Effect of using the simultaneous electronic presentations strategy in teaching basic skills of basketball to second-grade intermediate students

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ABSTRACT
The primary aim of this study was to identify the effect of using the simultaneous electronic presentations strategy in teaching basic skills of basketball to second-grade intermediate students. The present study had a parallel group, pre-post experimental design. In the present study the students of the Salah al-Din Intermediate School for the academic year 2020-2021 constituted the research community. A total of 75 students were present in the research community. Out of 75 students 16 students were selected as the participants for the study. The students falling within the age group of 13-14 years were recruited as the study participants, making up a percentage of 21.33 of the total number. Based on the results of the present study, the researcher concluded that the use of the simultaneous electronic presentations strategy created an interactive environment, which reflected positively on teaching basic skills of basketball to second-grade intermediate students.

KEYWORDS
Sport; Iraq; Students; Basketball

1. INTRODUCTION
Sports training is a special process of preparation of athletes based on scientific principles aimed at improving and maintaining higher performance capacity in different sports activities. The performance in the sports generally depends on the physical fitness of a sports person. Over the years, the field of physical education has witnessed great development by using modern methods of training through which student athletes can progress towards better levels (Masanovic, 2018).

The emergence and use of technology in this century is a significant development affecting the teaching and learning of physical education and sport. The rapid development of technology over the past two decades has provided many new and creative ways for educators to present instructional
materials effectively. Technology induced learning is way more beneficial in raising the level of performance of the players to an optimum extent (Maitham et al., 2021; Muneer et al., 2021).

The selection of the appropriate educational method completely depends on the trainer through which they can optimize the content and enable their learners to assimilate the educational material in the correct and good manner, which creates an atmosphere in which a kind of fun and to take the lesson (Al Tawarah et al., 2017; Mondriguez, 2017).

Technology such as projection systems, smart boards and wireless transmission allow for the display and transfer of information far beyond the traditional chalkboard. Electronic presentations are one of the strategies that overlap the educational material with e-learning. A student can easily access the educational content at any place and at any point of time depending upon the speed of the network connectivity (Albert et al., 2017; Allio et al., 2005). Technology based learning makes the information stored in the learner’s memory for a long time. It also helps the students to develop their thinking skills, which is reflected positively on learning basketball skills (Boyer et al., 2006; Dionisio et al., 2008). Thus, modern education seeks to develop the teaching method which leads to the realization and absorption of the information much faster (Gosling, 2001). Hence, the importance of the research lies in the effect of using the simultaneous electronic practical presentations strategy in teaching some basic skills of basketball for second year middle school students (Mohammed & Kzar, 2021).

The traditional methods of teaching are the methods adopted by the trainers for basketball players. Being expert in the field of physical education and through evaluation of the process of training, the researcher noticed improper learning among the students of basketball. Inappropriate learning negatively affects the performance of the players in the basic skills (Shields et al., 2014). Hence, the researcher identified the need to use some strategy that helps them in better learning, making it more appropriate in terms of their cognitive performance.

Hence, the researcher focused on the implementation of the simultaneous electronic practical presentations strategy for teaching some basic skills among basketball players. The primary aim of this study was to identify the effect of using the simultaneous electronic presentations strategy in teaching basic skills of basketball to second-grade intermediate students.
2. METHODS

2.1. Design and participants

The present study had a parallel group, pre-post experimental design. The study design was chosen according to the research problem. The experimental method is one of the methods that help in solving some problems related to the experimental research in a scientific manner, especially with respect to physical education. It is characterized by the precise scientific method within the methods related to scientific research.

In the present study the students of the Salah al-Din Intermediate School for the academic year 2020-2021, constituted the research community. A total of 75 students were present in the research community. Out of 75 students 16 students were selected as the participants for the study. The students falling within the age group of 13-14 years were recruited as the study participants, making up a percentage 21.33 of the total number.

2.2. Instruments

Prior to the start of the data collection for the present study extensive review of the existing literature was done by the researcher. The researcher conducted in depth review of references, and conducted personal interviews with experts specialized in the field of this study. Followed by this, the tests and measurements were conducted. In the present study, several tools and devices were used for the purpose of data collection with the aim to achieve the objectives of the research. The tools used in the present study included a stopwatch, basketballs, measuring tape and whistle.

*Scoring test:* This test was conducted with the intent to measure scoring performance. Various tools were used for conducting this test, including a camera, a camera stand, basketballs and DVD. At the start of this test, participants were directed to stand holding the ball in their hands. The camera was placed at a distance of 3 meters in front of the participant. After hearing the start signal, the participant performs the scoring test. The test score was calculated by taking a photograph of the participant and presenting it on a DVD to a panel of arbitrators. The scoring is done at three levels indicated as “degree”, where the highest degree is 10 and the lowest degree was designated as 1.

*Passing test:* This test was conducted with the intent to measure the performance of passing. Various tools were used for conducting this test, which included a camera, camera stand, basketball and a DVD. At the start of this test, participants were directed to stand holding the ball in their hands. The camera was placed at a distance of 3 m in front of the participant. After hearing the start signal, the
participant performs the passing test. The test score was calculated by taking a photograph of the participant and presenting it on a DVD to a panel of arbitrators. The scoring is done at three levels indicated as “degree”, where the highest degree is 10 and the lowest degree was designated as 1.

2.3. Procedures

The exploratory experiment is one of the required procedures conducted to check the implementation of the test and to avoid errors and obstacles that the researcher may face when carrying out the main experiment. The exploratory experiment was conducted in the month of October 2020. The exploratory experiment was conducted on 10 participants. The participants of the exploratory experiment were not included in the primary experiment of the study. The first exploratory experiment was conducted with the aim to verify the validity of the tools used in terms of positive assistance, to verify the fitness of the tests for the tester members and the ease of their application, to know the time required to conduct the tests, to verify the understanding and efficiency of the assistant work team in conducting measurements and tests and recording the results, to know the difficulties that the researcher may encounter during the course of the study and to provide appropriate solutions to them.

The pre-tests were conducted tests in the outdoor arena of Warka Intermediate School for Boys in the month of December 2021. The educational units are a series of learning units (time units) that deal with the subject of the research variable. The educational unit is characterized by integration and comprehensiveness. In the present study, the implementation of the curriculum was initiated in the month of October 2021. The educational units were implemented for a period of two months (8 weeks), with a total of 16 educational units and with an average of two units per week. The strategy of simultaneous electronic practical presentations was introduced in the main section of the educational unit only. Each educational unit lasted for 45 minutes and the main section lasted for 30 minutes. The electronic practical presentations included the presentation method of basketball skills, photo images using the computer, the method of displaying photographs, paper segmentation illustrating the parts of basketball skills, etc.

After successful completion of the educational program, post-tests were conducted by the researcher and the fellow team mates in the month of December 2021, under the same conditions as the pretests in terms of time, tools and the place of testing.

2.4. Statistical analyses

Statistical data are defined as the data that the researcher collects and analyzes in order to obtain the results to solve the research problem. In the present study, the statistical analyses were
carried out using the Statistical Package for the Social Sciences (SPSS) by computing arithmetic means, standard deviations, and t tests.

3. RESULTS AND DISCUSSION

Statistical analysis of the present study revealed significant differences between the pre-tests and the post-tests (Table 1). The researcher attributed this difference to the many factors associated with the quality of educational training provided to the participants in terms of clarity, the use of electronic practical presentations strategy, good teaching by the trainers and the use of electronic means and their synchronization with the teaching of basketball skills. This lead to a better understanding of the educational curriculum among the students. Also, it contributed to create an interactive environment between the variables of the lesson, in addition to renewal and diversity, and avoiding boredom and stimulating suspense.

Table 1. Differences in the results of the pre and posttests in the skill tests

<table>
<thead>
<tr>
<th>Tests</th>
<th>Unit</th>
<th>Pre test</th>
<th>Post test</th>
<th>Means difference</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Scoring test</td>
<td>Degree</td>
<td>2.85</td>
<td>1.29</td>
<td>7.28</td>
<td>1.06</td>
</tr>
<tr>
<td>Passing test</td>
<td>Degree</td>
<td>2.21</td>
<td>1.05</td>
<td>7.85</td>
<td>1.02</td>
</tr>
</tbody>
</table>

The findings of the study were in accordance with the study conducted by Al Tawarah et al (2017), who stated that “the practical presentations create an interactive environment that makes a difference in education and is reflected in a better educational way in teaching the scientific material, as well as helping the learner to focus on a variety of mental tasks.” Similarly, Allio (2005) stated that the use of an educational technique for practical presentations included various steps like writings, still images, and video presentation clips, according to scientific foundations in proportion to the level of the students. This is reflected positively in their learning performance. The successful educational curriculum is the one that can develop the skills required by the type of activity as a basis in the education process.

The training in the form of practical presentations has an important role in learning. It helps in expanding a learner’s perception by creating an educational atmosphere that works to attract the learner's attention, banish boredom, consolidate the educational material and expand sensory perceptions. The use of practical presentations stimulates the thinking of learners and works to create
more than one opportunity for thinking. The multiplicity of media used helped in raising the level of motivation among students. The use of media is a practical and mental preparation for the learner, as this helps to create a lot of mental abilities in the learner, which positively affects learning.

4. CONCLUSIONS

Based on the results of the present study, the researcher concluded that the use of the simultaneous electronic presentations strategy created an interactive environment, which reflected positively on teaching basic skills of basketball to second-grade intermediate students. The use of the simultaneous electronic presentations strategy led to develop harmony between e-learning and students’ comprehension. Therefore, the author recommends to generalize the use of the simultaneous electronic presentations strategy on the teacher within the physical education lesson because of its impact on teaching skills, and to enhance the experience of the simultaneous electronic presentations strategy among different samples and other study stages.

5. REFERENCES


**AUTHOR CONTRIBUTIONS**

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

**CONFLICTS OF INTEREST**

The authors declare no conflict of interest.

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