Impact of Video Feedback Instruction on Basketball Skill Learning and Knowledge

Dr. Gurunath Pawar, Dir. Of PE & Sports, Hujurpaga College, Pune
Dr. Mahesh Deshpande, Asst. Prof. CACPE, Pune

Introduction

Teachers of physical education have to be well equipped to make use of variety of teaching methods to develop and enhance student's skill learning. Different teaching methods are used to impart knowledge among the students according to the need of the subject as well as students. The choice of teaching method depends on expected students out comes, on the children's stage of progression & on the activity.

Purpose of the study

The purpose of the study is to gain an understanding of what is effect of video feedback teaching at cognitive level of the students for Basketball skill learning therefore, this research study examines the effectiveness of video feedback on players behavior and ultimately the students learning environment in physical education.

Objectives

a) To make video clips (Reference clips) of experimental group while practicing and providing immediate feedback.
b) To prepare different paper pencil test.
c) To identify knowledge level of basketball players with respect to skills.

Video Feedback teaching Method

Feedback from an external source helps the player identify and correct performance errors and improves motivation.video feedback enhances the speed at which a player acquires a skill. Learners gain a lot of information about their actions by receiving feedback. Using video as a form of performance feedback can be an effective tool to improve motor skill learning and performance.

Cognitive stage in Basketball skill learning

Learning by receiving knowledge and information. The **cognitive stage** is characterised by thinking trying to understand the skill. In this stage the learner forms a cognitive picture of the skill and what is required to do it.

Knowledge Test

One of the main objectives of this research project is to assess participant's knowledge and understanding of the various aspects of basketball skills. The most efficient method of measuring the level of achievement of cognitive objectives is the written test.

In some disciplines there are nationally standardized test and norms available. In physical education, however, outside sources of written tests are rare. This is partly due to the great variety of activities embedded in physical education curricula and the fact that there are fewer textbooks available in physical education.

Method

This study is intended to discover the effectiveness of the two teaching methods viz. Traditional Teaching Method (TTM) and Video graphic teaching Method (VGT) on the skill Performance (SP) and Knowledge Performance (KP) of the Basketball fundamental skills on junior girls, Pune.

For achieving this purpose an experiment was carried out with subjects selected from "Pune Vyayam Shala" Pune. This chapter elaborates the method and procedure adopted for carrying out experiment.

This study has been carried out following mixed approach of research and the experimental research method was followed during this endeavor

Sampling

This study is experimental in nature. Hence a purposive sample was selected. The subjects selected for this study were girls of Pune Vyayam Shala, Pune studying in std. VI to std. VIII

Data collection process

For the present study, the effect of video feed back teaching on knowledge was examined through knowledge performance test for the dribbling, passing and shooting. Researcher developed two different knowledge tests with the help of basketball experts on the basis of fundamentals of basketball. For developing knowledge test following procedure was employed.

Method of Developing knowledge Test:

Knowledge test was used to assess the knowledge performance of the subjects in the fundamentals of Basketball. As there was not a single standardized test

available to assess the knowledge performance in the said event, it was the need of the present research to develop the test.

Researcher used teacher made test for the same. Tests were developed and checked by experts and changes were done in the test according to the corrections given. Two paper pencil tests were conducted during the research period, to assess the cognitive aspect of the students.

It was a multiple choice test. There were 25 questions in each test. Time duration for test was 30min. One mark was awarded for each correct answer and score was calculated for each child.

Description of Statistical Analysis on Knowledge Test Performance

Two separate question papers on Knowledge of Basketball were set by Basketball experts. Mid-test after eight weeks and a post-test after experiment got over was conducted and marks were given to every individual (As during pre-test; students were very new to basketball game and did not know anything about skills of it hence no evaluation of it was done during pre-test). Average marks obtained by experimental group on mid- test are 17 (2.704) and on post- test are 19 (3.121) while control group subjects attained 15 (2.024) and 17 (2.345) marks on mid-and post-test respectively. To analyze the significance and compare mean difference considering mid-test as covariate, ANCOVA was the best statistical tool to be applied for knowledge test

Description of ANCOVA for the Comparison of Knowledge of Basketball Skills between Experimental and Control Groups

Data analysis of scores on knowledge test of basketball skills shows that between experimental and control groups 'F' value of 0.870 is not found significance at 0.01 level of significance as 'p' value is found 0.361, which indicates that there is no significant difference occurs between the knowledge of basketball skills among the girls from experimental group treated by video feedback and control group treated by traditional method of teaching basketball skills.

It is interpreted that video feedback and traditional method of teaching basketball skills have same effect on learning basketball skills at knowledge (cognitive) level.

Conclusion:

The result of knowledge test doesn't show much improvement in the performance of the students of both groups hence it can be said the cognitive aspect of the skill learning is not enhance by both the teaching methods.

In the experimental group special skills accomplishment in the student overall performance was significantly higher than control group because student's motivation and enthusiasm for skill learning was high in using video feedback teaching than traditional teaching.

Recommendations

- The coach should teach simple, fundamental skills in this stage, by demonstrating, modelling and giving clear instructions.
- Instructions should be brief and should focus on only a few skills at a time.
- Employ a range of motivational techniques.
- Keep instructions and demonstrations short and simple.
- Have athletes follow an example at first and then try the skills themselves with more instruction and feedback.
- Conduct knowledge test regularly.
- Use frequent knowledge of performance (KP) feedback.

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