A COMPARATIVE STUDY ON STUDENTS' VALUE EDUCATION ACHIEVEMENT THROUGH MULTIMEDIA TEACHING STYLE AND TRADITIONAL TEACHING STYLE AT SAINT LOUIS SCHOOL CHACHOENGSAO, THAILAND

Witthaya Thepkom[1]

Yan Ye[2]

Abstract: The purpose of this study was to compare the students' value education achievement taught by multimedia teaching style and traditional teaching style at Saint Louis School Chachoengsao, Thailand. Before conducting the teaching the pre-test was given to measure the students' learning level with the selected 99 students out of 277 students who were studying Value Education in the 12th grade during the first semester of academic year 2013 at Saint Louis School Chachoengsao, Thailand. The study was conducted with two groups of students with two different teaching styles they were 50 students as the control group taught by traditional teaching style and 49 students as the experimental group taught by multimedia teaching style since both groups were basically in the similar studying environment, learning level based upon the pre-test result and studying in the same study program. After conducting the teaching, the post-test was given to students in both groups in order to compare their achievement in value education. The Independent Sample t-test (two-tailed) was used to analyze the data gathered from the post-test score. The result showed that there was a significant difference in students' value education achievement taught by multimedia teaching style and traditional teaching style since the students who were taught by multimedia teaching style gained higher mean score of the post-test than students taught by traditional teaching style which implied that the students' achievement in value education after being taught by multimedia teaching style found to be more effective than being taught by traditional teaching style. There was no significant difference in students' value education achievement taught by multimedia teaching style and traditional teaching style according to gender neither in control group nor experimental group which implied that gender was not significantly different in the students' value education achievement whether being taught by multimedia teaching style or traditional teaching style. There was a significant difference in students' value education taught by multimedia teaching style and traditional teaching style according to grade point average (G.P.A) in the group of students that taught by traditional teaching style which implied that students who got higher G.P.A were still effective on their performance than students who got lower G.P.A. Finally, there was no significant difference in students' value education taught by multimedia teaching style and traditional teaching style in the group of students that taught by multimedia teaching style which implied that all students benefitted equally with the use of multimedia teaching style concerning to their value education achievement whether they got lower or higher G.P.A. Multimedia teaching style can help all students of different learning levels improve their value education achievement equally.

Keywords: Teaching Style, Multimedia Teaching Style, Traditional Teaching Style, Value Education

Introduction

Teaching is considered as the teacher's major component to facilitate students and develop their intellectual growth. Generally, it takes place where the students are formally taught and educated by the teachers which is called school. On the other hand, in the students' intellectual growth, learning is also an important part along with teaching which is called the students' learning style. Teaching and learning are the most important instruments for keeping people change in many ways such as social order, mental and behavioral development, economic competition, and other social processes. Due to the rapidity of change in the field of technology, it causes numbers of people keeping regularly access to varieties of information especially in education most teachers spend time with online information from the internet so as to acquire more knowledge not only in their field of specialized subjects but it also keeps seeking for new ways of teaching style that make their teaching more effectively. Therefore, it is needed for the teachers to shift their teaching roles, not just as a sender or deliverer of the knowledge, but rather try to make an interaction between the teacher and students by applying technology in the classroom in order to make the teaching more effectively. As a teacher, we need to make our teaching style more effectively by integrating all different teaching styles with the use of technology, graphics, picture, sound, and animation as we call multimedia teaching style to the real classroom since

[1] M.Ed. Candidate in Curriculum and Instruction, Graduate School of Education, Assumption University, Thailand Witthaya_thepkom@yahoo.com

[2] Ph.D., Director of Educational Research, Statistics and Measurement Center, Graduate School of Education, Assumption University, Thailand

its styles of teaching in the classroom seem more related with the use of multimedia elements which have widely influenced and changed the lives of many people rapidly, especially in the communication of the information which can be a more effective instruction medium in delivering information towards students. Therefore, its application can be very challenging and more effective to gain knowledge and enhance the teachers to project information and knowledge in a new innovative way (Agnew, Kellerman & Meyer, 1996).

One of the most fundamental teaching styles that has been using and applying into the classroom with the students up to the present is traditional teaching style which is considered as a teacher-centered teaching approach, while students become as a passive learner waiting for information and knowledge to be delivered by the teachers with a little part of participation in class (Orlich, Harder, Callahan & Gibson, 1998). This direct instruction method has rooted in the lives of many people, especially in behavioral learning perspective which is used as a well-known technique for many years ago as an instructional strategy in all schools until now. In terms of delivery medium, the teacher delivers knowledge via chalk and talk (Damodharan & Rengarajan, 2007). Basically, the teachers take control of the learning process and its content is transmitted in the entire class by emphasizing more on the actual knowledge. In other words, the teachers deliver the lecture and students are the listener. Worksheets and exercises can be given to students in order to work out individually under the teacher's observation. Usually, teachers make a move around helping students who have problems, but there is a very little part of active participation in class.

In terms of value education, it is currently becoming more important in everyone's life since human's action has caused so many big problems, conflicts and damages unconsciously, incorrectly and invaluably. Moreover, there are numbers of difficulties, suffering, discouragement, depression and problems in the lives of the people that cause the increased rate of committing suicide as well as criminal problems in the society, therefore, it is really needed to have some important morals and values to enhance them to carry out their lives consciously, correctly, morally and valuably. Its content provides a set of tools for applying, analyzing, synthesizing and evaluating as the good characteristics of the people in order to cope with many difficulties in the world. Furthermore, it basically makes people to act consciously by using higher order thinking skills, especially when facing the great difficulties in life, therefore, the teaching value education must be based on allowing students to think and act upon the right decision as well as solve its difficulties with the right evaluation in the given case studies, expressing ideas and applying in the real situation. Therefore, the application, analysis, synthesis and evaluation are very fundamental skills for teaching and learning process in value education (Value Education Secondary 6, 2012)

Objectives

1. To compare the Students' Value Education Achievement taught by Multimedia Teaching Style and Traditional Teaching Style
2. To compare the Students' Value Education Achievement taught by Multimedia Teaching Style and Traditional Teaching Style according to their gender and grade point average.

Literature Review

Teaching Styles

The approaching ways concerning to the teaching which works best for students alter significantly. Teaching style refers to individualized ways of delivering information and knowledge to the students. Some teachers familiarize to teach by giving a direct instruction considering as a teacher center, others familiarize to teach by giving more chance to students to participate in class as a group activity, interaction, games, using multimedia or doing things in the certain circumstances as a student center. Teachers need a teaching style that is most matched with the students' learning styles as vary considerably. Mostly, teachers are not born, all are trained and practiced with knowledge, skills as well as a variety of teaching styles which make them a professional teacher (Gilstrap & Martin, 1975, p.4)

Lang, McBeath & Hebert (1995) divided instructional strategies into six categories; direct instruction, indirection instruction, interactive instruction, experiential instruction, individual instruction and technology-related instruction. Each of its instructions has got their own ways of appraoch, in terms of multimedia application, technology-related instruction is most concerned since most people still believe that technology can help the teachers so as to make their teaching more efficiently and effectively. Conversely, a computer-assisted instruction can cut the need of becoming a teacher with a channel of distance education the students would spend the time in school lesser and just keep in touch with teachers through computer which is completely changed the way teachers teach as well as the way students learn in today's teaching and learning styles.

Clark (1989) described that even though technology is currently playing a very important role in the life of people, teachers are also necessary to be a facilitator along with technology. A truly professional teacher uses and applies technology as an assistant for

teaching, not for replacing. McNeil & Wiles (1990) classified the types of technology that are commonly used and applied in school; non-projected visuals, projected visuals, audio media and multimedia (combination of audio and visual).

One of the technology-applied instructions that can be found prevalently which is related to the teaching-learning process from teachers to students and students to students through computer network connectivity is Web-Based Instruction (WBI).

Clark (1996) defined web-based instruction as the individualized instruction that delivers information and knowledge to the public by the channel of the connectivity on the computer which all can keep in touch by accessing to the information stored in a server provided.

Web-based instruction is referred to the teaching-learning process supported by the sources from the internet (Khan, 1997).

Relan & Gillami (1997a) gave the definition of web-based instruction as the application of cognitive instructional strategies which utilizes the knowledge and information as well as creates the learning environment through the resources from the computer connectivity.

From its definitions which may not exactly the same in the way said, but there is a common concept that WBI makes use of the internet connection to deliver information and knowledge to the receivers.

Oliver (2000) recommended the corresponding instructional strategies to the web-based instruction that can really help students to achieve through the teaching-learning process; conversing, discussing, mentoring, questioning, supporting a partner, debating, impersonating, role playing, sharing data, analyzing, developing a new product, traveling virtually, situating curriculum in the context of expeditions, seeking, collecting, organizing, synthesizing online information, exploring real world cases and problems, accessing tutorials with exercises, quizzes, questions, online drill-and-practice.

Therefore, it would say that web-based instruction is the way that the teacher and students can keep in touch with each other as a multi-directional communication: teacher to student, student to student and student to teacher based upon the content they receive in which is definitely connected with the technology-applied instruction.

Learning Styles

A learning style can be defined as "an individual's natural, habitual, and preferred ways of absorbing, processing, and retaining new information and skills which persist regardless of teaching methods or content area" (Kinsella, 1995, p.171). Basically, we have our own particular learning style, anyway, it depends on how much one has the influences in both biological and environmental matters (Kinsella, 1995). Learning style is also defined as "The biologically and developmentally imposed set of characteristics that make the same teaching method wonderful for some and terrible for others" (Dunn & Griggs, 1988, p. 3). This means that learning style is considered as a development process through one's own experience. Additionally, as a learner, we also can practice with various learning styles and adjust with the most suitable one to our learning style. However, Reid (1998a) claimed that those who are successful learners have multiple learning styles.

According to Reid (1995), learning styles can be divided into three major learning categories; cognitive learning style, sensory learning style and affective learning style. In details, Reid's study of perceptual learning style preferences with students who learn the second language, which mostly its studies had focused on cognitive learning styles and conscious learning strategies. She studied and did the survey in her research to find out the preferred learning styles with students who were studying in English Language program in U.S.A among the six categories; visual, auditory, kinesthetic, tactile, group, and individual learning styles according to the degree of their preference (Reid, 1987).

VARK Learning Style was proposed by Fleming (2001) which is connected with the categories of six different learning style preferences given by Reid (1987), he defined learning style referring to a personal style of characteristics and preferred learning ways of gathering, organizing, and thinking upon the given information which is also connected to both cognitive and more particularly sensory learning style as studied by Reid (1987). VARK is a short name of perceptual modes of learning which stands for; Visual (V), Aural (A), Reading/Writing (R) and Kinesthetic (K).

VARK Learning Style is to use our learning senses for each specialized practice usefully by seeing and visualizing, hearing and listening, kinesthetic and tactile learning or reading and writing. However, each learner is specialized for each sense differently, as a teacher, we need to make use of the multimedia teaching style based upon each sense to be used so as to make the teaching more effectively.

Multimedia Teaching Style

Multimedia teaching style is the combination of variety of digital media types like text, picture, audio-visual and video into the integration of multi-sensory interactive application in order to deliver information to the students more effectively (Damodharan & Rengarajan, 2007). The teacher uses different multimedia elements to add up, make and modify the

contents so as to present meaningfully. These media elements are in the digital forms such as sound, pictures, texts, graphics or still and motion pictures for the presentation towards students by using with the projector, the students will be able to learn better since they use multiple sensory modalities, especially by seeing and hearing which would make them more motivated in learning with the information presented (Damodharan & Rengarajan, 2007).

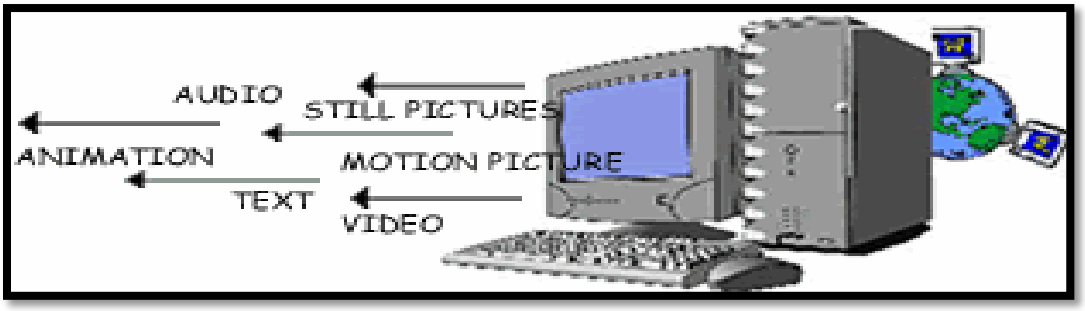

Figure 1: Multimedia Elements (From Damodharan & Rengarajan, 2007)

Vaughan (1998) described that multimedia project is very useful, exciting and challenging. A number of multimedia technologies are available for those who are creating innovative and interactive application to students.

Furthermore, another benefit of using multimedia project in the classroom is to enhance students work in the group cooperatively and collaboratively, using the skills to finish their project in groups (Damodharan & Rengarajan, 2007).

providing words to the images or picture will not be an effective way of multimedia learning style (Mayer, 2009). Basically, his cognitive theory of multimedia learning is combined and integrated by three major theories.

Sweller (1988) described that our human cognitive learning skills need to apply suitable instructional design in order to work cooperatively with the brain and memory. In summary it is the working process of our human cognitive learning skill that is from the intrinsic cognitive load as receiving and organizing the information and ideas from the instructor then to be controlled by the extraneous cognitive load as well as to be supported and promoted the first two functions by germane cognitive load. From the said process, the information is gone to the mental load and transformed our cognitive load and finally as the performance.

Paivio (1986) stated that human cognition is unique and specialized for dealing simultaneously with

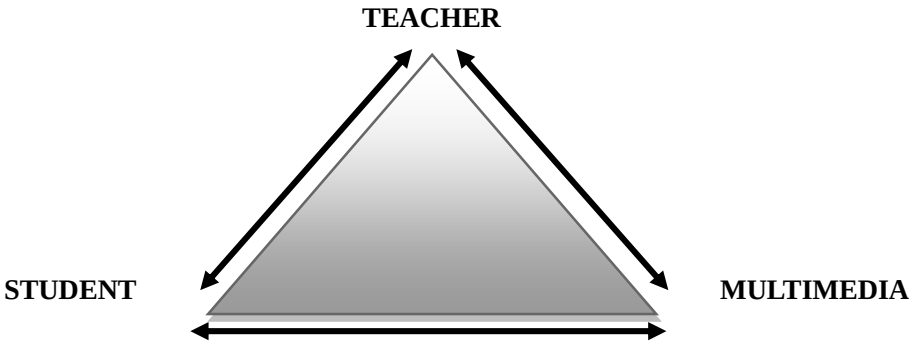

Figure 2: Interactive Multimedia Learning Process (From Damodharan & Rengarajan, 2007)

Damodharan & Rengarajan (2007) recommended that the teaching would be highly effectively when teachers start using and applying the current multimedia technologies, especially the usage of computer within the environment and atmoshere where its usage is accessible then it must be very useful and benefitted to the students.

Mayer (2001) stated that "people learn more deeply from words and pictures than from words alone" (p. 47). He, however, described further that simply verbal and nonverbal objects. Furthermore, the verbal system is working cooperatively with both the speech and the writing while also responding along with the pictorial function as the nonverbal system dually. In the theory, he assumed that there are two subsystems, one is specialized with the verbal object and the other with the nonverbal object. In fact its concept can be applied with students such as mnemonics, problem-solving or learning languages based upon the use of multimedia teaching style.

Baddeley's Working Memory Model was to

attempt to describe a short-term memory model more accurately, their first model was consisted of three main parts as the followings (Baddeley & Hitch, 1974).

1. The central executive acts as supervisory system and controls the flow of information from the central executive to its slave systems, they are:
2. The phonological loop is the verbal information
3. The visuo-spatial sketchpad is processing visual information

The third slave system was added in 2001 in the model that is the episodic buffer. Its function is different from the two slave systems by combining the two parts into a single representation (Baddeley, 2000).

The mentioned three major theories are mainly formed the cognitive theory of multimedia learning of Richard Mayer (2001), however, he focused more on the auditory/verbal channel and visual/pictorial channel in which makes his concept based upon these three assumptions as follows (Mayer, 2001):

1. Visual and auditory information are processed through different information processing channels.
2. Each information processing channel is limited in its own capacity to process information.
3. Processing information in a channel is an active cognitive process to build up coherent mental representations.

There are 3 main steps in the process of learning through Multimedia as given below (Mayer, 2001, p.54):

1. Selecting words for processing into a verbal working memory as well as selecting pictures for processing into a visual working memory.
2. Organizing selected words into a verbal mental model and selected images into a visual mental model.
3. Integrating both verbal and visual information together with the prior knowledge.

According to Mayer (2009), learners are better able to learn through multimedia presentations because they use both the visual and audio channels to build schema in working memory instead of just one. Constructing schema with both channels allows the learner to build more meaningful schema in working memory. This stronger schema is more likely to be retrieved than a schema that was built with one channel from a single media lesson.

Traditional Teaching Style

In traditional teaching style, a role of the teacher was considered as a dictator who controls the class entirely. Teachers deliver information by using a chalk and talk method. This direct instruction is very fundamental which has continuously been used for over decades as the instructional strategy in every school. Basically, teachers control the entire teaching-learning process in the class, its content is delivered with a one-way communication by a teacher which is considered as a sender focusing on the factual knowledge towards the students as the receiver (Damodharan & Rengarajan, 2007).

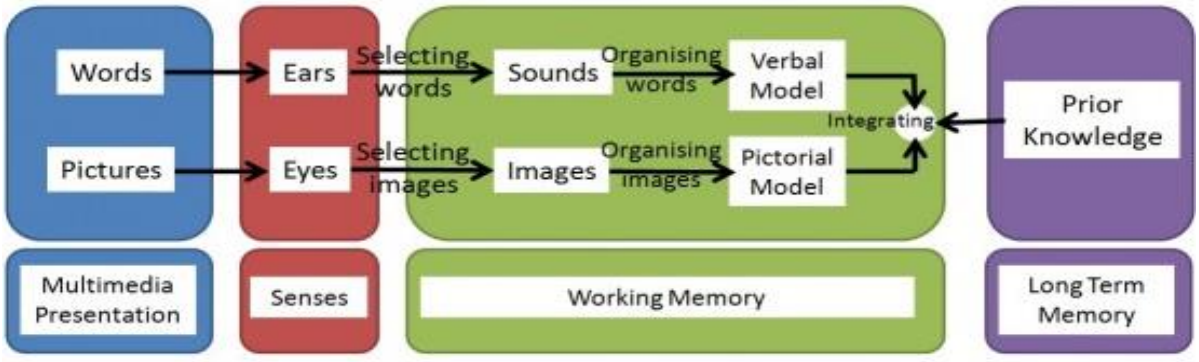

Figure 3: A Cognitive Theory of Multimedia Learning (From Mayer, 2001)

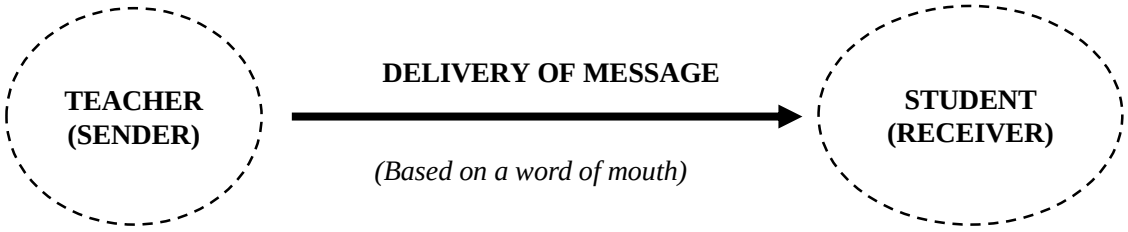

Figure 4: Traditional Teaching Style of Message Delivery (From Damodaharan & Rengarajan, 2007)

The concept of traditional teaching style is completely based on the teacher-centered instruction which the students act as the receiver who is waiting for the order from the teachers to be followed and done without having interaction that causes the students lack of the basic communication skills, especially in the class.

According to Feigenbaum (1959), human brain is a biological mechanism which is fundamentally composed of nervous and other cells. Nobody knows exactly how our brain functions systematically in receiving, processing, organizing and presenting information at this small level. He explained further concerning how the information is processed and developed in the context of rote memorization which is exactly a main channel of the traditional learning style using for decades in the traditional teaching style He summarized that there are two main methods in practicing and using rote memorizations usefully; serial anticipation method and paired association method.

Regardless of how many rote memorization methods to be used, anyhow these two basic memorization methods have been employed which are to increase the rate of memorizing capacities of each student that keep on using in the traditional teaching style (Feigenbaum, 1959, p.47-49).

Conceptual Framework

The independent variables of the research were the two different teaching styles that were conducted as "multimedia teaching style" and "traditional teaching style". The study was conducted with the students studying in the same level of the 12th grade at Saint Louis School Chachoengsao but there were demographic data to be considered that were "gender" and "grade point average" (G.P.A) which was another independent variable in the research.

The dependent variable on the other hand was "students' value education achievement," which was expected to be affected by the two different teaching styles. To analyze and compare the differences in "students' value education achievement," pre-test was given to measure the learning level of the students before teaching and the post-test was given to compare the students' achievement between the two different teaching styles after using them to two different groups of students.

The conceptual framework of this study is shown in the Figure 5.

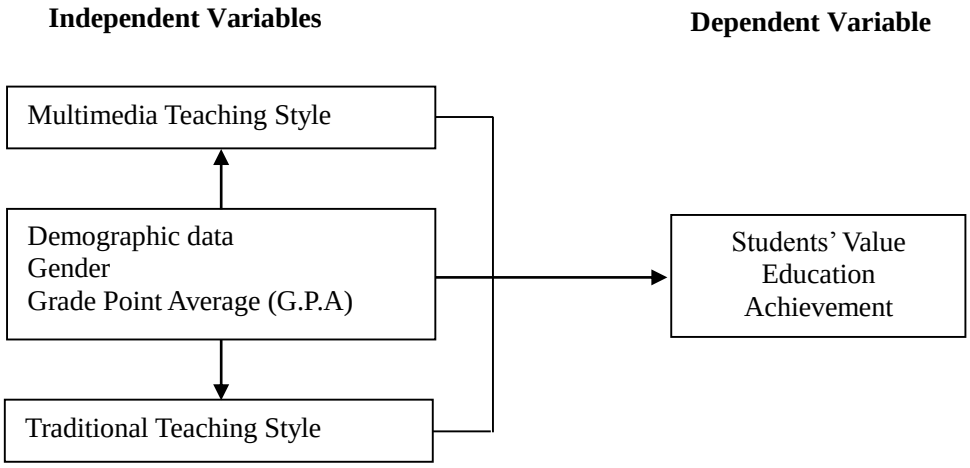

Figure 5: Conceptual Framework

Method/Procedure

This was an experimental study conducted as a quantitative and descriptive research and analyzed the result by inferential statistics which is aimed at comparing the students' value education achievement between two teaching styles; multimedia teaching style and traditional teaching style. The students were tested with the pre-test to measure their learning level before teaching and after teaching the post-test was given to compare the students' value education achievement between the two different teaching styles among the two different groups of students. The pre-test and post-test were the same learning contents but they were provided in each item differently according to its learning objectives. The data was gathered and analyzed by using Statistics Package for the Social Sciences Program.

There were 99 students out of 272 students who were studying Value Education in the 12th grade at Saint Louis School Chachoengsao to be selected and divided into two groups based on the classes since these two classes were in the similar studying environment, similar learning level and similar study program, especially the learning level to be measured by the pre-test. They were 50 students from Secondary 6/2 randomized as a control group studying Value

Education with the use of Traditional Teaching Style and 49 students from Secondary 6/1 as an experimental group studying Value Education taught by using Multimedia Teaching Style as shown in the following table.

Table 1: The Treatment of Experimental Process

Lists	Control Group	Experimental Group
1. Lesson Plan	Learning outcome and learning objectives are based on the same contents but only instructional procedure and materials are particularly emphasized on Traditional Teaching Style.	Learning outcome and learning objectives are based on the same contents but only instructional procedure and materials are particularly emphasized on Multimedia Teaching Style.
2. Contents	The 4 contents to be taught: 1. Anger-A Negative Emotion 2. The Perfect Prefect 3. The Genius of Menlo Park 4. Untaught Lesson	The 4 contents to be taught: 1. Anger-A Negative Emotion 2. The Perfect Prefect 3. The Genius of Menlo Park 4. Untaught Lesson
3. Textbooks	Textbook was mainly used in the teaching and explanation as well as doing exercises.	Textbook was just used for doing exercises. The teaching and explanation were done by Audio-Visual Presentation filled with sound, texts, pictures and moving video.
4. Equipment	To be taught in the normal room using whiteboard and marker as the teaching materials.	To be taught in the sound lab room with well-provided equipment's; a laptop, audio-visual player, speaker, LCD projector and active board screen.
5. Role of the teacher	A teacher was a deliverer.	A teacher was a facilitator.
6. Learning Activities	Activities were given individually while doing exercises. Interaction was done between teacher and students individually when students got problems in doing exercise.	Activities were done in groups whether small or big even as individual. Moreover, there were interactions between teacher and students both in class and individually.
7. Assignments	Assignments were given to students individually and teacher kept moving to help students individually.	Assignments were given to students both as individual and in groups while teacher kept moving to help students both as individual and group.
8. Assessments	To be assessed by the post-test after teaching based on paper test in 4 learning contents taught.	To be assessed by the post-test after teaching based on paper test in 4 learning contents taught.

Research Instrument

The study was conducted over the first semester in academic year 2013. Value Education was a subject teaching for 50 minutes a week in the total of 10 weeks and the 11th week to be given the post-test. Before starting, the pre-test was used to investigate and make sure that the learning levels of both groups were the same. At the end of the instruction, a post-test were given to test their learning achievement of both groups.

The three expert persons were invited to be a test content reviewer; Rev. Bro. Amnuay Yoonprayong, Ph.D., Dr. Kajornpat Tangyin and Rev. Peter Mascarenhas. They are all from Graduate School of Philosophy and Religion, Assumption University

After getting reviewed and corrected the content of the test according to the comment of each expert above. The tests were brought to tryout with the group of 30 students in the same level in order to evaluate the test reliability score of Cronbach's Alpha Coefficient before being used with the sampled group. After doing the tryout, the reliability score of the test had come out at (0.803) for the pre-test and (0.805) for the post-test.

Both tests were used to measure students based upon in the following contents:

Topic 1: Anger-A Negative Emotion based on the following learning objectives

1.1 The students will be able to define the meaning

of emotion correctly.
1.2 The students will be able to identify the types of emotion correctly.
1.3 The students will be able to give an example of each type of emotion correctly.
1.4 The students will be able to express their emotion in different circumstances correctly.

Topic 2: The Perfect Prefect based on the following learning objectives

2.1 The students will be able to define the meaning of prefect or leader correctly.
2.2 The students will be able to identify the types of prefect or leader correctly.
2.3 The students will be able to write down the good and bad characteristics of the prefect or leader correctly in their own opinions.
2.4 The students will be able to apply the desirable characteristics of the leader in any situation given correctly.

Topic 3: The Genius of Menlo Park based on the following learning objectives

3.1 The students will be able to define the meaning of goal in their own opinions correctly.
3.2 The students will be able to identify each function of GPAR method in any given situation correctly.
3.3 The students will be able to write down their future plan based on the GPAR method correctly.

Topic 4: Untaught Lesson based on the following learning objectives

4.1 The students will be able to define the word "Untaught Lesson" correctly.
4.2 The students will be able to identify the desirable and undesirable characteristics of the student correctly.
4.3 The students will be able to mention the desirable characteristics that need to practice in their lives correctly.
4.4 The students will be able to apply all of desirable characteristics in any situation given correctly.

Experimentation and Data Collection

In this study, both groups were taught by the same teacher with different styles of teaching. In the control group, textbook was used. Teaching and explanation were done by using Traditional Teaching Style. While in the experimental group, textbook was used for doing exercise only in the practice part but Multimedia Teaching Style was employed to teach the contents. Particularly, the experimental group was placed in the fully equipped classroom with a laptop, audio-visual player, multimedia speaker, LCD projector and active board screen. The teacher taught and controlled the class with the use of these equipment on the active board screen. Both groups had the same contents and assignments as well as the teacher carried out the teaching by standing in front of the class, while students sat facing the whiteboard and screen.

Before teaching, the pre-test was used to measure the learning level of sampled students whereas the post-test was used to collect the data and assess students' value education achievement after conducting the teaching.

The learning materials and style were described in details as the followings.

The Control Group

The procedure was done in the following steps:

1. There were fifty (50) students in this group using Traditional Teaching Style. The teacher gave a lecture based on the textbook by using White Board and explained to the students with its learning objectives of each unit throughout the course in the first semester.

2. The teacher provided exercises to students individually. While doing the exercises, the teacher moved around and helped students who had problems. The teacher checked students' work, attendance, gave suggestions, clarified and answered some questions and provided encouragement to work more effectively.

3. Before concluding the classes, the teacher summarized the unit by using spoken word delivery and gave some homework and assignments to the students. Similarly, the teacher followed from the first to third step in the teaching process until the last period of the classes.

4. After teaching the post-test was given to students to assess their achievement as well as demographic data were given for the data needed in the study.

The Experimental Group

The procedure was done as follows:

1. There were forty nine (49) students in this group with the use of Multimedia Teaching Style. The teacher gave a lecture based on PowerPoint and Audio-Visual Presentations filled with sound, pictures, texts and moving video to the students with its learning objectives of each unit throughout the course in the first semester.

2. The teacher provided activities from the textbook and worksheet to students both in pairs and groups. Students involved in discussing based on the activities received. The teacher moved group to group, checked students' work, attendance, gave suggestion and clarification, answered some questions, provided encouragement and facilitated the group to work more effectively.

3. The teacher asked each group to present in front of the class and gave some comments regarding to the

group presentation. Their participation in group discussion and class presentation were observed. Before concluding the classes, the teacher summarized the unit by using PowerPoint and Audio-Visual Presentations and gave some homework and assignments to the students. Similarly, the teacher followed from the first to third step in the teaching process until the last period of the classes.

4. After teaching the post-test was given to students to assess their achievement as well as demographic data were requested and collected during conducting the study.

The data was analyzed by means and standard deviations which were obtained for descriptive statistics, while the Independent Samples t-test (two tailed) was used for inferential statistics. The analysis was done according to each research objective in details as follows.

For Research Objective 1: the Independent Sample t-test (two-tailed) was used to compare the significant difference of the post-test score of Value Education Achievement taught by Multimedia Teaching Style and Traditional Teaching Style.

For Research Objective 2: the Independent Sample t-test (two-tailed) was used to compare the significant difference of the post-test score of Value Education Achievement between two groups of male and female as well as grade point average of less than 2.70 and equal to 2.70 or more than.

Findings/Results

The findings are shown according to each research objective as follows:

Research Objective 1:

1. In the post-test of students' achievement in two different teaching styles, there was a significant difference in students' value education achievement taught by multimedia teaching style and traditional teaching style.
2. The mean score of students' achievement in experimental group taught by multimedia teaching style gained higher than the mean score of students in control group taught by traditional teaching style which implied that the students' value education achievement after being taught by multimedia teaching style was more effective than being taught by traditional teaching style.

Research Objective 2:

1. In the post-test of students' achievement in two different teaching styles according to gender, there was no significant difference in students' value education achievement taught by multimedia teaching style and traditional teaching style according to gender in any groups whether students were in control group, in experimental group or as a whole.
2. Based on gender the students whether in control group, experimental group or as a whole was not significantly different on their performance in the post-test.
3. In terms of comparing according to grade point average, there was a significant difference in students' value education achievement taught by multimedia teaching style and traditional teaching style according to grade point average in control group and as a whole. While there was no significant difference in students' value education achievement taught by multimedia teaching style and traditional teaching style according to grade point average in experimental group.
4. Based on grade point average in control group or as a whole, students who got G.P.A equal to or more than 2.70 were more effective in learning achievement than those who got G.P.A less than 2.70. On other hand, in experimental group whether students who got G.P.A less than 2.70 or equal to or more than2.70 they were very similar in their learning achievement which implied that by using multimedia teaching style it can help all students in all learning levels improve their learning achievement, no matter how much score or G.P.A they got.

Discussion

Multimedia Teaching Style affecting the Students' Achievement

The findings of this study were similar to some previous research findings. Tan & Lim (2008) claimed that learning through multimedia teaching instruction is very fun and exciting. It is also presented through PowerPoint presentation is not boring but useful, encouraging and easy to understand. Moreover, students learn faster and understand the lessons better through watching video than learning with traditional teaching classroom instruction. Their research finding found that the students learning with multimedia teaching instruction had higher mean score than students learning with traditional classroom instruction which was statistically significant and proved that multimedia teaching instruction was more effective than traditional classroom instruction (Tan & Lim, 2008).

Students who learn with the use of multimedia becomes actively learning and better understanding than merely memorizing the knowledge delivered by the instructors (Kneedler, 1993; Reeves, 1992).

Furthermore, O'connor (1993) stated that when the teacher uses and applies any interactive multimedia in class, students become more motivated. Consequently, this brings a better class attendance and more finished homework.

Another similar previous research finding is Lin (2009) who conducted the study of a comparison between web-based instruction and traditional instruction on preservice teachers' knowledge of fractions. The result showed a statistically difference that the group learning with web-based instruction got higher posttest mean score than the group learning with traditional instruction (Lin, 2009). Vaughan (1998) also stated that to create multimedia project is very useful, exciting and challenging. A number of multimedia technologies are prevalent for those who are creating innovative and interactive application to students. Damodharan & Rengarajan (2007) stated that the teacher uses multimedia to add up and modify the contents of learning in order to present in a very meaningful way with different media elements applied. These media elements are normally used in the digital form for the presentation towards students by using multiple sensory modalities, especially within the channel of seeing and hearing which would make them more motivated in learning with the information presented as well as make the teaching more effectively. Moreover, another benefit of multimedia project in the classroom is to enhance students work in the group cooperatively and collaboratively from teachers through multimedia towards students. They also recommended that the teaching would be highly effectively when teachers start using and applying the current multimedia technologies, especially in the environment where the use of its computer is accessible, there will be very useful and benefitted to the students.

In the findings by using Multimedia Teaching Style, gender was not shown the difference between male and female in the learning performance or grade point average (G.P.A) was also not shown the difference between lower and higher grade point average (G.P.A) in the learning performance as well which proved that multimedia teaching style can help all students of different gender and grade point average (G.P.A) benefit and achieve in their learning equally.

Traditional Teaching Style affecting the Students' Achievement

One of the previous research findings that showed the opposite result is Liu (2010) who conducted the study of an Experimental Study on the Effectiveness of Multimedia in College English Teaching. He investigated the two different teaching methods to two groups; one with multimedia teaching method another with traditional teaching method. It found that both groups got nearly mean score, more especially the group learning with multimedia teaching method got a little lower, it conversely that there was no significant difference at all. His explanation stated that teaching with multimedia would be more interesting which activated learners from having to learn into willing to learn with the combination of sound, pictures and texts that can arouse learner's interest but too much watching to the screen filled with lots of sound, pictures, animations, texts and moving video is harmful to the eyes, it is easy to be tired after a long period of watching. On the other hand, learners do what they are told to do, they takes note from the screen, try very hard to memorize as well as turning the light off, and the dark classroom might become the best sleeping time (Liu, 2010).

It found that the most universities gave class to the students by the conventional lecture approach is ineffective in the teaching-learning process since the students act as the purely passive receiver of information from the teacher as well as their concentration is faded off after 15-20 minutes (Damodharan & Rengarajan, 2007).

However, the traditional teaching style tends to make students participate in the class very little, but presently individualized study in which each student works on their own and learn by themselves, not only at school but also at home. Individually and personally they can make a concentration more on their task as well as create their own environment in order to make their job and learning achievement become better (Putnam, 1997)

Furthermore, by using Traditional Teaching Style, gender was not significantly shown the difference between male and female in the learning performance whereas grade point average (G.P.A) was clearly shown the difference between the lower and higher grade point average (G.P.A) in the learning performance that those who got higher grade point average (G.P.A) they were still dominant and more effective than those who got lower grade point average (G.P.A) which prove that using traditional teaching style based on grade point average (G.P.A) the students benefit and achieve in their learning unequally.

The findings of this study concluded that the students taught by multimedia teaching style were more effective in their learning achievement than the students taught by traditional teaching style. Therefore, it is a recommendation to apply different teaching styles in value education teaching, such as multimedia teaching style, in order to enhance students' learning and achievement.

Recommendations

The recommendations of this study will be directed to 2 groups of people as follows:

Recommendations for Practice

1. Teachers teaching value education to students are encouraged to employ multimedia teaching style into their teaching by ways of seeing and hearing based on student-centered instruction as a meaningful tool to improve their attention and to increase their achievement.
2. It is better to apply the 7 principles according to Mayer (2001) in making the multimedia presentation to draw students' attention as well as increase their achievement.
3. The lesson should be well planned and structured in line with the use of multimedia teaching materials, be aware of the probability of a sudden electricity shortage by planning a substitute tool for students, such as texts filled with pictures card, creating a group activity, group discussion and so on.
4. Multimedia Teaching Style is of most applicable to a group of diverse students according to gender and grade point average (G.P.A)
5. Teachers should behave in a friendly and constructive manner, teaching a basic skill to students of how to get to know each other, communicating accurately and clearly as well as creating chance to students interact with teachers and among them as a student-centered instruction.

Recommendations for Future Research

1. This research is limited in its findings as a specific of two group students and time period are fixed. Therefore future research can be done by using different groups of students from different year levels of study between multimedia teaching style and traditional teaching style.
2. This research was done over a period of one semester. It may not be the most effective way to observe the effects of each teaching style. A study can be done over a longer period of time such as two semesters or four semesters, to be more effective and to provide a better and more accurate on the same topic.
3. Multimedia teaching style can be investigated in different subjects, different areas and different school settings.
4. Future studies may need to discover students' satisfaction and interest towards each teaching style and apply the Three Way Analysis of Variance with the same variable to make a more effective result.

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