

‘Students’ Perception on the Use of Instructional Multimedia Production Support Effective Learning

Day Ramadhani Amir¹, IbutPriono Leksono², Hari Karyono³
^{1,2,3}*Universitas PGRI AdiBuana Surabaya, Graduate Program, Educational Technology
DukuhMenanggal XII, Surabaya 60234 JawaTimur, Indonesia*

Abstract: The current study aimed to investigate students’ perception on the use of instructional multimedia product to support the effective learning. The study was done through qualitative case study. The participants were the students in vocational high schools. The methods to gather the data were through interview and observation. The findings revealed that the students’ responses toward the use of instructional media were positive. They perceived that the use of video as a media able to motivate, easier to understand and enthusiasm in learning. Further research focused on the teachers’ effort to improve the quality of multimedia product need to be tackled.

Keywords: instructional media, multimedia product, perception, video.

1. Introduction

Learning is a long life process of interaction among teachers and students in all conditions. Learning also can be considered as the process of seeing, observing, trying and understanding something from the teacher /informant of the message to the recipient of the message/students. Learning can be done individually, in groups or with the help of others as a guide in learning. To achieve a success in teaching and learning activities there are several components that can be developed by the teacher, including: learning objectives, learning strategies, teaching materials, learning media, and learning evaluation

Now days, there are some options for the instructional material influences the growth of video instruction within a variety of contexts. It also accompanied by an equal variety of available design options. The choices must be consider the most appropriate content, style and platform for presenting material, taking into account how best to motivate students, raise learning outcomes and even consider students’ affective state (emotions) in order to facilitate optimal learning [1].

Specific subject matter and pedagogical strategies necessitate varying design considerations. Different decisions might be made when designing videos aimed at helping students solve math problems, teaching a foreign language, demonstrating a medical procedure or lecturing in ancient history. Case studies which highlight the process of designing video for learning can only advise that it is imperative to draw on a close collaboration between expertise in the field/subject matter and in video production [2].

There really is a lot more that can be researched and explored, especially in terms of subject areas that see stronger levels of student engagement and impact where video is used in course teaching; the current body of knowledge is merely scratching the surface at this point. As introduced earlier, the cognitive theory of multimedia learning. [3], [4] should prove instrumental in effective video design. It proposes that multimedia design should aimed to reduce extraneous processing (cognitive processing that is not in line with learning objectives, caused by poor design), manage essential processing (necessary cognitive processing within the working memory that is affected by levels of complexity of the material) and encourage generative processing (cognitive processing for making sense of the material which is assisted by learner motivation). Absolutely, video developers need to consider this theory in their design choices.

This paper outlines a brief description of the six, key principles of multimedia learning with additional principles being discussed in [3] and [4] multimedia principle. Providing words with pictures, images, or other graphics enhances learning relative to materials that include only words. While this principle pertains to texts with pictures, it also applies to videos, which include audio and video components; 2) Modality principle. When combining visual and verbal materials, it is more effective to use audio than it is to use written text. Videos may be more effective when they present video in conjunction with audio narration as opposed to written text in the video; 3) Contiguity principle. Multimedia materials are more effective when words and pictures/images/graphics occur in close proximity relative to when they do not occur in close proximity; 4) Redundancy principle. Eliminating redundancy enhances the effectiveness of multimedia. For example, text may be redundant with audio narration, and such redundant text should be eliminated; 5) Coherence principle. Adding flashy but unnecessary illustrations to multimedia can be distracting, reducing coherence and thereby reducing learning; 6) Personalization principle. Using a conversational style (e.g., in narration) can be more beneficial relative to a more formal presentation style.

2. Method

The current study adopted case study research which aimed to investigate students' perception on the use of instructional multimedia product to support effective learning. Interview was used to gain the data of students' perception which involving 3 students' in each class. The students were selected randomly. The method in analyzing data used theme analysis.

3. Findings and Discussion

3.1 Findings

Based on the result of interview gathered from the students, it was indicated that the students perceived a positive response towards the instructional media used by the teacher in teaching in the classroom which are necessary in effective teaching and learning process for the students. *First*, being happy in learning. For the students, being happy in learning process is necessary to achieve positive learning outcomes. The result of the interview indicated that the instructional media used by the teachers giving a significant positive effect and learning situation toward the students. As it seen from the extract:

- S1 : *Yes, I think I feel more motivated during the learning*
- S2 : *Video media can attract me to be more focus to follow the lesson*
- S3 : *Sure, I feel more interested to study when the teacher using video media*

Based on the result of interview above, when the students were asked about the acceptance of the students if teacher used video media in the teaching and learning process, most of the student responded the question with a positive word and feeling which meant as students' acceptance to learn using video media. Meanwhile, the students asserted that the teacher's instructional media used in teaching and learning process made students did not feel confused to understand the material which was thought by teacher. Some of the students stated that it would make feel bored to learn when the teacher not created such a media to help the students to understand the materials. It was because the teacher gave them compliment tools in learning not only that teacher also used various media such as LCD or other tool. It was also showed the picture such as an animation to make students more interested and happy in learning. As it seen from the extracts:

- S2 : *I am really happy when the teacher using video media to teach, since it can make me easier in understanding the materials*
- S4 : *Usually, when the teacher did not create such innovation in the teaching and learning process, I get bored.*

Second, being more active in learning. The next students' perception of the media used by teacher is they can be more active in learning. It is also one of the parts of the benefit teacher's instructional media which was used in teaching and learning process. The researcher found that the teacher's instructional media can give positive effect to students where they were mostly stated that they were being more active in learning. Another student stated that sometime he was lazy sometimes he was active because it is if teacher provide the teaching with video media, so that it made him being active in the classroom. As seen in the extracts below:

- S2 : *Not only me, but my friends also fees enthusiastic when the teacher using video media to support the learning*
- S4 : *It is right, video media used by the teacher can improve students' willingness to study more*

On the contrary the extract above, the researcher also found the students negative perception of the media used by teacher in teaching. Those perceptions were students sometimes not being enthusiastic/spirit in learning because some of factors affect them. It was because some factors affect them to be not enthusiastic. As asserted in the extract:

- S1 : *Classroom situation also affect the learning, especially when the class become hot and noisy*

Those statements included in the types of perceptions are situation perception. Classroom atmosphere means as situation perception where students cannot be enthusiastic in learning because they were feels hot and noisy. Another factor affect them to be not enthusiastic/spirit to learning is personal factor or individual which means individual characteristic behavior is another strong influence on what you perceive about that individu

3.2 Discussion

Audio visual aid is very important for the students in teaching and learning process. The students like the way of the teacher delivering material in teaching the subject. Students stated that they were happy in learning when teacher used media. In line with [5] (Kemp, 1977: 79) who stated that audio media such song can provide a natural means of active learning for young learners. It can help students to deal with worries and fears. It helps them to develop social skills such as turn taking.

The second students' perception about the benefit of the teacher's instructional media in teaching is they can be more active in learning. Creative learning included any activity encouraging students to participate in learning approaches engaging them with course material and enhancing critical thinking as they made applications beyond the classroom. The students found participating in active learning activities an interesting, interactive, and enjoyable.

The third, students' perception about the benefit of the teacher's instructional media used in teaching is they can be more excited/spirit in learning. It was identified also from the students' perceptions that the way the teachers taught as well as show their own personal perception such as being enthusiastic would be helpful to get their interest in learning and to keep the students being excited and motivated in learning when the teacher used an interesting media in teaching, it would affect the students' mood.

On the contrary of the research findings, there were also the students gave negative perception of the media used by teacher in teaching. Those perceptions were students sometimes not being enthusiastic/spirit in learning because it is affect of classroom atmosphere. According [6] classroom atmosphere included in the types of perceptions is situation perception. Classroom atmosphere means as situation perception where students cannot be enthusiastic about learning because they were hot and noisy.

Another factor affect them to be not enthusiastic/spirit to learn was personal factor or individual which means individual characteristic behavior is another strong influence on what you perceive about that individual. The fourth students' perception about the benefit of the teacher's instructional media used in teaching is they can be easier to understand materials in learning. In teaching and learning, according to [7] that to know how the process of gathering information through human perceptions is through indicator of perception, the indicator that he meant the students' understanding. In line with this theory, in the research findings that the students were easier to understand materials when the teacher used media in teaching and learning process. Other than that there are some dimension to be paid attention regarded the use of multimedia in the teaching and learning process i. e the assessment method and procedures of assessment. [8] argued that assessment is important because it wash-back effect on learning. From this point of view, assessment is another dimension to be considered in developing multimedia product.

4. Conclusion

The aim of this research was to investigate students' perception towards the use of instructional media used by the teacher in teaching and learning process. The finding revealed that the students' responses toward the use of instructional media were positive. They perceived that the use of video as a media able to motivate, easier to understand and enthusiasm in learning.

References

- [1]. Chen, C.-M. and Wu, C.-H. (2015), 'Effects of different video lecture types on sustained attention, emotion, cognitive load, and learning performance', *Computers & Education* 80 , 108–121
- [2]. Schneps, M. H., Griswold, A., Finkelstein, N., McLeod, M. and Schrag, D. P. (2010), 'Using video to build learning contexts online', *Science* 328(5982), 1119–1120.
- [3]. Mayer, R. E. (2014). Multimedia instruction. In J. M. Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of Research on Educational Communications and Technology* (pp. 385-399). New York: Springer.
- [4]. Clark, R.C. and Mayer, R. E. (2016), *e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning* 4th Ed., Hoboken, NJ: John Wiley & Sons, Inc
- [5]. Tomlinson, B. 2001. Materials Development. In Carter, R. and Nunan, D. (Eds.), *The Cambridge Guide to Teaching English to Speakers of Other Languages*. Cambridge: Cambridge University Press.
- [6]. Dick, W. and Carey, L. 1990. *The Systematic Design of Instruction*. Third Edition. Tallahassee: Harper Collins Publishers. Ellis, R. 1990. *Instructed Second Language Acquisition*. Oxford: Basil Blackwell.
- [7]. Pinter, A. 2006. *Teaching Young Language Learners*. Oxford: Oxford University Press
- [8]. Rohmah, I.I.T., Saleh, M., Faridi, A., Fitriati, S.W. (2019) Language assessment pattern for primary education in the content and language integrated learning (CLIL) classroom context. *Asian EFL Journal*, 21(2.2), 101-123. <https://www.elejournals.com/asian-efl-journal/asian-efl-journal-volume-21-issue-2-2-march-2019/>