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Students' Perception in Creating Multimedia with Paci Model through TPACK Framework In English Department Mulawarman Universitas

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Abstract

The purpose of the study is to know the students' perception in creating multimedia with PACI model through TPACK framework. This research was conducted in English Department of Mulawarman University. The design of this study was qualitative study that it is purposed to illustrate students' perception about creating multimedia with PACI model through TPACK framework

Keywords: perception, creating multimedia, PACI model, TPACK framework

1. Introduction

In education multimedia technology has made a significant impact on the instructional content development and methods of communicating information to the learners. It is leading to the evolution of new concepts and innovatie teaching technique in the instruction-learning prcess. this changing perspective of education focusses on learning, rather thanon teaching and pedagogy, curriculum and instruction. (Neo & Neo, 2010).

Traditional educational content can now be transformed into interactive multimedia content by using authcccoring packages (Roselli et al., 2003). This fact has enabled the teacher to innovate their instructional designs by presenting the education content in an interactive and multi-sensory manner rather than the traditional single media format. This infusion of multimedia into teaching and learning has altered instructional strategies in educational institutions and many colleges and universitiesare currently gearing their teaching and learning towards one which uses multimedia technology to enhance the student's learning process (Teoh and Neo, 2006).

The most current technologies and state of the art learning design theories and practical applications are occuring new paradigms or learning/teaching and 'new space' toward preparing 21st century digitally-skilled professinals. (Liton, 2015). At the heart of good teaching with technology consist of three basic components: content, pedagogy, and technology, following with the relationships among and between them. The interactions between and among the three components, playing out differently across diverse contexts, account for the wide variations in the extent and quality of educational technology integration. These three knowledge bases (content, pedagogy, and technology) form the core of the technology, pedagogy, and content knowledge (TPACK) framework. (Koehler, Mishra, & Cain, 2013).

TPACK is a beneficial frame for thinking about what knowledge teachers must have to intergrate technology into teaching and how they might develop this knowledge. Using TPACK as a framework for measuring teaching knowledge could potentially have an impact on the type training and professional development experiences that are designed for both preservice and inservice teachers. Hence, there is a continual need rethink our preparation practice in the teacher education field and propose new strategies that better

prepare teaches to effectively intergrate technology into their teching. (Schmidt et al, 2009)

In conclusion, using multimedia as learning media able to bring good impact during this time, EFL students of english department were introduced to teaching with multimedia with PACI model and create their own multimedia with PACI model through TPACK framework for their future learning media when they become teacher. Based on the fact above the researcher wants to know deeper about what are the students' perception towards creating multimedia with PACI model through TPACK framework in Teaching English Foreign Language Class in the English Education Study Program of Mulawarman University and the subject for this study are students in sixth semester who are taught creating multimedia through TPACK in TEFL lesson.

Based on the explanation above the researcher formulated research questions as follows:

1. What is the students perception after creating multimedia with PACI model through TPACK framework ?

Then, related to the research questions, the purpose of this study are :

1. To find out the students perception in multimedia with PACI model through TPACK framework.

2. Literature Review

2. Concept of Perception

Wesely (2012) stated that learners' perceptions have been commonly associated with two target: perception of themselves have often been defined as how students understand and make sense of themselves and their own learning learning. While leaner perception of the learning situation have included how students experience and understand aspect of the classroom.

Perception is someone thought about something that they learn to measure how their attitude toward using something, whether they agree or not about that method or about something that they learn (Hong, Ridzuan, & Kuek, 2003, p.5) It means that students have their own opinion toward something that get from teaching learning process and how they react toward it.

Based on definition given by some experts above, the researcher can conclude that a perception is how students' thought to response about what they have done or about what they learned based on their own experience and this researcher the researcher explores the students' perception in creating multimedia with PACI model through TPACK framework in TEFL class.

3. Multimedia

Multimedia is any combination of text, art, sound, animation, and video delivered to you by computer or other electronic or digitally manipulated means. (Vaughan, 2011). Multimedia is a learning tool that allows learners to organize, represent and construct knowledge in multiple modalities that include text, audios, graphics, animation and videos. (Sivakumaran, et al., 2012, p.68). Multimedia is the use of text, graphics, animation, pictures, video, sound, to present information. Since these media can now be integrated using a computer, there has been a virtual explosion of computer based multimedia instructional applications (Najjar, 1996, p.1)

Multimedia Technology is used and experimented by various educational institutions of all levels all over the world in their own designed modes. There are two ways, multimedia education is imparted to the students by various universities / institutions: a)Teaching methodologies of multimedia content creation, which include imparting hands-on skills of software packages used for creation and authoring of multimedia content, and b) Employing interactive multimedia content and technology for effective teaching, which include the various methods of engaged learning like multimodal interactive information delivery; and personalized and enhanced anytime-anywhere access of the content. (Malik & Agarwal, 2012, pp.468-469).

4. PACI Model

Multimedia Learning, the researcher created the PACI model. It stands for PowerPoint (P), Audacity (A), Camtasia (C) and Internet (I). The intersection amongst these four software create four knowledges and skills, namely PowerPoint-Audacity (PA), Audacity-Camtasia (AC), and Camtasia- PowerPoint (CP) for designing and developing the multimedia of the PACI model for supplemental technology-integrated materials. (Limbong , 2016)

5. TPACK framework

According to Koehler (2014) Specifically, three major knowledge components form the foundation of the TPACK framework as follows:

1. Content knowledge (CK) refers to any subject-matter knowledge that a teacher is responsible for teaching.
2. Pedagogical knowledge (PK) refers to teacher knowledge about a variety of instructional practices, strategies, and methods to promote students' learning.
3. Technology knowledge (TK) refers to teacher knowledge about traditional and new technologies that can be integrated into curriculum.

Four components in the TPACK framework, address how these three bodies of knowledge interact, constrain, and afford each other as follows:

1. Technological Content Knowledge (TCK) refers to knowledge of the reciprocal relationship between technology and content. Disciplinary knowledge is often de fi ned and constrained by technologies and their representational and functional capabilities.
2. Pedagogical Content Knowledge (PCK) is to Shulman's (1986) notion of "an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction" (p. 8).
3. Technological Pedagogical Knowledge (TCK) refers to an understanding of technology can constrain and afford specific pedagogical practices.
4. Technological Pedagogical Content Knowledge (TPACK) refers to knowledge about the complex relations among technology, pedagogy, and content that enable teachers to develop appropriate and context-specific teaching strategies

3. Methods

The research design of this study is qualitative research that aims to describe the students' perception towards creating multimedia with PACI model through TPACK framework in English Department, Mulawarman University.

In this research, the researcher tries to know the students' perception towards multimedia with PACI model through TPACK in English Departement at Mulawarman University. The researcher will use questioner and interview as basic describe the data. In

addition, the existing evidence will be analyzed and interpreted by means of specific stages in reference to descriptive methods.

In this study, the participants of this study is English Department students, students who are in sixth semester. Researcher chose sixth semester students of English Department because they already had learn creating multimedia through TPACK. There are 147 students in sixth semester . Class A of sixth semester had 38 students, class B of sixth semester had 38 students, class C of sixth semester had 36 students, and class D of sixth semester 35 students. Researcher chose Class C of sixth semester and class D of sixth semester because this class already learn how creating multimedia through TPACK in TEFL 2 class. Class A and B could not be one of the samples because in TEFL 2 class they don't learn creating multimedia trough TPACK. In this study, the researcher use two kinds of instruments; they are Questionnaire and Interview. The data of this study were collected from questionnaire and interview that had been done to the students to know about students' perception in creating multimedia PACI model through TPACK framework. First, researcher give questionnaire to the students in sixth semester of English Department. There were 2 classes that researcher use for her research, class C and class D. There were 35 students who filled the questionnaire in class C and 36 students who filled the questionnaire in class D. After distributing the questionnaire, researcher calculated the data to get the mean score of students and to get the mean score of each items of questionnaire. After calculating the mean score, researcher would interview two students who got high mean score, two students who got average mean score and two students who got low mean score. Researcher categorized the students to be interviewed to get further information about students' perception in creating multimedia with PACI model through TPACK framework. The interview result would be transcribed and analyzed. After that, researcher would triangulate the data from questionnaire and interview by using data triangulation. To analyze the data of this study, the researcher used a flow model analysis from Miles and Huberman (1994;10-11). There are three concurrent flows of activities (data reduction, data display, and conclusion drawing/verification)

1. Data reduction refers to the process selecting, focuses, discard and organized the data. In conducting research, the researcher got much data. Hence, the researcher selected a data that give valuable information in research. Thus, at first the researcher has to do reduction to analyze the data. Based on the concept of data reduction, for reducing the data the researcher selecting 6 students to be interviewed based on the result of questionare from 41 students who fill the questionnare.

The researcher choose 2 students with highest score, 2 students with medium score and 2 students with lowest score. The researcher focuses on topic related to creating Multimedia with PACI model through TPACK framework.

2. Data display is an organized, compressed assembly of information that permits conclusion drawing and action. In data display researcher organize the result of the data reduction and compress the information and the result present in the form of extended text.

3. Conclusion drawing is developed from the beginning process of the data collection through identifying the object analyze until the final was obtain.

In this study, the researcher used triangulation technique to test the validity of the data. the researcher used data triangulation because researcher wanted her research to have valid and reliable result. Data triangulation was commonly used to strength the conclusion and also reduce the false interpretation toward the result. Researcher crosschecked the interpretation the data related to the data that researchers get. Afterwards, the data are considered valid and reliable for final analysis.).

4. Result

There are also 38 students that showed other positive perception about the effect of creating multimedia through TPACK, they think that they can learn technology easily as stated by student 5 we must understand the use technology itself:

"after creting multimedia with TPACK framework I know how to creating multimedia as a teaching learning material in the class is not just designing but also know how to combine that multimedia with content and pedagogy to fit learning target students, therefore we must understand the use technology itself." (page 70 line 26)

For summary,the students have positive impact after creating multimedia through TPACK framework,they can learn about technology in classroom.

There are also another result from the questionnaire, it shown that after creating multimedia through TPACK 43 students can select technologies and teaching approaches as showed from statement from student 3 feel we must know what content that will we bring in classroom and then what teaching method we choose and the last we can apply them in technologies :

"TPACK framework helps me apply camtasia and power point very well. I also beginning to understand how to explain the content by using video and also how we teach with the right method and then added with the explanation of the material itself in the power point" (page 66 line 14)

Based on the result of questionnaire,there are 37 students that think after creating multimedia through TPACK, it is easy to choose technologies that enhance the learning of (the particular content) for lesson as student 1 stated if she can improve her technologies for lesson:

"I understand how to combine content with technology (content to power point and then voiced with audacity) and then find a way to arrange it in order for the material to be easily understood by students and attracts attention,like, for the power point we have to set the composition of the explanation, arrange the composition of the description, set the font to be able to read and highlight important letters, give pictures, decorate the idea and for audacity,we have to make sure the voice is clearly heard by the students " (page 59 line 55)

Another finding of the questionnaire showed that after creating multimedia through TPACK there are 42 students agree that they can teach lessons that appropriately combine the particular content, technologies and teaching approaches, this shown in student 1 statement if she learn how to creat multimedia through tpack framework I know how to design and creat multimedia in appropriate way with content and combine with teaching method :

"I learn how to creat multimedia through tpack framework I know how to design and creat multimedia in appropriate way with content and combine with teaching method so in the end students can clear their learning target. I realize there are many thing we should pay attention before creat multimedia, we must know what content that will we bring in classroom and than what teaching method we choose and the last we can apply them in technologies" (page 58 line 36)

This statement from student 1 also supported with student 2 statement after creating multimedia through TPACK framework multimedia more structured consist of technologies, content knowledge and also pedagogy :

"After I creating multimedia through tpack framework I learn how before we teach in classroom we should carefully in select teaching method because teaching method should be appropriate with content knowledge, after that we can choose technologies can be use in classroom. in this case tpack framework is very useful and make my multimedia more structured" (page 62 line 31)

From the statement above it shown that creating multimedia through TPACK framework can enhance their pedagogical knowledge, content and also their skill in using technology.

5. Discussion

From the findings of the study, first, students agree with using multimedia in classroom because they think multimedia very useful and students more interesting in learning process because in multimedia they will see material with sound, text, video, picture and animation. According to (Andresen & Brink, 2013, p.22) Multimedia is very helpful and fruitful in education due to its characteristics of interactivity, flexibility, and the integration of different media that can support learning, take into account individual differences among learners and increase their motivation,as for the second one, students agree after creating multimedia they more creative in design and present their multimedia in classroom because in creating multimedia they learn and develop their skill in creating multimedia. According to (Vaughan, 2011, pp.197-200) Some people might say it's impossible— and that you have to be born with it. But, like traditional artists who work in paint, marble, or bronze, the better you know your medium, the better able you are to express your creativity. In the case of multimedia, this means you need to know your hardware and software first. The third, students believe after creating multimedia with PACI model through TPACK framework they know how to choose and using technologies in classroom , they also know if creating multimedia in classroom we need to mastered content knowledge and our pedagogical knowledge.

From the questionnaires and interwies we could take the conclusion that three major knowledge components TPACK framework like CK (Content Knoweledge), PK (Pedagogical Knowledge) and TK (Technology Knowledge) improve after creating multimedia with TPACK framework.

The conclusion above supported by theory from (Koehler et al, 2014, p.102) that state specifically, three major knowledge components form the foundation of the TPACK framework as follows: Content knowledge (CK) refers to any subject-matter knowledge that a teacher is responsible for teaching. Pedagogical knowledge (PK) refers to teacher knowledge about a variety of instructional practices, strategies, and methods to promote students' learning. Technology knowledge (TK) refers to teacher knowledge about traditional and new technologies that can be integrated into curriculum

6. Conclusion

Based on the research findings of the study, for the first reserach question, the researcher concluded that students' perception in creating multimedia with PACI model through TPACK framework showed positive perception with the total of the mean score 3.77. It could be concluded that students had the positive perception because they got several benefits after creating mutimedia with PACI model through TPACK framework, the first result of the study show students can enhance their content knowledge, skill and creativity using technologies, and also their pedagogy knowledge.

7. Suggestion

Based on the finding data, the researcher would like to offer some suggestions. The following suggestions are especially addressed to teacher and lecturers, students and future researcher.

1. For the Teacher

For teachers and lecturers, based on the data that the researcher collect shows that students have positive perception in creating mutimedia with PACI model through TPACK framework. It seemed that teacher should make and design and interesting multimedia model through TPACK model to motivate students to creating their multimedia as learning media in the future.

2. For the students

It is important to know that creating multimedia with PACI model through TPACK framework have benefit to improve their pedagogical knowledge, content knowledge and also students skill to use several application in classroom.

3. For future researcher

In doing the study, the instruments used by the researcher are questionnaire and interview which were done in limited point of view and time. The researcher hopes that the next researcher will have more time and instruments in conducting their research.

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