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The Correlation Between Objective And Procedure In The Development Of Alternative Digital Assessment System For Summary Writing Based On Android: Analysis Of Teacher's Opinion

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Abstract. The implementation of teaching Malay Language in high school should focus on the development of digital and virtual teaching material that based on computer, information and communication technology. The development goal needs to be directed to the teacher's opinion towards the correlation between objective and procedure to serve as catalysts in the learning process of summary writing. Hence, this research was conducted to study teacher's opinion towards the correlation between objective and procedure in the development of digital and virtual alternative assessment system that based on Android for form four summary writing. The survey method was conducted by involving 33 teachers as a randomly selected sample. The study data were analysed descriptively from the questionnaire. Descriptive data that were analysed are mean and standard deviation, while the inferential data were tested using Pearson Correlation statistics. The result shows that there is a positive correlation between objective and procedure in the development of digital and virtual alternative assessment system, r = 2.03 at a significant level of <0.05. The finding provides implication that the objective and procedure must be applied by a teacher for the sustainability of the systematic development of digital and virtual teaching material for form four students in learning summary writing.

Keywords: Teacher's Opinion; Objective and Procedure; Development of Alternative Digital Assessment System; Summary Writing; Android

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INTRODUCTION

The development and application of teaching and learning tools should be diversified to ensure that student can acquire creative and critical thinking in the active classroom. This means that in language teaching, teachers need to be given guidance and advice on the procedure and structure of tool that to be used (Tomlinson, 2009; Adenan Ayob & Nor Syafira Adnan, 2019). In this era of global education, various tools should be used and adapted to the lesson content and must be coordinated through information technology resources (Bigatel & Williams, 2015). This includes the application of Android technology.

In language teaching and learning, the coordination of tool adaptation by the teacher aims to facilitate the process of student's constructive thinking. In this case, there are too many technological and pedagogical elements that need to be adapted in the development and application of language teaching and learning tools. Teaching and learning tools based on interactive multimedia integration are also abundant in the age of digital technology that is more focused on virtual contexts. Bond and Bedenlier (2019) argue that in general lessons involving the development and application of digital and virtual tools that integrate interactive multimedia should be studied from the teacher's point of view.

Statement of Problem

Several researchers have found complex studies on the development and application of virtual teaching and learning tools. Raihan and Lock (2010) as well as Adenan Ayob and Nor Syafira Adnan (2019) argue that teacher's views on the development of Internet-based tools and information technology are different and very complex and should be encouraged. This really shows that Android-based Internet are often used as interactive multimedia-integrated tool; text and graphics for student's problem solving via learning.

There are studies that touch the correlation statistics on objective and procedure subscales in the development and application of teaching and learning tools. Sabzian, Pourhossein Gilakjani and Sodouri (2013) and Zhao (2013) studies show that there is a significant relationship between teacher's perception on the objective and procedure subscales that based on information technology for essay writing. They added that the combination of interactive multimedia elements is able to function stable so that teacher can channel their focus on the development and application of tools.

Opinion on tools development have also been a major focus of several previous studies. From Riasati, Allahyar and Tan (2012) and Pourhossein Gilakjani (2017), its impact on teaching contributes to the coordination of objective and procedure subscales that based on Internet resources. Therefore, this research attempts to examine teacher's opinion on the objective and procedure subscale for the development of digital alternative assessment systems for Android-based summary writing.

Objective of the Research

Two objectives were identified that based on statement of problem. Every objective is mentioned below:

i. Teacher's opinion towards objective and procedure for the development of alternative digital assessment system for summary writing based on Android.
ii. The correlation between objective and procedure for the development of alternative digital assessment system for summary writing based on Android.

Question of the Research

The research questions are accordance to both objectives as mentioned above. The research questions were highlighted below:

i. What is the mean of teacher's opinion towards objective and procedure for the development of alternative digital assessment system for summary writing that based on Android?

ii. Is there any positive correlation between objective and procedure for the development of alternative digital assessment system for summary writing that based on Android?

Research Scope

This study involves conducting a survey method for development of alternative digital assessment system for summary writing based on Android among Malay Language teachers in the Bangsar Zone, in the Federal Territory of Kuala Lumpur. In this study as well, the data were analysed descriptively (mean and standard deviation) and inferentially using Pearson Correlation statistics. This research is also limited to objective and procedure subscale for the development of alternative digital assessment system for Android-based summary writing. Questionnaire instruments were used for data collection. Shulman (1987) model is also the limitation of this study.

Research Significance

This study is important for teacher to focus on the objective and procedure subscales in the development and application of digital alternative assessment tools for summary writing that based on the Android system. This is because the process of developing digital and virtual tools is worth reviewing. The effect is to improve the performance and efficiency of channelling the knowledge of summary writing based on information technology. The view of objective and procedure subscales by teacher should also be implemented to facilitate student to think effectively, specific and complex in summary writing in terms of content, description, and sentences processing. This study can also facilitate teacher to identify an element of interaction and active communication in teaching summary writing.

Operational Definition

Objective and Procedure in the Development of Alternative Digital Assessment System for Summary

Objective and Procedure: Alternative digital assessment system for summary writing that based on Android create active teaching, discovery or inquiry instruction, and observable form of classroom teaching. Teacher can check student's understanding at the end of lesson. For reflection, teacher can do reviewing,

reconstructing, re-enacting and analysing one's own and student's achievement, and grounding explanations in evidence. At the end of lesson, teacher can consolidate new understandings and learning from experience (modified from Shulman, 1987).

Summary Writing

In the Secondary School Standard Curriculum for Malay Language, summary writing skills are essential. For the context of the curriculum, summary writing skills involve material formed in terms of teaching objective and procedure. Among them is the ability of student to think creatively towards content writing, language and sentences processing (Riasati, 2012) via interactive tools. Most topics for tests and exams are more focused on specific themes, especially those involving national issues. Therefore, in diversifying important content in addition to elaborating content, students need to be taught with various creative and innovative in the environment of interactive multimedia resources that based on computer and information technology (Patel, 2013).

LITERATURE REVIEW

In this literature review, some researcher highlight teaching and learning was meaningful when it is done on computer, information and communication technology. Focus of teaching that based on objective and procedure subscales in tool development must be justified on computer and information technology that revolves around for student to generate the schemes of idea for longer memory (Englund, Olofsson & Price, 2017). New information in longer memory will provide acceptable knowledge that in line to creative and critical schemes of idea. In other way, if the knowledge is inappropriate or rejected, the schemes should be modified (Mohammad Reza Ahmadi, 2018).

The new knowledge should be sustainable in the era of modern classroom. Castaneda and Selwyn (2018) study shows that the development of tool that considered objective and procedure subscales leads the student to construct new thinking strategies. Every teacher must make sure that generating ideas are more important for student in learning than just accepting them. According to Castaneda and Selwyn (2018), generating ideas must be focused in teaching to help student identifies new and effective knowledge. In computer, information and communication technology, teacher must be equipped with technological skills to empower student's stages of knowledge under the command of high order thinking skills (Bond & Bedenlier, 2019).

METHODOLOGY

Research method

Quantitative study design was used in this research. The use of survey methods was adapted through the questionnaires in this research. This method corresponds to the questionnaire structure for the collection of normal data distribution.

Sample and Location of Study

A total of 33 secondary school teachers of Malay Language who are in Bangsar Zone, Kuala Lumpur was chosen as samples. The characteristics of the sample are adapted to the teaching experience as well as the prevalence of absorption of various technological resources in teaching. The study location was chosen because it involves the suitability of the data features in the probability sampling based on the random sample selection method.

Research Instruments

Questionnaire is the instrument of this study. The structure of this instrument is Part A (About Respondent). Part B is defined for the objective subscale, while Part B is the procedure subscale.

Part A in the subject of respondents involves race and gender. Part B is an objective subscale involving 15 items. Part C is the subscale of the procedure, which also involves 15 items. All items are based on a positive Likert Scale.

The statement further shows the analysis of data. All the data were analysed based on research questions.

i. What is the mean of teacher's opinion towards objective and procedure for the development of alternative digital assessment system for summary writing? -descriptive analysis; mean and standard deviation.
ii. Is there any positive correlation between objective and procedure for the development of alternative digital assessment system for summary writing? - inferential analysis; Pearson Correlation.

FINDINGS

Distribution of Respondent Demographics

For the distribution of demographic breakdown shows 10 male Malay Language teacher, Chinese (3) and Indians (2) which is 50% of the total sample. Malay Language teachers (8), Chinese (5) and Indian (2) which is also 50% of the total sample.

***Table 1**: Mean Score of Teacher's Opinion*

Subscale	Mean	Standard Deviation (SD)
Objective	74.4	0.12
Procedure	73.5	0.13

In Table 1 shows objective subscale is 74.4 (SD = 0.12). Procedure subscale is 73.5 (SD = 0.13).

Table 2*: Correlation between Objective and Procedure Subscale*

Subscale	Mean	Standard Deviation	r	*Sig.
Objective	74.4	0.12	2.03	0.01
Procedure	73.5	0.13		

*Significant level < 0.05

Figure 2 shows the correlation between the of objective and procedure subscales. From the results of this study, there is a significant relationship between the objective and procedure subscales, that shows r = 2.03, p <0.05.

DISCUSSION

From the statement of findings, the study shows that there is a significant relationship between the objective and procedure subscale for the development. The results of this study are supported by Bodily, Leary and West (2019) who revealed that the importance of those development shows the positive relationship between the objective and procedure subscale that should be used as a basis to strengthen the results of the study.

There is also other relationship in different studies. Bond and Bedenlier (2019) study shows that there is a significant relationship between the objective and procedure subscales to facilitate the development that based on interactive multimedia materials. Studies on the development of digital and virtual materials for the teaching of writing were conducted by them. From these discussions, the development process is only suitable for producing language tools that focus on multilateral communication in virtual classroom discussions (Patel, 2013; Pourhossein Gilakjani, 2013; Pourhossein Gilakjani, 2014; Adenan Ayob, & Nor Syafira Adnan, 2019).

The above findings are also supported by other studies. Broadbent and Poon (2015) explained that the material development process will only have the impact if the objective and procedure subscales are implemented structurally. The objective and procedure subscales are in line to the teacher's view to integrate various interactive multimedia elements via information technology for language writing. Their results are also supported by Englund, Olofsson and Price (2017) and Castaneda and Selwyn (2018), namely the procedure subscales that prioritized online, digital and in virtual teaching environments.

CONCLUSION

As a conclusion, this study indicates that Malay Language teachers need to explore and practice objective and procedure subscales that based on opinion before developing teaching material that involves writing skills. The combination of Android-based interactive multimedia should also focus on different elements that are integrated whether in terms of text, graphics, audio, animation or video.

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