

The Effect of Exercises in the use of Interactive Video in the Development of Learning Motivation and the Performance of Some Basic Skills for Free Swimming for Beginners

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Abstract

The educational process is not simple, but it is a complex process and needs to make a lot of effort, which makes it face many challenges, perhaps the most obvious are the methods and tools used in the teaching of various subjects. In their work as swimmers for age groups, the researchers noted that the new players do not have the motivation to learn when performing skills and fear of access to water, which is reflected negatively on the level of learning and performance of these skills. The educational process is based on modern technologies to transfer information from teacher to learner, The learning process was done better, faster and with less effort, the preparation of exercises using interactive video in the development of learning motivation and the performance of some basic skills for free swimming for beginners. The aim of the research was to identify the effect of interactive video in the development of learning motivation and the performance of some basic skills in free swimming for beginners. The researchers used the two-group experimental approach to suit the nature of the study. The research community was identified by the Waves Swimming Academy in the province of Bebel (73), who's ages ranged from 12 to 16 years. The study sample was selected in a random way by (30) beginner and 41.09% of the research community. They were divided into two groups (experimental and control) for each group (15). The results reached the following conclusion: The development of learning motivation has a positive impact on learning some free swimming skills for beginners and that the special exercises have had a positive impact on the use of interactive video in teaching some basic skills of free swimming for beginners. Interactive video has a clear role in developing learning motivation and performing some basic skills for free swimming for beginners.

Keywords: Exercises, Interactive video, Learning motivation and basic skills.

Introduction

The scientific and technological progress in various fields of science and knowledge has led to many changes in life styles and the emergence of modern scientific creations which have become an important element in the development of the fields of science in general and sports education in particular. This progress was accompanied by the use of interactive video in all areas of work in general and in the sports field in particular.

Therefore, the spread of the use of educational computer has helped to develop the process of learning locomotive, which is one of the sciences of physical education, which received great attention from researchers because of its importance in the process of acquiring the learner skills.

Basic Kinetics. The use of modern scientific techniques (interactive video) of educational means that have a direct impact in the process of learning as this is a technology for fun and suspense, as well as it adds a lot to the educational process as this technology has the ability to highly efficient in providing the best as well as the provision of effort and time and article. This is true of swimming as one of the most competitive events among swimmers.

Interactive video is one of the most widespread and voluntary teaching methods in the teaching and learning process. It is an intermediary in communicating many facts and concepts. Its use provides an atmosphere of interaction between the teacher and the

learner and the educational material, as well as the ability to identify the feedback easily [1]. The interactive video can provide information in different ways. It provides information using video clips with fixed frames, as well as text and computer text. Educational theory tells us that the greatest amount of education occurs when information is presented in different ways.

For the process of learning and teaching, motivation is a prerequisite for achieving educational goals in the fields of multiple learning both in the collection of information and knowledge (knowledge) or in the formation of trends and values. Especially using interactive video in the development of learning and motivation to perform some basic skills in free swimming for beginners.

Research Problem

The educational process is not simple, but it is a complex process and needs to make a lot of effort, which makes it face many challenges, perhaps the most obvious are the methods and tools used in the teaching of various subjects. In their work as swimmers for age groups, the researchers noted that the new players do not have the motivation to learn when performing skills and fear of access to water, which is reflected negatively on the level of learning and performance of these skills.

The educational process is based on modern technologies to transfer information from teacher to learner; the learning process has been done better, faster and with less effort. Therefore, researchers are trying to identify the effectiveness of interactive video use in special exercises in the development of learning motivation and the performance of some basic skills of free swimming for beginners.

Research Objectives

- Preparation of exercises using interactive video in the development of learning motivation and the performance of some basic skills for free swimming for beginners.
- To identify the impact of using interactive video in the development of learning motivation and the performance of some basic skills with free swimming for beginners.

Research Hypotheses

There is a positive impact of exercises using interactive video in the development of learning motivation and the performance of some basic skills for free swimming for beginners.

Research Methodology

The researchers used the two-tiered experimental approach to suit the nature of the study.

Research Community

The research community was identified by the Waves Swimming Academy in the province of Bebel (73), who's ages ranged from 12 to 16 years.

The Research Sample

The sample was randomly selected by 30 beginners and 41.09% of the research community. They were divided into two groups (experimental - control) for each group (15)

Homogeneity and Equivalence of the Sample

Sample Homogeneity

The researchers homogenized the sample with the dependent variables (learning motivation, basic skills in free swimming), to ensure starting from one line of project and the following table shows this.

Table 1: Shows the mean, median, standard deviation and torsion value of the studied skills

S	Skills	Measuring unit	Mean	Median	standard deviation	Skewness
1	Learning motivation	Grade	112.54	111	5.832	0.264
2	Mute breath for the longest period under water	Sec.	2.773	2.562	0.983	0.214
3	Horizontal buoyancy on the abdomen	Sec.	2.621	2	0.872	0.712
4	Primary swimming distance (10) m usingSwimming collar	Sec.	58.919	57.542	7.598	0.181

It is clear from table (1) that the values of the torsion factor were all less than (1) integer and this confirms the homogeneity of the sample of the research.

Sample Equivalence

The researchers compared the sample with the dependent variables (learning

motivation, basic skills in free swimming) as shown in the following table:

Table 2: Shows the mean, median, standard deviation, and torsion value of the selected skills

S	Skills	Experimental group		Control group		(t) value	Sig.	Statistical significance
		Mean	STD.EV.	Mean	STD.EV.			
1	Learning motivation	117.87	5,03	115.65	5,11	2.021	0.123	Non sig.
2	Mute breath for the longest period under water	2.443	1.414	2.531	0.984	1.897	0.075	Non sig.
3	Horizontal buoyancy on the abdomen	2.707	1.216	2.663	0.993	2.032	0.076	Non sig.
4	Primary swimming distance (10) m usingSwimming collar	62.717	3.598	63.652	5.983	1.786	0.112	Non sig.

Table (2) shows that the calculated value of t is less than the t-value of the table at the degree of freedom 28 and that the values of (Sig) are all greater than (0.05), which confirms the equality of the two groups.

Tools and Devices used to Search

- Dell Type 1 computer.
- Display type (LG) number (1).
- Type display cable (HDMI).
- Swimming pool number 30.
- Water balls.
- Stopwatch number 3.
- Whistle number 3.

Field Research Procedures

Identified Skills

Through the experience of researchers in the field of swimming, they are trained in the academy and win the swimming pool and through their academic experience as professors in Iraqi universities where they found that it is important for beginners to learn to swim is to break the barrier of fear through the development of the motivation of learning or the basic skills of free swimming, The initial learning process is (mute for the longest underwater period, horizontal buoyancy on the abdomen, primary swimming distance of 10 m using Najada).

Specify the Tests used in the Search

- Learning motivation scale:
The researchers adopted the Yusuf al-Qatami scale (2002). [2] It was applied to the research sample to identify their learning motivation. It consists of (36) paragraphs. Annex (1).
- Measurement of basic swimming free skills:

By introducing some specialized scientific books and resources, [3, 4, 5] which aim at measuring the level of learning basic skills in free swimming.

Exploration Experience

In order to identify the obstacles and difficulties that are likely to arise in the implementation of the main experiment, the researchers conducted a pilot experiment, conducted on 7/5/2018 on a sample of (5) belonging to outside the main research sample.

Main Research Procedures

First: Pretests

The researchers carried out pretests on 8/5/2018 at the Spanish swimming pool of the Waves Swimming Academy at 3:00 pm, when they applied the meter first, and the highest score is (180) and lowest (36) , And the researchers counted the degree that is equal to or below the mean middle degree as an indicator of weakness in the motivation of learning, and then the basic skills of free swimming in the swimming pool and then write the results in the sample data discharge form.

Second: Special Exercises

After studying many of the scientific references on free swimming education, the researchers prepared swimming exercises to teach novices using interactive video, which will be in the shape of a large screen inside the swimming pool (3D) and provides each learner with a special spectacle in this

swimming pool. (3) Educational units per week on Saturdays, Mondays and Wednesdays. The time starts between 10: 00-12: 00) in the morning, and the time of the unit was one (120) minutes and a total and contains every one Educational course on the following sections:

- The preparatory section: aims to prepare the novice child psychologically and physically to deal with the water medium through dialogue and discussion and warm up and exercises general and special joints and large muscles, for the purpose of public heating and descent into water.
- Main section: includes (the educational activity of basic skills in free swimming, and the activity based on the interactive video using audio and video, games and recreational competitions).
- Final section: includes relaxation and a small recreational game inside or outside the water.

Third: Program Design and Work

The researchers, with the help of specialists in the design of computer software, a program of computer software and techniques and the role of the following:

The exercises are presented in large and clear forms for each exercise and repeated more than once in all directions and slowly taking into account the important aspect of the musical aspect with the presentation of each exercise as well as many of the games in the water using various balls and hoops dedicated to this purpose. After watching the

beginner for that performance comes the role of skill performance, which he saw in a field in the swimming pool and with the help of teaching to give feedback and correct errors.

Fourth: The Main Experience

After verifying the validity of all the procedures implemented and validating them, including the scientific transactions for the tests of the variables examined, the practical and field application was applied to the research sample. This was done for the period from 10/5 to 25/6/2018.

Fifth: Posttests

The researchers carried out telemetry measurements on 30/6/2018 at the German swimming pool of the Academy of Swimming at 10:30 am and the tests were carried out in the pretests.

Results and Discussions

View, Analyze and Discuss the Results

After the data obtained by the researchers were released, and to verify the validity of the research objective, the data were analyzed statistically using appropriate statistical methods.

First, Presenting and Analyzing the Results of the Skills Studied in the Pretests and Post-test Tests of the two Research Groups

Presenting and analyzing the results of the skills studied between the pretests and post-experimental tests of the experimental group.

Table 3: The statistical parameters and the values of (t) between the pretests and post tests of the skills studied for the experimental group

Skills	Pretests		Posttests		(t) value	Sig.	Statistical significance
	Mean	STD.EV.	Mean	STD.EV.			
Learning motivation	117.87	5.03	153.76	6.892	9.974	0.000	Sig.
Mute breath for the longest period under water	2.443	1.414	5.065	1.998	11.875	0.001	Sig.
Horizontal buoyancy on the abdomen	2.707	1.216	5.012	1.054	12.865	0.021	Sig.
Primary swimming distance (10) m usingSwimming collar	62.717	3.598	43.321	7.937	7.895	0.000	Sig.

It is clear from Table (3) that there are significant differences between the pre and posttests in the skills tests in question and in favor of the post-test. The sig value is less than (0.05) and this confirms the statistical and moral differences for the post-test.

View and Analyze the Results of the Skills Studied between the Pretests and Post Tests of the Control Group

Table 4: The statistical parameters and the values of (t) between the pretests and post tests of the skills studied for control group

Skills	Pretests		Posttests		(t) value	Sig.	Statistical significance
	Mean	STD.EV.	Mean	STD.EV.			
Learning motivation	115.65	5.11	127.982	7.954	7.983	0.011	Sig.
Mute breath for the longest period under water	2.531	0.984	3.743	1.094	6.893	0.012	Sig.
Horizontal buoyancy on the abdomen	2.663	0.993	3.832	1.888	8.998	0.000	Sig.
Primary swimming distance (10) m usingSwimming collar	63.652	5.983	59.932	9.043	9.876	0.012	Sig.

It is clear from Table (4) that there are significant differences between the pre and posttests in the skills tests in question and for the post-test. The sig value is less than (0.05). This confirms the statistical and moral differences in favor of the post-test.

View and analyze the skills studied post-test of the research groups between the

Table 5: The values of (t) between the two posttests of the selected skills of the control and experimental group

Skills	Experimental group		Control group		(t) value	Sig.	Statistical significance
	Mean	STD.EV.	Mean	STD.EV.			
Learning motivation	153.76	6.892	127.982	7.954	11.908	0.000	Sig.
Mute breath for the longest period under water	5.065	1.998	3.743	1.094	9.984	0.000	Sig.
Horizontal buoyancy on the abdomen	5.012	1.054	3.832	1.888	10.094	0.000	Sig.
Primary swimming distance (10) m usingSwimming collar	43.321	7.937	59.932	9.043	9.874	0.000	Sig.

Table (5) shows that there are significant differences between the pre and posttests in the skills tests in question and for the post-test. The calculated value (t) is greater than the value of (2.546) (Sig) are all smaller than (0.05), which confirms the significance of differences and for the benefit of the experimental group.

Discussion of Results

From Tables (3, 4, 5), respectively, there is a marked improvement in the skills studied and for the post-test of the experimental and control groups. There is also a clear development in the two-dimensional tests between the experimental and control groups and for the experimental group. The researchers attribute this remarkable development to the program the educational use of interactive audio aids (Silver Explanation) increases confidence, increases self-confidence, and defeats the fear experienced by novices due to falling into the water and exercising.

"The fear is a negative factor that impedes the process of learning to swim, so this factor must be removed or reduced, because it is the most important psychological handicap," he said. Which impede the process of learning to swim "[6] and attributed the researchers this development of the experimental group,

which surpassed the control group to the quality of exercises within the interactive video, which increased the desire of the process of learning because the student sees the best performance and from all angles and all the speed in addition to explain and explain the teacher Sight Hearing helps the student to remember the minute details he has already seen in the skill presentation.

This is confirmed by Al-Tilah: "Educational means of pictures and illustrations provide the teacher's time and effort to explain concepts and facts." Has played an important role in the process of learning and increased the element of competition that led to the high level and speed of learning, as "the accompanying movement with some of the neuro-auditory stimuli such as stimuli, clapping and clicking leads to accelerated learning, delayed emergence of fatigue, and boredom, and the possibility of focusing on a certain area of movement" [7].

The preparation of the educational curriculum using audio and touch methods was based on diversity, excitement and recreation, which helped to attract children to participate and interact with him positively, and the occurrence of such improvement. "The beginner at this stage needs to provide him with the means to play and the tools that enable him to practice the movement on a large scale, which is used by all members of his body. The child needs a wide place to engage in activity and movement"[8]. The researchers attribute this development to the positive effect of this method in the educational process because it is based on the individual differences in the instructions.

Because we know that there are individual differences in learning that constitute an obstacle in bringing all the learners to one level of learning and that the technology provided the learner the opportunity

"Interactive video provides opportunities for interaction that prevent the learner from being able to control and learn according to his / her own speed and methods." This enables researchers to achieve research hypotheses [9].

Conclusions

Through the results the researchers reached the following conclusion:

- Development of motivation to learn positively affect the learning of some of the skills of free swimming for beginners
- That the special exercises have had a positive impact effect using the interactive video in the teaching of some basic skills for free swimming for beginners.
- Interactive video has a clear role in the development of learning motivation and the performance of some basic skills swimming free for beginners.

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Appendix 1: Shows the learning motivation measure used in the research

S	Items	Strongly agree	I agree	Hesitant	Disagree	Strongly disagree
1	I feel happy when I'm in the swimming lesson.					
2	It is rare that the teacher of the subject is interested in starting a lesson.					
3	I would rather do a swim within a group of colleagues that I do solo.					
4	My interest in some skills leads to neglecting everything around me.					
5	I enjoy the new ideas I learn and study swimming.					
6	I have a tendency to leave swimming lessons because of the difficulty of performing them.					
7	I like doing my responsibilities in the lesson regardless of the results.					
8	I face the different positions of responsibility with full					

	responsibility.					
9	The tutor listens to me when I talk about my problems with the lesson.					
10	It is difficult for me to pay attention to the teacher's explanation and follow-up.					
11	I feel that most of the teacher's lesson is not exciting.					
12	I like to be satisfied with my colleagues in swimming skill.					
13	I avoid difficult skills that require responsibility.					
14	I find it difficult to learn the performance of a 50 meter freestyle skill.					
15	The teacher is interested in knowing the truth of my feelings towards the lesson.					
16	I feel that some of the classmates are the cause of the problems I am experiencing.					
17	I feel upset while performing the skills that require working with colleagues in the lesson.					
18	I sometimes feel apathetic about skill performance					
19	I am satisfied when I develop my skills in the lesson.					
20	Better to give us a hard article teacher skills you need to make a physical effort.					
21	I prefer to take care of lesson skills on anything else.					
22	Make sure to observe the behavior that the teacher asks me to do					
23	I am pleased to receive significant rewards in the amount of effort.					
24	Be careful to do what the teacher asks me to do.					
25	I often feel that my contributions to doing new things in the lesson tend to fall.					
26	I feel that adhering to the rules of a lesson creates a boring learning environment					
29	It's hard for me to make friends quickly with my classmates.					
30	I have a strong desire to inquire about skills in the lesson					
31	The material teacher is keen on performing skills.					
32	The teacher does not care about the ideas I learn in swimming.					
33	Soon I am bored when I do homework studied.					
34	Working with colleagues in a lesson I can get higher marks.					
35	My cooperation with my colleagues in swimming skill is beneficial to me.					
36	I do whatever I am asked for in the scope of a lesson.					

Appendix 2: Exercises used in research and presented through interactive video

1. Sit on the edge of the pool performance of the two legs.
2. Lying on the edge of the pool performance of the blows of the two legs.
3. Perform the blows of the two men with the edge of the bathroom.
4. Catch the edge of the swimming pool performance strikes with a drink and take it out in the water during the performance.
5. Perform the blows of the two men from the horizontal buoyancy mode using the buoyancy plate with a drink and take it out in water during performance.
6. Performance of the blows of the two men from the horizontal buoyancy, and the two arms and water on the water and relaxed, for a short distance.
7. Perform the blows of the two men from pushing the edge of the pool and slide.
8. Perform the movements of the arms outside the water.
9. Standing the learner in the water with the torso of the trunk and the performance of arms movements.
10. Arm rests on the edge of the swimming pool and the performance of arms movements in exchange.
11. Arm rests on the buoyancy plate while the other arm performs movement with exchange.
12. Place one arm on the edge of the pool, based on one side of the face on the surface of the water, so that the mouth is out of the water, take inspiration and put the face in the water to exhale
13. Performance of breathing movement with an arm resting on the buoyancy plate (the exercise with walking the width of the bathroom).
14. Performance of the movement of the movement of one arm on the board of buoyancy whiles the other arm of the end of the movement of the drive while taking inspiration.

15. Performance of arms movements and breathing with the blows of the legs.
16. Performance of the two men with the work of one arm cycle.
17. Performance of the blows of the two men with the gradient in the distance and the number of arm cycles.
18. Linking the movements of arms and breathing with walking width of the bathroom.
19. Taking the position of horizontal buoyancy with the stabilization of the two legs and the performance of arms movements and breathing.
20. Perform the movements of the two legs and arms with breathing for a short distance and then increase the distance with the gradient in the number of times and inhalation in water.
21. Blows of the two men with tensile arms down the surface of the water and the performance of breathing from the side.
22. Normal swimming and lead at first without breathing and then add breathing movements.

Appendix 3: Model of educational unit

Components of the unit	Time	Performance (Activity)	Behavioral objectives
administrative works	5 Min.	<ul style="list-style-type: none"> Greeting and taking absence 	<ul style="list-style-type: none"> To get used to the novice on the system and leadership and take the absence
View educational software (animation)	5 Min.	<ul style="list-style-type: none"> Watch the interactive video of some of the legal specifications of the swimming pool 	<ul style="list-style-type: none"> The novice gets used to the system while watching the animation program The novice gets used to attention while watching the animation program The novice should feel happy while watching the program. To acquire the novice skills of confidence with water.
Warm up the ground	5 Min	<ul style="list-style-type: none"> Running the children in a circle and when the siren is heard, the direction changes. Rotation of arms with walking in a circle. Jumping feet in front of the circle. 	<ul style="list-style-type: none"> To prepare the beginner physically by exercising for some physical exercises. That the novice feel pleasure and happiness during performance. The novice should participate positively in performing various exercises.
Water Warming	10 Min	<ul style="list-style-type: none"> Sit on the side of the bathroom and make blows with two light men. The safe descent of water (by slowly descending from the edge of the area allocated for it. 	<ul style="list-style-type: none"> Exercises can help raise the fitness level for beginners. Improve the training of the efficiency of the body to do its job under work. The beginner can perform the exercises correctly. The novice should get a sense of happiness for the right performance. The novice to implement what I saw in the educational software. The novice should feel happy during the performance. The novice should reach a good performance level. To acquire the novice skills of confidence with water.
Main part (practical application of the tutorial)	35 Min	<ul style="list-style-type: none"> The novice applies interactive video viewing with special videos showing confidence skills with water. The basic skills of free swimming in the program are supervised by the researchers. 	<ul style="list-style-type: none"> That the novice can move and walk in water forward and backward. The novice can jump up and down in the water. To acquire the novice ability to enter the safe into the water
		<ul style="list-style-type: none"> Practice the accompanying instruction by watching the interactive video: Exercise No. (1) Exercise No. (5) Exercise No. (7) Exercise No. (9) Exercise No. (20) 	<ul style="list-style-type: none"> That the novice can move and walk in water forward and backward. The novice can jump up and down in the water. To acquire the novice ability to enter the safe into the water
Finally	5 Min	<ul style="list-style-type: none"> * Water Games : Beginners move in different directions depending on the teacher's directions (up - down - right - left). 	<ul style="list-style-type: none"> The beginner's body should return to normal. The novice should feel happy and satisfied. To get used to the novice to perform some calm exercises. The novice should feel relaxed.