The development of learning media in virtual classroom on topics of Thai performing arts

[ID]Pravit Rittibul[1], [ID]Manoch Boontonglek[2], [ID]Riswan Orachun[3*], [ID]Artitaya Ngerndang[4], [ID]Panurat Boonsong[5]

[1,2,3,4,5]Program in Performing Arts Education, Faculty of Fine and Applied Arts, Rajamangala University of Technology Thanyaburi 12110, Thailand; pravit@rmutt.ac.th (P.R.) manoch_b@rmutt.ac.th (M.B.) riswan_o@rmutt.ac.th (R.O.) artitaya_n@rmutt.ac.th (A.N.) panurat_b@rmutt.ac.th (P.B.)

Abstract: This research aims 1) to develop and test the effectiveness of learning media on Virtual Classroom on topics of Thai performing arts 2) to compare the pre- and post-learning achievements. 3) to study the satisfaction of students towards the learning media of Virtual Classroom on topics of Thai performing arts for Grade 10 students, Thammasat Khlong Luang Wittayakom School, thirty-six people were randomly selected. The research tools consisted of Learning Media Virtual Classroom on topics of Thai performing arts, pre-test and post-test media quality assessment form, satisfaction assessment form. Statistics used were mean standard deviation consistency Index of E1/E2 and t-score. The research findings were as follows: 1) The learning media development process for the Virtual Classroom on topics of Thai performing arts according to the ADDIE Model on Thai Traditional Performing Arts consisted of 4 types: 1. Khon (The Mask Dance) 2. Drama performances 3. Dance and dance performances 4. Native performances Teaching through learning media, Virtual Classroom on topics of Thai performing arts, efficiency was 82.31/85.56 which was higher than the criteria of 80/80. 2) The learning achievement of students after learning was higher than before which is different 3) Students' satisfaction after using the learning media Virtual Classroom on topics of Thai performing arts had the mean value of 4.56, at the highest level.

Keywords: Learning innovation, Online learning media, Topics of Thai traditional performing arts, Virtual classroom media.

1. Introduction

The world today is a time of transition from the 20th century to the 21st century, so the phrase "education for the 21st century" emphasizes that we are in a time of rapid change in our environment, in which countries are increasingly connected known as the world of information since the advancement in technology has caused changes in the organization of learning activities, shift from teacher-centered to student-centered. Learners do not need to receive knowledge only from teachers in the classroom. Today's sources of knowledge are all things that happen and exist around, whether it is parents, communities, friends, nature, the environment or learning from modern technology (Yuwathida Akkahad and Weerayut Chanla, 2022). The progress of information technology causes the evolution of the world to change rapidly, today's information technology has played an important role in the lives of human beings resulting in many changes to human society and becomes necessary for life in various fields, whether it is in terms of economy, industry, service, society, environment, as well as education (Attaphon Kittithanachai, 2012). Therefore, it is necessary to rely heavily on information technology in order to operate efficiently reduce work steps and develop work to progress even more (Thanathorn Thongchan, 2015).

Teaching and learning in the virtual classroom are new innovation in education that is very interesting and new to many students and teachers. If considering the concept of applying modern technology to solve educational problems, it can be seen that teaching and learning in the virtual classroom should be very important to teaching and learning. Due to the variety of technologies, teachers can offer lessons and learning activities that allow different learners to perceive and learn with potential according to different presentation environments (Tanida Noopaen, 2009).

Thailand is known as a country that has been independent for a long time, with arts and culture representing the uniqueness of the nation and it is well-liked by many countries who have seen the beauty in Thai arts and culture, although at present, Thailand is being influenced in terms of culture from a variety of foreigners that are flowing into Thai society but one thing that Thai people can still preserve and inherit until today is Thai Traditional dancing art, which is a national art that all Thai people should conserve and support in order to keep this art in the future (Sumit Thepwong, 2005).

Thai traditional dancing arts is a science in the field of fine arts which is classified as an art of beauty that aims to entertain the mind Reflecting culture, traditions, way of life, society, and human living in different periods. The study of Thai traditional dancing arts is the study of a branch of culture. Thai traditional dancing arts have many meanings, Thai traditional dancing arts is something that has been associated with humans since childhood, singing and dancing to create entertainment. Thai traditional dancing arts is part of the Wang Ta Silp branch of art that includes painting, architecture, literature, music and dancing but most of them are related to the dance of humans, dancing arts, in addition to showing the civilization of the country, as well as being a source of arts and performances of many forms together, with a human being as the center to create, preserve and transmit. In terms of the purpose of learning benefits, including the qualifications of those who begin to learn art, are all things that will promote that person to be a good youth in the future and a person who will be able to maintain the national culture to continue (Sumit Thepwong, 2005).

From aforementioned problems, the researcher foresees the importance of teaching and learning in the modern era; therefore, developed a virtual classroom learning media on the subject of Thai Traditional Performing Arts according to the standards of 3.1 Grad 10-12/1, Basic Education Core Curriculum, 2008, to develop online learning media to be more interesting. Teaching content must be concise and easy to understand. and to be consistent with current Thai education to promote Encourage learners to have knowledge, understanding and use of technology in learning for the benefit of oneself.

1.1. Research Objectives

1. To develop and test the efficiency of the learning materials Virtual Classroom on topics of Thai performing arts.
2. To compare achievements before and after studying Thai Traditional Performing Arts.
3. To examine the satisfaction of students towards the virtual classroom learning media about the type of Thai traditional dancing arts.

2. Research Methodology

2.1. Population and Sample

The population used in this research is a Grade 10 student at Thammasat Khlong Luang Wittayakhom School, 22 rooms, 825 students.

The samples used in this research were selected by simple random sampling, using a random unit as a classroom. The characteristics of the group of learners in each room are similar. The researcher therefore randomly selected one classroom to experiment, namely Grade 10 students at Thammasat

Khlong Luang Wittayakom School. A total of 36 students studying Thai Traditional Performing Arts according to indicators, 3.1 M. 4-6/1 according to the Basic Education Core Curriculum, B.E. 2551.

2.2. Duration Scope

The researcher has studied and experimented. Throughout the first semester of the academic year 2022 (between June and November).

2.3. Research Instrument

1. Virtual classroom learning media on the subject of Thai Traditional Performing Arts was reviewed from documents, textbooks, various information, including virtual classroom media and research related to the creation of virtual classroom learning materials as a guideline for the development of virtual classroom learning materials. The content of the media consists of Khon (The Mask Dance) performances, plays, dances and indigenous performances. Then the ADDIE model was used as a principle to be applied in the development of learning materials in the virtual classroom according to the steps and proposed to content and media experts. All 5 experts evaluated the quality of learning materials in Virtual Classroom on topics of Thai performing arts with the following details: Index valuation result Consistency of the media in terms of content, according to expert opinion, has an index value of 0.91. According to expert opinions, the index value was at 0.79. The overall evaluation result was at the highest level. with mean equal to 4.51, standard deviation equal to 0.73.

2. Pre-test and post-test on Thai Traditional Performing Arts subjects- The researcher defined the test construction process as follows: 1) Study information from documents, textbooks, information, and other information. 2) Create pre- and post-tests on the Thai Traditional Performing Arts subjects. 3) Take the created pre- and post-learning test for the advisor to check the correctness and make improvements. 4) Bring the pre- and post-learning test to 5 experts to check the consistency and suitability of the design to find the Index of Concordance (IOC) 5) to be revised in order to get complete pre- and post-test tests before actually being used. Assessment results for the consistency of the test were equal to 0.97. Assessment results for the quality and suitability of the assessment form There was a mean of 4.83, a standard deviation of 0.65 was at the highest level.

3. Satisfaction questionnaire for Grade 10 students by using the virtual classroom learning media on the subject of Thai Traditional Performing Arts. The steps to take are as follows: 1) Study information from documents, textbooks, various information, including previous researches related to the creation and efficiency of the satisfaction assessment form for the use of learning media in the virtual classroom with rating scale with a score level of 5 levels. 3) Take the created satisfaction assessment form for the advisor to check and revise assess satisfaction with the complete use of virtual classroom learning materials before actual use. The evaluation result of the questionnaire's consistency was equal to 0.92. The evaluation result of the quality and suitability of the questionnaire. There was a mean of 4.85, a standard deviation of 0.50 was at the highest level.

2.4. Data Collection

1. The researcher contacts and coordinates with the organizations of the sample and make appointments to collect data to meet and clarify objectives and ask for cooperation in conducting research.

2. The researcher suggests important details about the process and method of using virtual classroom learning media on the subject of Thai Traditional Performing Arts, with the content of the

media consisting of Khon (The Mask Dance) performances, drama performances, dance performances and dance performances and indigenous performances.

3. Sample group use the learning media Virtual Classroom on topics of Thai performing arts.

4. Collect data before experimenting with a pre-test by allowing students to do a pre-test on type of Thai Traditional Performing Arts for 20 questions.

5. During the experiment, scores of results during class were collected by having students do activities during class.

6. Collect the data after the experiment with a post-test by having students do a post-test on type of Thai Traditional Performing Arts for 20 questions.

7. Ask the students to answer the questionnaire to assess their satisfaction after learning with virtual classroom learning media on the type of Thai Traditional Performing Arts.

8. The researcher conducts a pre-learning/post-learning test. The correct answer is equal to 1 and the wrong answer is 0 (Zero-One Method) with statistical methods to test the hypothesis.

9. Record the data from the satisfaction assessment questionnaire for Grade 10 students and analyze the results by statistical methods.

2.5. Research Findings

1. The analysis of efficiency of learning media in the virtual classroom on the subject of Thai Traditional Performing Arts.

Table 1.

(N=36)

Instrument	Full mark	Mean score	Percent	Standard score	E
During class test (E_1)	30	24.69	82.31	80	82.31
Post-test (E_2)	20	17.11	85.56	80	85.56

2. Comparison of achievements before and after studying with learning media Virtual Classroom on topics of Thai performing arts.

Table 2.

(N=36)

Items	Full mark	Mean score	S.D.	t	Sig.(2-tailed)
Pre-test	20	10.25	1.65	20.11	0.00
Post-test	20	17.11	1.56		

Note: *Significant level .05.

3. The effect of student satisfaction towards the learning media in the virtual classroom on the Thai Traditional Performing Arts category.

Table 3.

(N=36)			
Appraisal items	**Mean**	**S.D.**	**Satisfaction level**
Content			
Explain the content of the lesson clearly and easily understand.	4.56	0.61	Maximum
The content is difficult-easy, suitable for students	4.53	0.51	Maximum
Learners gain more knowledge and understanding of the content they study.	4.56	0.50	Maximum
Total	4.56	0.54	Maximum

4. The effect of student satisfaction towards the learning media in the virtual classroom on the Thai Traditional Performing Arts category (Cont).

Table 4.

(N=36)			
Appraisal items	$\bar{x}$	**S.D.**	**Satisfaction level**
Media			
Clear description of the use of media and easy to understand	4.50	0.61	Maximum
Media formats are beautiful, innovative and interesting.	4.58	0.55	Maximum
It is a medium that learners can study by themselves.	4.60	0.49	Maximum
modern media	4.89	0.32	Maximum
Learners can learn with fun.	4.47	0.61	Maximum
Easy to use and easy to learn.	4.44	0.55	High
The media are suitable for use in teaching and learning.	4.47	0.56	High
Total	4.56	0.53	Maximum
Total mean	4.56	0.53	Maximum

3. Conclusion and Discussion

In this research, the development of learning materials, Virtual Classroom on topics of Thai performing arts, the research results can be discussed as follows.

1. The findings of learning media development of Virtual Classroom on topics of Thai performing arts according to the ADDIE Model were as follows: 1) Analytical stage: In the part of the content analysis of learning media on the subject of Thai Traditional Performing Arts, the contents of knowledge were reviewed from documents, textbooks, various information in the category of Thai Traditional Performing Arts such as Khon (The Mask Dance) performances, plays, dances and indigenous performances. Characteristics of Thai Traditional Performing Arts, Video on Thai Traditional Performing Arts 2) Design stage: The researcher studied the methods for developing learning media in Virtual Classroom on topics of Thai performing arts in online classroom format by designing the shape of the media so that learners can re-study the content as many times as they like according to the needs of the students, content is set by analyzing data, structure design and order of content placement, divide content into categories so students can study the required content as many times as they want, at any time, and anywhere they want and increase interest by presenting content in the form of images and sounds. 3) Development: Create various elements that will be used in development media, learning media Virtual Classroom on topics of Thai performing arts in the form of

an online classroom by the researcher creating, developing, designing, structuring and compiling the elements of the learning materials on type Thai Traditional Performing Arts by Canva program, then imported to the spatial website, with content consisting of Format of text, images, sounds and activities during learning to increase the knowledge that is included in the Thai traditional dancing arts course so that the learners can study in the desired content in order to review the content for students. During the process, teachers and consultants were always consulted periodically and then brought to make improvements. Then the learning materials Thai Traditional Performing Arts in the form of a virtual classroom offered to experts to give suggestions in designing various elements to attract learners to be more interested in the lesson. 4) Implementation: brings learning materials to the virtual classroom. The type of Thai Traditional Performing Arts that has been evaluated for efficiency and revised until it was completed and applied to the sample group Grade 10 students at Thammasat Khlong Kluang Wittayakhom School 5) Evaluation stage: Evaluate the results by doing a satisfaction assessment after using the media to find out the results of the learners' satisfaction with the learning media virtual Classroom on topics of Thai performing arts, which the students took the test during the study to mean percentage equal to 82.31 after the students had learned with the learning media Virtual Classroom on topics of Thai performing arts, then the students took post-test. It was found that the post-test score had a mean of 85.56%, with an efficiency equal to 82.31/85.56. The development of learning materials in the Virtual Classroom on topics of Thai performing arts can help promote and stimulate learners' interest to learn. There is no limit to the scope of study, both about time and place, making the learners learn with fun without getting bored. The learning media Virtual Classroom on topics of Thai performing arts has a development process according to the ADDIE Mode model, which is consistent with the research of Sudarat Jongburanasit (2019) who has studied the using the teaching model ADDIE Model for improving and developing Chinese language teaching in line with the 21st century, which uses the ADDIE Model theory for improving and developing Chinese language teaching in line with the 21st century by using design methods, teaching documents to match the students, using applications to help teach to eliminate weaknesses for students, designing teaching and learning activities for learners to have a broader worldview Including practical training so that students can apply to work in the future. In addition, the use of the teaching model ADDIE Model to improve and develop teaching and learning Chinese in line with the 21st century, according to the standards that have been set which can be used in real teaching and learning management. This is in line with Thanathepporn Dechprasart (2015) studied the application of computer-assisted instruction to promote the process of essay writing to solve dharma topics in the undergraduate dharma education curriculum. The results showed that the generated lessons were effective at 81.0/80.27, higher than the expected criteria.

2. Comparison of achievements before and after learning on type of Thai Traditional Performing Arts using virtual classroom learning materials, using t-test Dependent statistics of the sample group found that the mean of the pre-learning management score obtained from the learning achievement test. The mean score was 10.25 with a standard deviation of 1.65. After managing the learning that has been done with a test to measure learning achievement regarding the type of performance, mean score was 17.11 with a standard deviation of 1.56 when comparing the mean of pre-test scores with post-test, results showed that learning management with learning media Virtual Classroom on topics of Thai performing arts had higher learning achievement post-test than pre-test at the statistical significance level of .05. This is consistent with the research of Asanee Madbamrung and Tossaporn Saeng (2016) on learning achievement after learning using a virtual classroom for grade 12 students in the pre-test, mean score was 13.07 with a standard deviation (S.D.) of 2.16, and post-test after the students had learned from the virtual classroom was higher than pre-test with mean score of 24.17, the standard deviation (S.D.) of

0.99, the t-test analysis between pre-test and post-test was 26.67 with significant difference at the 0.05 level, and it was also consistent with Chatkaew Sriwong's research (2013) who has studied Development of virtual operations to enhance learning objectives, to design and develop the virtual practice to enhance learning. The t-test Dependent statistics were used to compare the learning achievement of learners who learned the virtual practice to enhance learning with Learning Achievement of Learners Learning in Normal Laboratory. The research found that learning achievement of learners learning in virtual practice to enhance learning had learning achievement scores. The mean was 6.25, the standard deviation was 3.33, and the learning achievement of the learners who studied in the normal laboratory, the average learning achievement score was 3.45 and the standard deviation was 2.47. The statistics at the .05 level were consistent with the hypothesis.

3. The findings of student satisfaction analysis with the learning media Virtual Classroom on topics of Thai performing arts found that the overall level was at the highest level with a mean of 4.56, a standard deviation of 0.53. When considering each side, it was found that students have media satisfaction at the greatest degree with a mean of 4.56, a standard deviation of 0.53, followed by content at the highest level with mean of 4.56, the highest standard deviation of 0.54. From the observations during teaching and learning using learning media, Virtual Classroom on topics of Thai performing arts, it was found that learners were enthusiastic and pays great attention to learning materials Cooperate in fun activities as a result, the students are very satisfied with the learning media. This is in line with the research of Kewalin Phatai, Pichen Chanpum and Apiwat Wattanasura (2018) who have studied learning media with virtual reality technology on animal world vocabulary. The results of the research revealed that the satisfaction of the students had the overall satisfaction with the media at the highest level. And it is also in line with the research of Amnat Chidthong (2012) who has studied the application of augmented reality techniques to produce teaching materials for wooden structures. Overall, the developed system was interesting and able to stimulate to learn at the highest level, 76.00 percent, and users have an understanding of the lessons increased by 68.00%. It is also in line with the research of Thanida Noopan (2009) who studied the creation of a virtual classroom for problem-based learning on the use of Microsoft Excel to calculations for grade 8 students at Surat Pittaya School. The results showed that learner satisfaction with the virtual classroom for problem-based learning on the use of Microsoft Excel for calculations, overall mean was 4.15, standard deviation was 0.78 when compared to the obtained criteria. It was found that it was in the very satisfactory criteria.

4. Research Recommendation

4.1. Recommendation for Implementation of the Research Results

1. Learning management with learning media, Virtual Classroom on topics of Thai performing arts, can stimulate and attract learners' attention but due to the limitations in the use of devices such as mobile phones, tablets, internet that are used for teaching and learning, therefore, students must have ready and have the skills to use together as well

4.2. Recommendation for Further Research

1. Learning materials for virtual classrooms should be developed in other forms or add more interesting elements such as 3D images or sound effects for using various buttons.

2. Use of tests for measurement and evaluation should be done in the form of a game or any other form that can be contained within the learning material to attract the attention of learners and encourage students' enthusiasm for teaching and learning activities.

3. Should study and expand the scope of research content. to cover individual differences as a guideline for enhancing the ability of learners

4. Due to the variety of virtual classroom learning materials and details of use, media producers should provide a playback manual for those who want to use or study by themselves. The manual must be clear and can be easily understood.

5. To develop learning achievements by using virtual classroom learning materials, if adapted to other topics or subjects, the form of technology suitable for the content should be studied and should take into account the availability of learning equipment of learners and educational institutions.

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