Effectiveness of Interactive Web tools as teaching strategies in AMA computer college, Cavite campus, Philippines

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ABSTRACT

The main concern of this study is to analyse the effectiveness of interactive web-tools as teaching strategies in AMA Computer College Cavite Campus. This study employed the descriptive survey method of research. The effectiveness of usage of Interactive Web Tools as Teaching Strategies was analysed by documentary analysis and interviews and it was observed that it is way more effective in making students understand. With these results, an improvement in the school system through their faculty members would give way to a modernized teaching method and strategy. This was focused on the interactive web-tools as teaching strategy that will enhanced the teaching technique of teachers. It may provide more in-depth understanding of the effectiveness of interactive web tools that may help developed and enhanced teaching strategy and style of teachers. There will be more systematic and teaching style of teachers in teaching.

Key words: Web tools, Interactive, Teaching Strategy, Effectiveness.

1. INTRODUCTION

Education in the best process of gaining information and knowledge in a systematic way. It has formative effect on individuals mind, character and physical abilities [1]. In other words, education is the process by which society deliberately transmits its accumulated knowledge, skills and values from one generation to another.

Interactive assessments is one of the method for education transfer, it permits important course improvements which is created by students with various collaborations. This is part of on-going regular course works which help in self-building the students' knowledge and personality. This helps the students in gathering the teaching resources and enriching their learning by demonstrating. This advantage for students by their participation in the course has a real educative application [2].

According to the Office of Technology Assessment's 1995 report on teachers and technology, schools have made significant progress in implementing technology in helping

teachers to use basic technology tools [3]. But they still struggle with integrating technology into the curriculum.

Having excellence in teaching as a goal, leads an instructor to dedicate special effort and time to the preparation of class material and to seek the most effective method to deliver each portion of the content. However, after delivering the carefully prepared instructional material, unless an objective assessment tool is used to measure the effective contribution of the chosen approach to student learning, the instructor has to rely only on his or her instinct to judge how successful the teaching was. It is common to find situations in which learning measurement is performed almost solely through tests and/or course assignments, leaving the measurement of the effectiveness of the chosen approaches to instructional delivery to a capstone assessment activity at the end of the course. The results of this assessment became very useful for improvement of future delivery of the same course, but are not applicable to the course from which they are derived.

Wong and King developed an interactive online tutorial as a learning aid for the students aimed to meet the following objectives: to present background material and rules in a clear and concise manner. To present the material in an engaging manner so students will be willing to work problems, to provide practice problems with instantaneous feedback on performance, and to mimic grading on exams so students may find their errors. When the authors started doing this online tutorial, they intended to make this useful as both classroom presentation for the instructor and after-class review for the students. This learning aid has both tutorial and a practice problem set, whereby the former.

Some studies acknowledged the difficulty in isolating the factors that influence online learning, such as the technologies or the students [5]. The study also noted that assessing quality in traditional classroom settings is difficult for similar reasons. Much of the research comparing outcomes does not account for changes in instructional design and classroom teaching that may accompany the introduction of technology. They suggested that online learning initiatives go beyond the technology itself to encourage institutions and faculty.

Studies conducted an online survey which obtained descriptive data about the faculty participants and their Web-enhanced courses. To assess experience level, the survey queried faculty's academic and professional backgrounds, years of teaching, years of Web use, and number of Web-enhanced courses taught. Items were included to determine the extent of training and support services received. Those items include the use of Content Tools such as Lecture Notes, Course Readings, Exercises and PowerPoint Slides. As well as Communication Tools which are the use of Email, Discussion, Small Groups, Chats and Guest Presenters. The last one is the Interaction Tools which composed of Quizzes, Simulations and Exams. [6].

As with the result of the study mentioned above, 31 faculty members out of 56 or 67% agreed that Web Tools is a convenient way of distributing materials which can be easily access by students. It was seen as an opportunity to

accomplish efficiently otherwise time-consuming tasks such as printing and distributing syllabi, readings, assignments, expanded supplemental resources, and hand-outs.

The main concern of this study is to analyse the effectiveness of interactive web-tools as teaching strategies in AMA Computer College Cavite Campus.

RESEARCH QUESTIONS

The main objective of this study is to analyse the effectiveness of interactive web-tools as teaching strategies in AMA Computer College Cavite Campus.

This study sought to answers the following questions:

1. How effective is the interactive web-tools in terms of:

      1.1 Communication;

      1.2 Motivation;

      1.3 Demonstration

2. What are the challenges of teachers experiencing interactive web tools?

2. MATERIALS AND METHODS

2.1. Research Design

This study employed the descriptive survey method of research. Documentary analysis and interview were also used. Since descriptive research deals with the prevailing situations, gathering data became easy. The sources of materials were easily acquired by the researchers.

This study used random technique; it is the selection of suitable samples from group or classes of the population involved in the study. The population was determined by identifying faculty members who are using interactive web tools. Such identification was limited to the faculty members who always use following identified web tools [7] such as Online course readings and exercises, Power Point slides, E-mail and discussion groups, and Online simulations and exams.

2.2. Data collection and analysis

The researcher asked 50 respondents to participate in the survey. The respondents of this study were officially enrolled students, during the 3rd Trimester of School Year 2010 – 2011, from various courses and who are attending the classes of the faculty members who were identified as web tool users. The following characteristics of an effective teacher were identified and used as a tool for the survey form includes; Demonstrates appropriate knowledge of the subject area, Communicates effectively, Motivates and inspires students to learn, Students can obtain support and/or assistance from the instructor if needed, Encourages student to develop independent learning skills, and generally helps student to learn effectively.

The main instrument used in gathering data was the survey-checklist and interview. The survey form is composed of a checklist of items comprising the identified characteristics of an effective teacher. They were asked to rate their teachers based on the likerts scale.

The researcher also used the primary instrument – interview. They also employed non-standardized and non - directive type of interview where the researchers were free to

choose, change and add question as support to the study.

The researcher conducted a preliminary investigation to identify the effectiveness of interactive Web Tool as a teaching strategy at AMA Computer College Cavite Campus. To gather data and information, the researchers conducted an initial survey among students and faculties in order to identify those teachers who frequently use web tools as an aid for teaching. The researcher then, conducted the actual survey in order to find out the students perception on the use of interactive web tools. The students were asked to rate their teacher who are teaching with the aid of interactive web tools

The data provided by the respondents were analysed and tallied based on the criteria presented to them. The results and answers of the questionnaire have been gathered. This is when statistical treatment came in. The results were determined by the use of Average Method. The design and administration of assessment tools for ongoing classroom activities is complex and time consuming. To be effective, the results need to be immediately available to the students,

and actions must follow hard upon the gathering of the data

3. RESULTS AND DISCUSSIONS

Based on the results, this study proved very important to instructors at AMA Computer College Cavite Campus. AMA, being a computer school, is expected to provide accurate information and to lessen the time consumed in lecture preparation, beyond traditional teaching methods and strategies.

With the results below, an improvement in the school system through their faculty members would be appropriate. The data presents a proof that the use of Interactive Web Tools as an alternative teaching technique could be considered effective.

In item number one (1) of the survey, 45 of the respondents Agree, while 5 of them Strongly Agree that the teacher demonstrates appropriate knowledge of the subject area; such supports the idea that a teacher who uses interactive web tools for teaching, handles the subject matter with proficiency. In item number two (2) of the survey, 45 respondents Agree,

Table 1. Survey Results

	Strongly Agree (5)	Agree (4)	Slightly Agree (3)	Disagree (2)	Strongly Disagree (1)	Average
1. Demonstrates appropriate knowledge of the subject area	5	45	--	--	--	4.1
2. Communicates effectively	--	40	10	--	--	3.8
3. Motivates and inspires students to learn more	50	--	--	--	--	5
4. Student can obtain support and/or assistance from teachers if I need it.	4	45	1	--	--	4.06
5. Encourages student to develop independent learning skills	47	3	--	--	--	4.94
6. Generally helps student to learn effectively	50	--	--	--	--	5

while 10 slightly Agree that the teacher communicates effectively; this proved that the teacher becomes more effective in communicating with the aid of interactive web teaching because it explains concepts and instructions clearly. In item number three (3) of the survey, 100% of the respondents Strongly Agree that teachers who are using interactive web tools motivates and inspires students to learn, which proved that through these tools, a teacher finds ways to motivate and inspire students to exert more efforts and attention to their subjects. Item number four (4) of the survey shows that, students feel that they can obtain support and/or assistance from teachers whenever they need it, out of 50 students, 45 Agree, 4 Disagree and 1 Slightly Agree that students can obtain support and/or assistance from the instructor if needed such as through the online course readings, discussion groups and emails. Such proves that using interactive web tools facilitate the teacher with greater opportunity of providing more supplemental materials that will aid the student's learning experience [8-9]. Item number five (5) of the survey shows that the instructor does not direct all learning outcomes but rather encourages students to think critically, solve problems, communicate ideas, etc. based on the results 47 of the respondents Strongly Agree, while 3 Agree that the teachers who use interactive web tools encourages student to develop independent learning skills. Finally, item number six (6) of the survey shows that 50 or 100% of the respondents Strongly Agree that the teacher who uses interactive web tools generally helps the student to learn effectively [10]. This is supported by the theory of Wingard (2004) cited that the major use of Web-based instruction is to enhance traditional, on-campus courses, where the benefit of Web enhancement as a supplemental resource [7] . Faculty members are embracing these tools as well and investing significant time and energy into adding Web-based supplements to their traditional courses [11].

Teachers had experienced difficulty in interactive web tools as teaching strategy though they stated that this will be a big help for them to learn new strategies in modern teaching [12-13]. Additionally, they quote that they are willing to learn not only for the benefit of students but for their own benefit as well.

This shows that the usage of Interactive Web Tools as Teaching Strategies is effective. With these results, an improvement in the school system through their faculty members would give way to a modernized teaching method and strategy.

4. CONCLUSION

It was concluded that the effectiveness of interactive web tools usage as Teaching Strategies is effective. With these results, an improvement in the school system through their faculty members would give way to a modernized teaching method and strategy

5. ACKNOWLEDGEMENT

6. CONFLICT OF INTEREST

7. SOURCE/S OF FUNDING

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