PRACTICE TEACHING AND LEARNING USING INTERACTIVE MULTIMEDIA INNOVATION FOR NON-OPTIONAL TEACHERS TEACHING IN MUSIC EDUCATIONS

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ABSTRACT

According to Jesenius (2007), teaching and learning music education will be more attractive through various medium of instruction, either through audio-visual or multimedia interactive software. Schutz (2008), stated that the uses of these various sources will help the lesson to be more interesting. Brown (2009), also described the use of a medium that involves a screen as students are able to sense, detect tunes and carry out activities to further enhance students' understanding in music education. This research is carry out to identify whether the use of interactive multimedia through the internet, which can be accessed by non-optional student of musical electives and can be run at the school. Quantitative methods have been used by a number of items in the questionnaire based on numerous dimensions such as the educational content, features, learning activities, support materials, training of student assessments and interactive test package. A sample of nineteen students of 7th semester Bachelor in Education taking music education as an elective and is undergoing professional training practices in schools were selected. Through this study, some innovations are conducted via interactive multimedia package, and it shows that highly percentage able to assist students in music education system in an effective and interesting method. This is consistent with the statement by Van de Zande (2006), an interactive package linkages provide good teaching and learning in music education, particularly for teachers trained in teaching.

Keywords: audio visual, interactive multimedia software, medium, accessible, professional training practices, teachers' training

INTRODUCTION

Based on National Key Result Area-NKRA (2009) and Key Performance Indicator-KPI of our third Education Minister, Broadening Access Towards Quality Education and Capability, this innovation is one-step towards gaining opportunities, space and develop the potential and talent, which are available among educators, towards an effort to enhance the brilliance and qualities in education from various background or sociological status. Somogy, (2003) stated that the role of a teacher in terms of ideas and leadership able to generate fresh new ideas and enhancing the role in teaching and learning process.

Main Education Development Plan (2007), also claimed that teachers need to understand, give in a lot of effort, and have a high commitment and resources in implementing new competitive approaches in effort to increase the knowledge of prospective teachers in Malaysia to achieve the Vision 2020, namely to accomplish the 6th challenge, which is to achieve scientific and progressive society that have the power of change and high competitiveness and look further beyond, not just as the users of technology but contributors to the scientific and technological civilization of the future.

The innovation also aims to ensure the nation's youngsters have accessibility to education and quality ability besides spawning an educative, creative minded, innovative, characterized by pure value and be able to compete in the world stages. The innovation is also held very tightly linked to the 2nd Main National Mission, in order to improve applicable knowledge and innovation and nurture the 'First Class Minds'. This innovation effort also aims to awaken a human capital holistically, with emphasis on the mastery of knowledge, intellectual capital in Science and Technology in addition of entrepreneurship traits. This innovation is also a progressive acculturation and efforts towards the practice of values, ethics and high moral as defined in the National Integrity Plan.

Teaching and Learning Innovation which have been conducted also must be a first step to prove his form and pressure of high effort in development of human capital to realize 'First Class Mind' and foster efforts towards the status of developed countries soared, especially in the field of Music Education.

Description of Innovation In Terms Of Content and New Services

Interactive content related to the musical experience in music education involving musical game are conducted such as castanets, bells, triangles and tambourines. Development of teaching which involves multimedia presentation, are basically combined with video through Youtube and can be accessed through the website developed. Those website can be accessed by students at the given address and can download the materials on the site easily because this form of interactive videos have been made and placed on the website, where students can easily continue to use the material for teaching and learning music in class.

STATEMENT OF THE PROBLEM

The main problem faced is the lack of teaching material on the subject of 'percussion skills' made in the form of a multimedia module power point links using internet ,which lead students in having difficulties explaining this to the teaching and learning of students in the classroom. Percussion skills are taught using lectures and supported by photographs or existing materials percussion. Students need to understand the technique, composition and selection of the suitability of this percussion instrument.

Increment of student's skills on percussions often enhances the confidence level among prospective teachers of Music Education elective. Lack of confidence towards Music Education may worry the music educators and researchers in the field. Lack of confidence is a major problem faced by the teachers of music around the world. Lack of confidence that exists within teachers will be translated and delivered by the teachers to the students at school causing musical skills to be decreased, music lessons trend are only taken for granted and the occurrence of variety of perceptions. Rush and Lautzenheiser (2006) said that the success of the program depends on the ability of music which conducted by the teachers in teaching and learning process which takes in the form of collaboration, communication, construction sense of ownership and effective leadership. This will take a long time to be resolved or modified since the beginning of perception construction that this one was planted at an early stage among the new generation of music educators.

Initial survey of 19 student's perception from Bachelor of Education (advisor) Music Education Elective during the 7th semester practicum related to teaching and learning games of Percussion Instruments through the questionnaire are shown in Table 1 as follows:

Table 1. Results of Questionnaire entitled "Perceptions of students in teaching percussion instruments"

	TITLE : PERCUSSIONS INSTRUMENTS	AGREE		DISAGREE	
		f	*%*	*f*	*%*
a	Lack of material resources	19	100	0	0
b	Lack of instructions for teachers	19	100	0	0
c	Lack of skill while playing the instruments	18	90	1	5
d	Effective Teaching tools may increase student's interest	18	95	1	5
e	Lack of musical score sheets	18	90	1	5
f	Percussion score sheets have to be revised	17	85	2	10
g	Lack of ideas in composing the score sheets	18	90	1	5
h	More exercise are needed to conduct the percussions	18	95	1	5
i	Difficult to determine the suitability of the percussions	18	90	1	5
j	Lack of knowledge in the subject	18	95	1	5

From the result of the questionaire, we managed to find that students felt that they are lack of resources in schools (100%), lack of instructions for teachers (100%), lack of skill while teaching the students (90%), effective teaching tool may increase student's interest (95%), lack of musical score sheets (90%), percussion score sheet should have be revised (85%), lack of idea in composing the score sheet (90%), more exercise are needed to conduct the percussions (95%), difficult to determine the suitability of the percussions (90%) and lack of knowledge in the subject (95%).
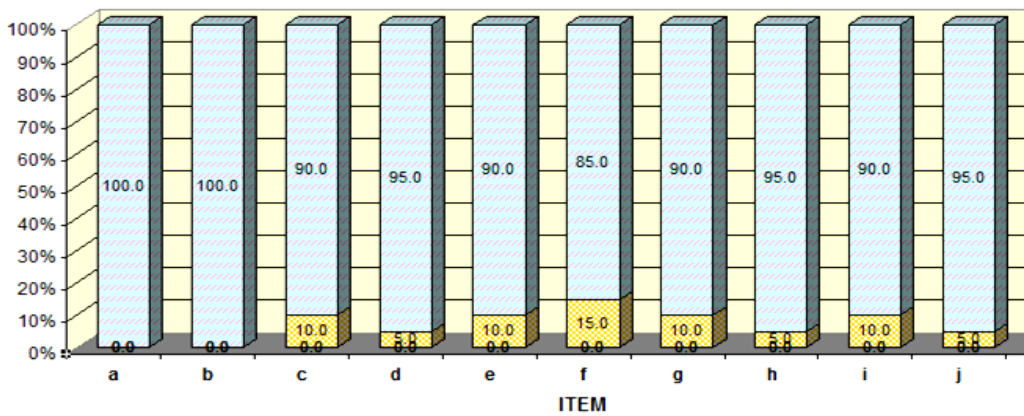
Graph 2. Percentage of Student Perceptions against Type of Percussion Graph

PURPOSE OF THE STUDY

The purpose of this study was to

1. Developing a multimedia interactive access for Music Education's teaching practice learning music teacher education is not an option.

2. Identify the effectiveness of teaching and learning using multimedia interactive teaching practice in music education is not an option

The study was conducted in the Ipoh Teacher Training Institute (IPG) only, which located in Ipoh and involves one unit of 7th semester trainees in Bachelor Teaching (advisor) only. The unit is chosen because the music elective course is appropriate to the purpose of the study. The findings of this study reflect only descriptively of the sample and can only be generalized to populations around the IPG.

LITERATURE REVIEW

No exception should be consistent with the requirements of environment-focused high capacity utilization of human capital. This also involves aspects of learning and teaching music education at the primary or secondary schools. According to Schutz (2008), music education requires changes in teaching and learning with a combination of audio-visual elements, interactive multimedia and Internet access, which are appropriate for students. Sexton (2007) suggested that the usage of DVD audio, music videos and iTunes music video that can be downloaded able to increase the students understand and construction of a teaching module. Jensenius (2007) also pointed that the integration of audio-visual and multimedia software may able to provide numerous music experiences for students and to help in the construction of the teaching module. According to Zimmerman (2002), self-exploration helps student in mind to enhance academic skills. Martin (2004) stated that through the teaching and learning using technology, one able to enhance independent learning. Linnenbrik & Pintrich (2003), expressed that through interactive teaching and learning process may able to improve self-paced learning, constructive learning and social development among students. This also coincides with the ability of Music Education enhance creativity, thinking and self-confidence as expressed by (Catterall, 2002, Burton, Horowitzh, & Abeles 1999; Caterall, Chapleau, & Iwanaga, 1999)

Music education in Malaysia will requires a new approach in teaching and learning process, where the module aims to provide an understanding of aspects and delivery objectives more clearly.

RESEARCH METHODOLOGY

Design Review

The quantitative approach was used in this study, by using a questionnaire which contains questions based on the Likert scale. Items in the questionnaire are based on several dimensions, names, educational content, features, learning activities, support materials, student assessmentsand interactivetests.

Instrument Review

Researchers used a survey method using questionnaire which contain questions based on the Likert scale and open type were used. A pilot study on a group of student teachers elective music made for refining the instrument.

The Purpose of the Pilot Study was:

    a. To identify problems relating to the understanding and interpretation of the survey questions,

    b. The improvements of the items are less obvious question or misleading.

Items of this study are formulated so that it is consistent with the validity of the content of interest. It has been reviewed and approved by three lecturers from the music institutes. In order to assess the reliability of the questionnaire, Cronbach Alpha coefficients were determined. Reliability value for the questionnaire was 0.75, which is at an acceptable level.

Then, the questionnaire was used for interactive use by music education students of multimedia elective.

Sampling

The study focuses on the students who take music education electives, which consist of 19 7th semester students.

Table 2. Sampling Data

Data		Total
Diploma in Teacher's Teaching Programme BM/PJ/MU/		19
	Malay	12
	Chinese	4
Categorize into races	Indian	1
	Sabah Ethnics	1
	Sarawak Ethnics	1
Total Sample		19

DATA ANALYSIS AND FINDINGS

From the finding of the study, we notice that the students gave a majority agree percentages. Syaharom (1990) stated that interactive learning is very essential in conveying the teaching and learning process. This shows that interactive multimedia interactive learning able to be brought up inside the learning and teaching session of the non-students of music education option.

Table 3. Content from Music Education Validities the Music Education Syllabus

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Disagree	0	0	0	0.0
	Agree	3	15.8	15.8	15.8
	Strongly Agree	16	84.2	84.2	84.2
	Total	100	100.0	100.0	

Based on the Table 4, which obtained from the usage of multimedia interactive item in teaching contain technique and principles on playing 5 main percussion instruments, also shows a very high percentage.

Table 4. techniques and principle of playing 5 types of percussion

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Disagree	0	0	0	0
	Agree	9	47.4	9	47.4
	Strongly Agree	10	52.6	10	52.6
	Total	100	100.0	100.0	

Table 5, an item which have solid and easy to understand instructions pertaining 5 types of percussion, also shows a slightly high percentage on strongly agrees on the subject.

Table 5. Solid and easy to understand instructions pertaining 5 types of percussion

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
	Agree	6	31.6	6	31.6
Valid	Strongly Agree	13	68.4	13	68.4
	Total	100	100.0	100.0	

Based on the data obtained from table 6, "allow students to play percussion practically by the guide of teachers" item, data shows that high percentage recorded on strongly agree and this statement suits perfectly with the usage of multimedia interactions, which gave a very huge impact in the teaching and learning process.

Table 6. Allow students to play percussion practically by the guide of teachers

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
	Agree	7	36.8	7	36.8
Valid	Strongly Agree	12	63.2	12	63.2
	Total	100	100.0	100.0	

Table 7, displays that "students-involvement in active learning and inquiry explorations" item gave a good feedback of high percentage of strongly agree. This will help in the sharpen of one's creativity and exploration in new things.

Table 7. Students-involvement in active learning and inquiry explorations

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
	Agree	9	47.4	9	47.4
Valid	Strongly Agree	10	52.6	10	52.6
	Total	100	100.0	100.0	

Table 8. Interactivity for students that prefer self-discovery and explorations

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
	Agree	6	31.6	6	31.6
Valid	Strongly Agree	13	68.4	13	68.4
	Total	100	100.0	100.0	

Table 8 shows that "Interactivity for students that prefer self-discovery and explorations" shows an absolutely high percentage on strongly agree. This helps a lot in increasing self-

esteem and ways of thinking of a student, which was stated by Rajendran (2004) in his elaboration in 'high order thinking skill'.

Table 9. Suitable for student who has various talents and studying techniques

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
	Agree	6	31.6	6	31.6
Valid	Strongly Agree	13	68.4	13	68.4
	Total	100	100.0	100.0	

Table 9 shows that "Suitable for student who have various talents and studying techniques" item gave out an excellent high percentage of strongly agree. This shows that students are more interested to study in the subject that they are skilled with, which the idea was firstly came out by Gardner (1983,1993), the Multiple Intelligence Theory.

For the "additional exercise for teaching and learning session in the class" item in table 10, the data shows a high percentage on strongly agree. Craig Cortello (2009) also supports this point by stating that teaching and learning session are very essential in nurturing and enhancing student's personality

Table 10. Additional exercise for teaching and learning session in the class

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
	Agree	8	42.1	8	42.1
Valid	Strongly Agree	11	57.9	11	57.9
	Total	100	100.0	100.0	

DISCUSSIONS AND CONCLUSION

Innovation of multimedia interactive learning in the teaching and learning process for the non-teachers of music education option, have successfully help them in teaching the primary school students and increases the confidence level.

From the findings of the study, we can conclude that:

1. All 7th semester trainee teachers of Bachelor Degree in Education of Music Electives will receive multimedia interactive music education teaching and learning process in their teaching session.

2. Increment and improvement must be imply in order to nurture the quality of teachers, by the means of leadership and personality-building, through a musical performance, to give a very huge positive impact in enhancing the teachers quality, as stated in the Malaysian Teachers Standard.

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