

## A COMPUTER ASSISTED INSTRUCTION IN TEACHING HISTORY AND DEVELOPMENT OF WATER POLO

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### ABSTRACT

*The present study was intended to point out the effect of the utilization of the proposed Computer Assisted Instruction in teaching water polo. Forty two learners who were enrolled in Angeles University Foundation participated in the study taking up P.E. 04 Team Sports as their subject. Results indicated that the utilization of the Computer Assisted Instruction in the teaching of History and Development of Water Polo an important medium in motivating the students to fully participate in the upcoming actual drills and games. It was also concluded that computer-aided instruction in teaching the history and development of water polo was effective to the assimilation of important facts of the lesson for it is being comprehensive, simple and easy to understand on the part of the students.*

**Key Words:** Computer Aided Instruction, Water Polo

### Introduction

The emergence of information technology in this previous decade was swiftly developing. Sengoku and Nomura (2006) stated that a major concern in this field is developing a computer assisted instruction (CAI) program as a new learning device in the educational scene. Previous studies have reported results on the effect of the utilization of (CAI) program. Steffen (1987) investigated the effect of (CAI) in learning bowling while Fincher and Wright (1996) reported computer use in an athletic training program. For swimming instruction, Persyn and Colman (1999) demonstrated (CAI) program for kinesiological diagnosis. Sengoku and Nomura proclaimed that these studies have shown the benefit of using (CAI) programs. However, McKethan et.al. (2000) and Williams (1999) expressed that some studies have claimed negative effects of the new instruction system.

To make teaching more elaborative and meaningful, the use of interactive software is essential for it enhances the learner's skills in analyzing and solving problems in just a click of a button. It is on this reason the researchers pursued this study for they believed that teaching Physical Education entails the need of a computer-aided instruction in presenting the history and development of bowling through games, animations and other multimedia for the students to fully understand the game. In this light, the researchers proposed a computer-aided instruction in teaching the history and development of water

polo to improve the quality of teaching, simplify the learning process and connect the learners in the interactive world of technology.

### Methods

The researchers utilized Likert Scale that presents a set of attitude statements. Respondents were asked to express agreement or disagreement in a five-point scale. Each degree is given a numerical value from 1 being the lowest and 5 being the highest thus, a total numerical value can be calculated from all of the responses. Typical question using a Likert Scale poses a statement and ask respondents to rate whether Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree.

The questionnaire of each respondent was hand scored and the results were tabulated, interpreted, analyzed and held percentage distribution for quantitative description. Descriptive rating was used in describing the data obtained, this include the weighted mean, percentage and distribution. Summated rating scale with each range intervals and descriptive rating were used in this study.

### Results and Discussion

The following results have been interpreted analyzed for quantitative description. The result of the responses of both students and teachers has been gathered to form part of the output of this Computer Assisted Instruction program.

Table 1 shows the frequency and percentage distribution of the responses of students and

teachers on the Contents of the Proposed Computer Aided Instruction in the History and Development of Water Polo. Statistics in the table confirms that the content in the courseware are updated, comprehensive and excellently prepared.

**Table 1**

Evaluation of the Students and Teachers for the Contents of CAI

	Frequency No. Students N = 42	Percentage	Description
1	0	0%	Strongly Disagree
2	2	4.76%	Disagree
3	7	16.66%	Undecided
4	8	19.04%	Agree
5	25	59.52%	Strongly Agree
TOTAL	42	100%	
	Frequency No. of Teachers N = 3	Percentage	Description
1	0	0%	Strongly Disagree
2	0	0%	Disagree
3	0	0%	Undecided
4	0	0%	Agree
5	3	100%	Strongly Agree
TOTAL	3	100%	

Table 2 shows the frequency and percentage distribution of the responses of students and teachers on the Animation of the Proposed Computer Aided Instruction in the History and Development of Water Polo. Statistics in the table shows that the animations in the courseware are vibrant.

**Table 2**

Evaluation of the Students and Teachers for the Animation of CAI

	Frequency No. Students N = 42	Percentage	Description
1	0	4.7%	Strongly Disagree
2	2	17.1%	Disagree
3	5	11.9%	Undecided
4	14	33.3%	Agree
5	21	50.0%	Strongly Agree
TOTAL	42	100%	
	Frequency No. of Teachers N = 3	Percentage	Description
1	0	0%	Strongly Disagree
2	0	0%	Disagree
3	0	0%	Undecided
4	1	33.3%	Agree
5	2	66.6%	Strongly Agree
TOTAL	3	100%	

Table 3 shows the frequency and percentage distribution of the responses of students and

teachers on the Over-all Presentation of the Proposed Computer Aided Instruction in the History and Development of Water Polo. Statistics in the table shows that the over-all presentation in the courseware was brilliantly designed.

**Table 3**

Evaluation of the Students and Teachers for the Over All Presentation of CAI

	Frequency No. Students N = 42	Percentage	Description
1	0	0%	Strongly Disagree
2	0	0%	Disagree
3	3	7.1%	Undecided
4	15	35.7%	Agree
5	24	57.4%	Strongly Agree
TOTAL	42	100%	
	Frequency No. of Teachers N = 3	Percentage	Description
1	0	0%	Strongly Disagree
2	0	0%	Disagree
3	0	0%	Undecided
4	0	0%	Agree
5	3	100%	Strongly Agree
TOTAL	12	100%	

The high rating given to the aspects of the tables indicated that the students and teachers response had considered the Computer Aided Instruction in the History and Development of Water Polo an important activity in motivating the students to fully participate in the upcoming actual drills and games.

### Conclusion

The computer aided instruction in teaching the history and development of bowling was effective to the assimilation of important facts of the lesson for it is being comprehensive, simple and easy to understand on the part of the students. The students found it interesting and eye catching if the prepared PowerPoint Presentation utilized all the multimedia applications available. Microsoft Visual Basic was likewise essential in illustrating to the learners the basic skills, techniques and simulation on how to play the sport. Students and Teachers were highly interested in the class with the aid of the CAI compared to the traditional class discussion.

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