires with rating scales. Data analysis technique was descriptive analysis with quantitative and descriptive approaches. Descriptive techniques were used to analyze the results of problems and learning components of Office Administration Education Research Methodology. Quantitative techniques were used to analyze data from experts. Validation of developed contextual learning media involved media expert and material expert. The conclusions of the particular study are: 1) this study has produced a contextual learning video on course of Administration Education Research Methodology with material of research proposal in topic of Introduction; 2) according to the assessment of media experts and material experts, the developed learning video has a criteria of very feasible.

How to Cite
INTRODUCTION

Today, some of structured research methods training are incorporated into undergraduate and graduate education. In the past, most social science graduates might had expected a career as a social researcher, but today graduates are less likely to follow such career paths (Nind, M., Kilburn, D. & Luff, R.: 2015). Students of office administration education study program are required to have the ability to conduct research to write their thesis. Aiming to equip the students’ abilities, the curriculum of office administration education study program has provided course of Administration Education Research Methodology. The subject aims to provide knowledge and skills in writing proposals, conducting the research, and writing research reports. The students’ ability to write proposals, conduct the research, and write research reports are a prerequisite for writing thesis.

The learning activities of Administration Education Research Methodology subject was not optimal. An example of the problems was the low participation of students in learning. The students were more passive during the learning. The students rarely asked or gave respond. Another problem was students’ understanding on learning material was low. More than 50% of students who take research methodology courses find it difficult to understand the material being studied. The low level of students’ understanding can be seen from the inability of the most students in explaining the concepts when the lecturer asks them. Moreover, the students’ ability to write research proposal was also low. The quality of research proposals written by students was less of good in general. The problems related to the learning media (lack or inadequate) to facilitate the students in understanding the learning material.

In learning research methodology, the principles and illustrative examples generated can form the knowledge and understanding required to enhance pedagogic culture and practice (Lewthwaite, S. & Nind, M.: 2016). An effort is needed to solve the problem in order to improve the quality of learning on course of Administration Education Research Methodology. An effort of problem solving is developing media to facilitate students in understanding the material of Administration Research Methodology. Media is all types or kinds form that able to transfer the information from senders (informant) to receivers (Prastati, 2005: 3; Heinich, 1996: 8). If the media contains messages or information with the purpose of learning, then the media is called as learning media (Heinich, 1996: 8). In the context of education, media is commonly referred to learning facilities – transfer material or messages to students (Wang & Cheung, 2003: 217). Thus, the media is component of learning resources or physical means contain instructional material in student environment to stimulate students in learning.

Learning media is developing constantly along with the development of science and technology. The development of learning media also follows the demands and needs of learning, in accordance with the situations and conditions. Arsyad (2007: 29) classified the learning media into four groups; the media produced by printing technology, the media produced by audio visual technology, the media produced by computer technology, and the media produced by the combination of printing and computer technology. Media is very important in learning because it can clarify the presentation of messages, solve the limitations of space, time, and sensory power, solve the problem of students’ passive, and the students become more enthusiastic and more independent in learning, and provide stimuli, experiences, and perceptions to learning material (Sadiman, 2006: 17-18).

Contextual learning as a learning strategy widely discussed among the education communities. There a lot of opinions associate with the definition of contextual learning. Johnson (2012: 58) argued that contextual learning is a suitable learning system to brain that produces meaning by connecting the academic content with the real context of students’ life. Sanjaya...
(2009: 255) defined contextual learning as a learning strategy involving students to find the material and connect it into real-life situations in order they can apply the learning material within their lives. Contextual learning has positive impact on learning outcomes (Putnam & Leach: 2007). Kholifah (2016) concluded that contextual learning based video media is suitable for learning in higher education. The purpose of the particular study is to produce a contextual learning media of learning video on course of Education Administration Research Methodology and to determine the feasibility of contextual learning media based on the experts.

**METHODS**

The research method was research and development of ADDIE model. The ADDIE model is one of the most common models used in the instructional design field as a guide to produce an effective design of leaning. This model is an approach that helps instructional designers, any content developer, or even teachers to create an efficient and effective teaching design by applying the processes of the ADDIE model on any instructional product (Aldoobie, N.: 2015). The stages of this research and development consisted of analysis, design, development, implementation, and evaluation. The analysis stage consists of problem analysis and analysis of learning components. The design stage consists of making the structure of learning materials and storyboards. The development stage consists of making the scenarios for learning video, making the learning video and expert validation.

The data collection techniques in analysis stage were interview and observation, while questionnaire was used in development stage. The questionnaire was used to obtain data on expert's assessment toward the developed product. The questionnaires were inventory questionnaires with rating scales. The aspects on expert's validation are feasibility of media and feasibility of material. The data analysis in the particular study included analysis of problems, components of learning and analysis of expert validation results. The data analysis technique was descriptive analysis with quantitative and qualitative approaches. Descriptive techniques used to analyze the results of problems and learning components of Office Administration Education Research Methodology. Quantitative techniques used to analyze data from experts. The criteria to determine media feasibility is presented in Table 1.

![Figure 1. Scheme of learning media development procedures](image-url)
RESULT AND DISCUSSION

The first stage on ADDIE Model is problem analysis. The analysis stage consists of problem analysis and analysis of learning components. The data in analysis stage obtained through interviews with respondents, consisting of students of Office Administration Education Study Program of Economic Faculty, Yogyakarta State University who has taken the course of Office Administration Education Research Methodology. The numbers of interviewed respondents were 5 students consisting of students from batch 2012 and batch 2013. The respondents were randomly selected. Based on the results of interviews, it obtained data of problems in learning of Office Administration Education Research Methodology. Problems according to the students' version are: 1) the difficulty to understand the material of research methodology; 2) the poor variety of learning methods; 3) the non-contextual of material in media.

Table 2. Problems of Research Methodology Learning

<table>
<thead>
<tr>
<th>Problems</th>
<th>Num. of Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficult to understand the material</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>Poor of variety learning methods</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>Non-contextual of material in media</td>
<td>3</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Processed Primary Data (2018)

Furthermore, based on observation to students who are writing thesis, it obtained data about the poor of students' understanding on the research methodology material. Observations were conducted to 4 (four) students who currently conduct thesis guidance and 4 (four) students who have passed thesis examination.

Table 3 shows most of students have the poor understanding in the chapter of introduction. There is only one student who have a good understanding both in the chapter of results and discussion and the chapter of conclusion. Most of students (75%) have a sufficient understanding in the chapter of literature review, research method, result and discussion and conclusion. Furthermore, it can be concluded that based on the result of observation, students do not have an appropriate understanding in writing their thesis.

Based on problem analysis stage, there are three problems in learning of Administration Education Research Methodology. They are: (1) students are difficult to understand the material of research methodology; (2) poor of variety learning methods; (3) non-contextual of material in media. All respondents stated that material of Administration Education Research Methodology is difficult to understand. This statement is supported by observation results to students who are writing thesis and have passed thesis examination. Students’ understanding is on poor category, especially in writing the chapter of introduction.

The introduction is an urgent part and it is a foundation to the next chapters in rese-
Table 3. Students’ Understanding Toward Research Methodology Material

<table>
<thead>
<tr>
<th>Research Methodology Material</th>
<th>Students’ Understanding</th>
<th>Number of Students</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter of Introduction</td>
<td>Poor</td>
<td>7</td>
<td>87.5</td>
</tr>
<tr>
<td></td>
<td>Sufficient</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chapter of Literature Review</td>
<td>Poor</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>Sufficient</td>
<td>7</td>
<td>87.5</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chapter of Research Method</td>
<td>Poor</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Sufficient</td>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Chapter of Result and Discussion</td>
<td>Poor</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>Sufficient</td>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td>Chapter of Conclusion</td>
<td>Poor</td>
<td>1</td>
<td>12.5</td>
</tr>
<tr>
<td></td>
<td>Sufficient</td>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>1</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Source: Processed Primary Data (2018)

The errors or mistakes in formulating the components of introduction will result in errors and difficulties in making research proposals. Therefore, an understanding to components of introduction chapter which consists of background of the problem, problem identification, problem limitation, problem formulation, and research objective, must be well taught within students. One of the solutions is by presenting material through media with contextual material (Nind, M., Kilburn, D., & Luff, R.: 2015). Lewthwaite, S. & Nind, M. (2016) stated that practical learning strategies are also very necessary.

The next analysis is learning components analysis. Based on analysis of learning components of Office Administration Education Research Methodology, the data obtained is presented in Table 4.

Table 4. Results of Learning Components Analysis

<table>
<thead>
<tr>
<th>Learning Components</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal of learning /</td>
<td>Fulfilled and Clear</td>
</tr>
<tr>
<td>learning objectives</td>
<td>The scope is clear</td>
</tr>
<tr>
<td>Learning material</td>
<td>Theoretically / contextually</td>
</tr>
<tr>
<td>Media</td>
<td>PowerPoint</td>
</tr>
<tr>
<td>Lecturer</td>
<td>Incredible competent</td>
</tr>
<tr>
<td>Students</td>
<td>Poor of autonomous / independent</td>
</tr>
</tbody>
</table>

Source: Processed Primary Data (2018)

Table 4 shows the results of learning
components analysis which states that the
goal of learning in Research Methodology
course has been explained clearly. The learn-
ing materials have been discussed theoretical-
ly and contextually during the meetings. Most
of learning media used was the powerpoint,
there was no other innovative media used so
far. All of Research Methodology lecturers
have an incredible competency, while stu-
dents identified less active in the learning pro-
cess and have not had a proper independency.

Furthermore, based on analysis of learn-
ing components, there are components that
are less support to learning. Among five com-
ponents (see Table 4), two components need
to improve; material and students. Learning
material is poor of contextual, as the impact,
students are difficult to understand. Moreover,
students are also more passive and poor of
independent learning, so they have not good
material understanding.

The second stage of ADDIE model is
the design stage. The design stage produced
material structure, storyboard, and instruc-
tions of media evaluation instrument. (1)
Material Structures; based on the results in
analysis stage, the main problem is poor of
material understanding in topic of writing the
chapter of introduction. Therefore, the de-
veloping of learning video focused on the mate-
rial of chapter of introduction. The material
structures of chapter of introduction included
concept of problem, background, problem
identification, problem limitation, problem
formulation, research objectives, and research
significances.

![Figure 2. Learning Material Structures](image)

The next stage in design stage is (2) Storyboard; storyboard made in design stage
is a descriptive storyboard. The descriptive
storyboard contains subject materials, video
scene scenarios, and cast of learning video
scenes. The scenario scene videos are design-
ated on four dialogue scenes and a narration.
The learning video storyboard is attached in
attachment section. (3) Instructions of Eval-
uation Instruments; The instructions of evalu-
ation instruments consist of media evaluati-
on instrument by material expert and media
evaluation instrument by media expert. The
instructions of media evaluation instruments
by material expert consist of indicators of con-
cept authenticity, material factuality, material
actuality, sequences of material presentation,
video conformity to clarify the material, and
language use. The instructions of media eval-
uation instruments by media expert consist of
video title indicators, letter use, text readabi-

ty, display attractiveness, object layout, color
composition, and presentation sequences.

Development stage is the third level on
ADDIE Model. This stage consists of making
the scenarios for learning video, making the
learning video and expert validation. (a) Eval-
uation Instruments; The developed of media
evaluation instruments consists of evaluati-
on instruments by media expert and material
expert. The developed of media evaluation
instruments are presented in appendix sec-
tion. (b) Media Products; The developed of
learning media product was learning video.
The developed of learning video consists of
a scene of problem occuring in learning acti-

Video duration is 20 minutes 59 seconds, 1920 X
1080 pixel frame size, and 1.8 GB file size.

The developing media of learning video
is conducted based on the results of needs
analysis and learning problems (Widiati, Ira-

wati, Basthomi, et. al: 2013). Based on analy-
sis stage, the learning media are the learning
video. The developed learning video focused
on material of introduction chapter. Learning
video used a contextual approach. It means, the content of learning video is real problem demonstration in order students are easily understand the material. Contextual learning is a learning concept that helps teachers associate the material with the students’ real situations, and encourage the students to make connections between the knowledge and its application in their lives as family members and society (Hadiyanta: 2013). Based on research conducted by Irwandi (2013), contextual learning has a positive effect on cognitive learning outcomes. Contextual learning can facilitate the students’ understanding to the material being studied (Shamsid-Deen & Smith: 2006).

Thus, the developing of contextual learning media in learning video is in accordance with the needs and supported by the findings of previous research. Kholifah (2016) concluded that contextual learning based video media is suitable for learning in higher education.

Figure 3. Metadata of learning video

The quality of learning video was validated by media expert and material expert. Media expert was Mrs. Musliakh Dwihartanti, SIP, M.Pd. She is the lecturer in Technology of Administration Learning. She graduated from Learning Technology of Postgraduate program at Yogyakarta State University. The validation of media in its many and varied forms has necessitated the development of tools and indicators capability of providing an insight into the condition. Validation of media quality consisted of 8 aspects of assessment. The results of validation by media expert were presented in Table 5. Based on the assessment by media expert, the average score was 4.25. Besides providing assessments, media expert also provide suggestions and insight for improvement. The suggestions and insights by media expert are to keep the consistency in letters use and numbering. Also, media expert provides recommendation to revise the product before applied into the learning process.

Table 5 was Mr. Ali Muhson, M.Pd. He is an expert in the field of research methodology and statistics. He graduated from master degree and doctoral candidate in the field of Educational Research and Evaluation of Postgraduate program at Yogyakarta State University. Validation of material quality consisted of 7 aspects of assessment. The results of validation by material expert were presented in Table 6. Based on the assessment by material expert, the average score was 4.28.

Besides providing assessments on the Table 6, material expert also provide suggestions and insight for improvement. The suggestions and insights by material expert are the reasons of research importance should be written in a text, the explanation of problem identification should be interrelated among the problems, problem formulation is question (s), not statement (s), and needs to add material of research significances. Meanwhile, material expert provides recommendation to revise the product before applied into the learning process.
In accordance with the research objectives, it has produced a contextual learning video on course of Administration Education Research Methodology with material of research proposal in topic of Introduction. According to the assessment of media expert and material expert, the developed learning video has a criteria of very feasible. However, both media expert and material expert provide recommendation to revise the product be-

### Table 5. Validation Results of Media Expert

<table>
<thead>
<tr>
<th>No</th>
<th>The Assessment Aspects</th>
<th>Very Poor</th>
<th>Poor</th>
<th>Sufficient</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The clarity of title</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Font type selection</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Font size selection</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The legibility of text</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Video display</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Layout</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The balance of background color and text</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>The consistency of display among sections</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total of score</strong></td>
<td><strong>3</strong></td>
<td><strong>16</strong></td>
<td><strong>15</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed Primary Data (2018)

### Table 6. Validation Results by Material Expert

<table>
<thead>
<tr>
<th>No</th>
<th>The Assessment Aspects</th>
<th>Very Poor</th>
<th>Poor</th>
<th>Sufficient</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Concept authenticity</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Material factuality</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Material actuality</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sequences of material presentation</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Video conformity to clarify the material</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Accuracy of language use</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Clarity of language use</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total of score</strong></td>
<td><strong>20</strong></td>
<td><strong>10</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Average 4,28

Source: Processed Primary Data (2018)

**CONCLUSION**

In accordance with the research objectives, it has produced a contextual learning video on course of Administration Education Research Methodology with material of research proposal in topic of Introduction. According to the assessment of media expert and material expert, the developed learning video has a criteria of very feasible. However, both media expert and material expert provide recommendation to revise the product be-
fore applied into the learning. The lecturer on course of administration education research methodology should consider using contextual learning strategy in order to make students easily understand the material. The students should actively ask if they do not understand the material, and diligently read the material independently without having an assignment from the lecturer.

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