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PHYSICAL EDUCATION

EFFECT OF MULTIMEDIA COURSEWARE SUPPORTED TEACHING FIELD MARKINGS ON LEARNING CAPACITY OF PHYSICAL EDUCATION STUDENTS

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Abstract

The purpose of the study was to find out the effect of multimedia courseware supported teaching of field markings on learning capacity among physical education students. To achieve this purpose of the study, thirty men students studying Bachelor of Physical Education in the Department of Physical Education, Annamalai University, Annamalainagar, Chidambaram were selected as subjects at random. The selected subjects were divided into two equal groups of fifteen subjects each, such as multimedia courseware supported group and control group. The group I learned field markings with the use of multimedia courseware supported teaching for fifteen days.Group II acted as control who learned field markings with chalk and board method. The learning capacity of the students towards field marking was selected as criterion variable. Learning capacity was measured by using the self-made questionnaire with 40 questions related with track measurements. All the subjects of two groups were tested on selected dependent variables at prior to and immediately after the fifteen days of learning period. The analysis of covariance (ANCOVA) was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance to test the "F" ratio obtained by the analysis of covariance, which was considered as an appropriate. The results of the study showed that there was a significant difference between multimedia courseware supported group and control group on learning capacity in field markings. There was a significant improvement on learning capacity towards learning field markings due to multimedia supported teaching.

Keywords: Multimedia Courseware, Field Marking, Learning Capacity, Physical Education.

INTRODUCTION

Technology acts as a catalyst for fundamental change in the way students learn and teacher teaches. Technology revolutionizes the traditional methods teachers' use. Students become re-energized and much more excited about learning - resulting in significantly improved grades - while dropout and absentee rates decrease dramatically. Technology implementation often stimulates teachers to present more complex tasks and material. Introduction of technology will tend to support teachers in becoming coaches rather than dispensers of knowledge. Technology use increases teachers' sense of professionalism and achievement. Technology can motivate students to attempt harder tasks and to take more care in crafting their work. Technology impacts health, physical education, recreation, and dance educators in the areas of research, classroom teaching, and distance education. While the overall effect is not yet fully assessable, the presence of technology in so many different aspects of the profession makes it important to more clearly recognize and appreciate its current and potential role. This article focuses on uses of Internet on physical education and sports sciences. The greatest value of Internet may reside in the ability to provide improved support to classroom instruction.

METHODOLOGY

The purpose of the study was to find out the effect of multimedia courseware supported teaching of field markings on learning capacity among physical education students. To achieve this purpose of the study, thirty men students studying Bachelor of Physical Education in the Department of Physical Education, Annamalai University, Annamalainagar, Chidambaram were selected as subjects at random. The selected subjects were divided into two equal groups of fifteen subjects each, such as multimedia courseware supported group and control group. The group I learned field markings with the use of multimedia courseware supported teaching for fifteen days. Group II acted as control who learned field markings with chalk and board method. The learning capacity of the students towards field marking was selected as criterion variable. Learning capacity was measured by using the self-made questionnaire with 40 questions related with track measurements. All the subjects of two groups were tested on selected dependent variables at prior to and immediately after the fifteen days of learning period. The analysis of covariance (ANCOVA) was used to analyze the significant difference, if any among the groups. The .05 level of confidence was fixed as the level of significance to test the "F" ratio obtained by the analysis of covariance, which was considered as an appropriate.

ANALYSIS OF THE DATA

LEARNING CAPACITY

The analysis of learning capacity of the pre and post test scores of medium intensity resistance training group and control group have been analyzed and presented in Table I.

TABLE I
ANALYSIS OF COVARIANCE OF THE DATA ON LEARNING CAPACITY OF PRE AND POST TESTS SCORES OF MULTIMEDIA SUPPORTED TEACHING AND CONTROL GROUPS

Test	Multimedia Supported Teaching group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test							
Mean	19.40	19.27	Between	0.13	1	0.13	0.01
S.D.	3.40	1.02	Within	350.53	28	12.52	
Post Test							
Mean	36.40	28.07	Between	520.83	1	520.83	25.98*
S.D.	3.43	1.29	Within	561.37	28	20.05	
Adjusted Post Test							
Mean	36.40	28.06	Between	521.76	1	521.76	361.82*
			Within	38.94	27	1.44	

* Significant at .05 level of confidence.

(The table values required for significance at .05 level of confidence for 1 and 28 and 1 and 27 are 4.20 and 4.215 respectively).

The table I shows that the pre-test means of multimedia supported teaching group and control group on learning capacity are 19.40 and 19.27 respectively. The obtained "F" ratio of 0.01 for pre-test means is lesser than the table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on learning capacity. The post-test means of multimedia supported teaching group and control group on learning capacity are 36.43 and 28.07 respectively. The obtained "F" ratio of 25.98 for post-test means is higher than the table value of 4.20 for df 1 and 28 required for significance at .05 level of confidence on learning capacity.

The adjusted post-test means of multimedia supported teaching group and control group on learning capacity are 36.40 and 28.06 respectively. The obtained "F" ratio of 361.82 for adjusted post test means is higher than the table value of 4.215 for df 1 and 27 required for significance at .05 level of confidence on learning capacity.

The results of the study indicated that there was a significant difference between the adjusted post-test means of multimedia supported teaching group and control group on learning capacity in field marking.

CONCLUSIONS

1. There was a significant difference between multimedia supported teaching group and control group on learning capacity in field marking.
2. There was a significant improvement on learning capacity in field marking due to multimedia supported teaching.

REFERENCES

1. Aly M, Elen J, Willems G., [2004], Instructional multimedia program versus standard lecture: a comparison of two methods for teaching the undergraduate orthodontic curriculum, European Journal of Dental Education, 8(1), pp.43-46.
2. Azer SA., (2005), A multimedia CD-ROM tool to improve student understanding of bile salts and bilirubin metabolism: evaluation of its use in a medical hybrid PBL course, Advance Physiology Education, 29(1), pp.40-50.
3. Basturk, R. (2005), "The Effectiveness of Computer-Assisted Instruction in Teaching Introductory Statistics". Educational, Technology & Society, 8 (2), pp.170-178.
4. Eisermann U, Haase I, Kladny B., Computer-aided multimedia training in orthopedic rehabilitation, Am J Phys Med Rehabil. 2004 Sep; 83(9) : 670-80.
5. Goodson-Espy, T., Espy, S., & Cifarelli, V. (2002). Warrick's Secrets: Teaching Middle School Mathematics Through an Internet-based 3D Massively Multiplayer Role Playing Game. Society for Information Technology and Teacher Education International Conference 2002 (1), 1080-1084.

6. Hicks, D., Doolittle, P., & Ewing, E. (2004). Using Multimedia to Prepare Preservice Social Studies Teachers for the Teaching of Historical Inquiry. Society for Information Technology and Teacher Education International Conference 2004(1), 4796-4800.