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## The impact of the educational modeling strategy using the direct teaching method in acquiring the skillful performance of free swimming for ages (10-12) years

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### Abstract

The research included four chapters. The first chapter included the research problem. The development in the educational field, the development of modern educational strategies and methods, the small number of educational units, the lack of time for swimming lessons, the difficulty of this sport as it is practiced in a different environment, and the lack of use of modern strategies in this game has shown the current problem. Therefore, the researcher resorted to using an educational strategy and a modern educational method in order to facilitate the educational process in an easier way. Therefore, the researcher decided to apply this strategy and this educational method, which had not been previously investigated in their impact on acquiring the skillful performance of free swimming for learners of ages (10-12) years. As for the objectives of the research, it included two objectives: identifying the impact of the educational modeling strategy using the direct teaching method in acquiring the skillful performance of free swimming, and the second objective was identifying the effect of the direct teaching method in acquiring the skillful performance of free swimming for ages (10-12) years. As for the hypothesis of the research, it included the presence of statistically significant differences between the experimental group and the control group in the post tests, in favor of the experimental group. The second chapter included identifying the research community and its sample, where the research community was deliberately chosen, represented by the students of the specialized school, who numbered (25) students, and they were chosen by the intentional method. (16) students were chosen by drawing lots, representing the experimental group and the control group, and the number of students in the group reached The experimental group (8) students and the control group (8) students and (5) students represented the exploratory group. The research sample represented (64%) of the original population. As for the third chapter, it included presentation, analysis and discussion of the results reached by the researcher through the results obtained by the researcher as shown in the tables that show the results, while the fourth chapter included the conclusions and recommendations reached by the researcher through the results he obtained. Significant difference between the post test between the experimental and control groups. The second conclusion is the superiority of the experimental group learned with the educational modeling strategy in the direct learning method in acquiring the skillful performance of free swimming for ages (10-12) years. As for the recommendations, it is the need to use the educational modeling strategy in the direct learning method. Other sports and events.

**Keywords:** educational modeling strategy, direct teaching

### Introduction

The world is witnessing a great and wide technological revolution, which included the fields of life and its activities, and it came as a result of the great efforts made by scientists and researchers through studies and research that bore fruit. As the educational process requires the use of many new learning strategies that help the teacher to communicate information smoothly and easily and with less time and effort and to avoid monotony and boredom in the lessons and make the learner willing to learn more information.

The field of physical education and sports science has witnessed a great development, and this was clearly evident through the levels reached by countries in this field. Education also has a great influence on the process of acquiring and developing skills for beginners at different ages and events, and this depends on the development of strategies and teaching methods used in the educational process. It is based on sound scientific foundations in order to reach the desired goal, and there is no doubt that the methods used are of great importance in developing the level of skillful performance in all games and sporting events in general and free swimming in particular.

The educational process is a creative and innovative process, so the researcher decided to use the educational modeling strategy in the direct education method, which is one of the modern concepts that help in the process of education and upgrading it more easily, especially with swimming, which is considered one of the difficult sports in the learning process and needs a long time to gain performance. The skills of free swimming, and the method that is suitable for learners and their ability to master. The educational material is flawed, because there is a new and frightening water environment, which is water for those who do not know how to swim, whether this material is easy or difficult. of performing properly.

### Research problem

The researcher noticed through his experience in the field of teaching and education and through his personal experience in the field of teaching and swimming methods and the small number of allocated units and the lack of swimming practice and the difficulty of skills in this game showed the current problem, the researcher resorted to solving this problem through the use of an educational strategy and a modern educational method in order to It helps learners from the learning process in a smooth and flexible manner for this stage, saving time and effort and obtaining better results, so the researcher used the educational modeling strategy in the direct education method to acquire the skillful performance of free swimming, so the researcher decided to use this strategy and method to identify its results and the possibility of using it in teaching free swimming.

### Research objectives

1. To identify the impact of the educational modeling strategy using the direct teaching method in acquiring the skillful performance of freestyle swimming for ages (10-12) years.
2. To identify the effect of the direct teaching method in acquiring the skillful performance of free swimming for ages (10-12) years.
3. Preparing educational units with the strategy of educational modeling in the direct teaching method.

### Research hypotheses

1. There are statistically significant differences between the experimental group and the control group in the post-tests, in favor of the experimental group.
2. There are statistically significant differences between the pre and post test for the experimental and control groups, in favor of the experimental group.

### Research journals

1. The human field: students of the Specialized Swimming School.

2. Time range: for the period from 1/6/2022 to 10/7/2022
3. The spatial field: the closed Olympic swimming pool.

### Define term

**Educational modeling strategy:** It is an educational method that is represented by learning by example and displaying smart or desirable behavior in front of students, and it is accompanied by clarifications and comments provided by the model (teacher) or role model during his work <sup>[1]</sup>.

**Direct education strategy:** It is known as one of the educational strategies that adopt the transfer of information from the teacher to the learner without the need for an indirect means of communication since the teacher gives the information without any modification to it and without the need for the learner's opinion about it and the learner understands it in the way that the teacher builds for him <sup>[2]</sup>.

### Chapter two

#### Research methodology and field procedures

##### Research methodology

That the problem in scientific research needs to find the appropriate solution to it by choosing the appropriate approach with the nature of the problem, so the researcher used the experimental approach for its suitability to the nature of the research, as this approach represents the most honest approach to solving many scientific problems in a practical and theoretical manner <sup>[3]</sup>.

##### Research population and sample

The research community was chosen by the intentional method, represented by the students of the Specialized School, whose number is (25) students, and (16) students were chosen by lottery, representing the experimental group and the control group. (8) students and (5) students who represented the exploratory experiment, and the learners who did not adhere to the educational units, amounting to (4) students, were excluded. The research sample represented (64%) of the parent community.

##### Homogeneity and equivalence of research groups

There was no homogenization of the members of the research sample because all the members of the sample are from the same age group and all of them do not have previous experience in the field of swimming and are not good at swimming. To ensure that the two groups are homogeneous and equal and there are no differences between the two groups, and to start from one starting line as shown in

<sup>1</sup> Nasser Khattab: Methods of teaching cognitive strategies for students with learning difficulties, Teachers College, Jeddah 2007.

<sup>2</sup> Jacobs, D.M., & Michaels, C.F. (2007), "Direct Learning", Ecological Psychology Magazine, Vol. 19(4), pages 321-349, (Online) (31/01/2016), available:

<sup>3</sup> Ismail Abd Zaid Ashour, Naseer Mezher: Topics in Scientific Research Methods, Dar Al-Atak for Printing and Publishing, Lebanon, 2018, p. 123.

**Table 1:** It shows the arithmetic mean, standard deviation, and (T) value calculated for the two research groups

| Variants Measurement              | Alone experimental group | the control group | value (v) |       |       |       |       |           |
|-----------------------------------|--------------------------|-------------------|-----------|-------|-------|-------|-------|-----------|
| calculated                        | Sig                      | indication        |           |       |       |       |       |           |
|                                   |                          | s                 | p         | s     | p     |       | 0,078 | non-moral |
| Regular breathing test for 10/sec | a second                 | 5,831             | 1,225     | 5,687 | 1,576 | 0,976 | 0,214 | non-moral |

### Tools and devices used in the research

Research tools: research, sources and references, personal interviews, questionnaire, observation, test and measurement.

**Tools and devices used:** Stopwatch. Measuring tape, scientific calculator, video camera, laser discs, computer, pens and paper. Duel hall, hp laser printer whistle.

### Identifying skills

The basic skills of free swimming were identified by the researcher by relying on references and sources, which identified the free swimming skills, which are (body position, legs strikes, arms strikes, breathing, compatibility). The researcher also adopted the evaluation of the skillful performance of free swimming through evaluation through a standardized evaluation form. The objective evaluation was adopted by observation by experts with experience and specialization. The researcher photographed the skillful performance and presented it to the experts, and it was repeated more than once for the purpose of ensuring performance in Some instances of rapid skill need careful observation by the adjuster.

### Skill tests for free swimming

1. Regular breathing test for 10/sec.
2. Frontal horizontal buoyancy test.
3. Flow test (front slip).
4. Free swimming test for a distance of 25 meters.

### Performance evaluation form

The researcher adopted a form for evaluating the skillful performance of freestyle swimming, which divides swimming skills for freestyle swimming into five skills prepared by (Firas Ajeel Yawar: 2016)<sup>[4]</sup>.

Through this form, free swimming was evaluated from (100) degrees divided according to the level and difficulty of the skill (body position: 16 degrees) kicks of the legs: 16 degrees) (strokes of the arms: 24 degrees) (breathing: 24 degrees) (compatibility: 20 degrees) where the total becomes The evaluation score is from (100) degrees, and the evaluation is done through observation through the visualization of the testers one by one, and the photography is shown to the experts, and it is possible to re-imagine more than once.

### Field experiment procedures

The procedures included the practical experiment of the research through the reliance on the research procedures according to the methodology of the scientific research as follows:

### Exploratory experience

The researcher conducted the exploratory experiment on Wednesday, 1/6/2022, at exactly three o'clock in the afternoon, on a sample of (5) students from the research community from outside the research sample, who were chosen randomly.

### Equivalence tests

The researcher conducted the equivalence tests for the research sample on Thursday, corresponding to 2/6/2020 at exactly nine o'clock in the morning in the closed Olympic swimming pool, and the researcher took into account fixing all the variables in terms of place, time and method in order to unify and control as much as possible the external variables and taking into account the fact that the circumstances of Pre-tests are similar to post-test conditions.

### Tutorial

The researcher prepared the educational curriculum from within the vocabulary of the fencing subject curriculum. The two researchers prepared the curriculum from (12) educational units that were applied to the groups of the experimental and control research sample over a period of (4) weeks, at the rate of three educational units per week, at a rate of (90) minutes per educational unit. The program started on 6/5/2020, and the program ended on 7/7/2022. One educational unit consisted of three main sections, which are, respectively (the preparatory section – and the main – final section). The time for the preparatory section reached (15) minutes, either The main section has a time of (65) minutes, and this section has included two parts: the educational part, which has a time of (20) minutes, and the applied part, which has a time of (45) minutes, while the last section is the final section, which has a time of (10) minutes, as it included Calm down and breathing exercises.

### Post-tests

The researcher conducted the post-tests on the research sample on Sunday 10/7/2022. The researcher worked hard to unify the previous external conditions in which the pre-tests were conducted in terms of spatio-temporal conditions and the method of conducting the previous tests. Until all variables are controlled except for the experimental variable.

### Statistical Methods

The researcher used the ready-made statistical package (SPSS) to analyze the data statistically:

### Chapter III

#### Presentation, analysis and discussion of the results

#### Presentation and analysis of results

In this chapter, the researcher will present the results that the researcher reached through analyzing and presenting the statistics and the results he reached as shown in Table (2).

<sup>4</sup> Firas Ajeel Yawar: (PhD thesis), (The effect of differentiated education strategy on cognitive achievement and the acquisition of skillful performance for students in free swimming), 2016.

**Table 2:** Shows the values of the arithmetic mean, standard deviations, and the calculated (t) value

| skill                 | Measuring unit | Experimental |       | Control |       | calculated t - value | Sig    | indication |
|-----------------------|----------------|--------------|-------|---------|-------|----------------------|--------|------------|
|                       |                | s            | p     | s       | p     |                      |        |            |
| body position         | Degree         | 10,876       | 1,941 | 8,105   | 2,433 | 3,641                | 0.00 0 | moral      |
| Leg strikes           | Degree         | 12,116       | 1,757 | 10,267  | 1,887 | 4,219                | 0.001_ | moral      |
| Arm strokes           | Degree         | 16,897       | 2,739 | 14,676  | 2,972 | 3,543                | 0.002_ | moral      |
| breathing             | Degree         | 13,879       | 3,876 | 11,546  | 2,476 | 3,765                | 0.002_ | moral      |
| Kinetic compatibility | Degree         | 17,176       | 1,778 | 15,321  | 2,567 | 3,812                | 0.001_ | moral      |

It is clear to us from Table (2) the values of the arithmetic mean, standard deviations, and the value of (T) calculated for the control and experimental research groups, as the arithmetic mean for the experimental group was (10,876) and with a standard deviation (2,433), while the arithmetic mean values for the control group were (8,105), with a standard deviation (2,373), and the calculated (T) value was (3,641), and the sig value was (0.000), which is less than (0.05), which indicates the existence of significant statistical differences between the two experimental and control groups. In favor of the experimental group, as for the two-legged kick test, the arithmetic mean of the experimental group was (12,116) with a standard deviation of (1,757), while the arithmetic mean values of the control group were (10,267) with a standard deviation of (1,887). The calculated (T) value was (4,219), and the value (sig) was 0.001 (0.001), which is less than the level of significance (0.05), which indicates the existence of statistically significant differences between the experimental and control groups and in favor of the experimental group. The arithmetic mean of the experimental group was (16,897) with a standard deviation of (2,739), while the arithmetic mean of the control group was (14,676). with a standard deviation (2.972), and the calculated (T) value was (3.543), and the sig value was (0.002), which is less than the level of significance (0.05), which indicates the existence of statistically significant differences between the experimental and control groups, in favor of the experimental group. As for the breathing test, the arithmetic mean of the experimental group was (13,879) with a standard deviation of (3,876), while the arithmetic mean of the control group was (11,546) with a standard deviation of (2,476), and the value of (T) calculated (3,865), and the value of sig was (0.002), which is less than the level of significance (0.05), which indicates the existence of statistically significant differences between the experimental and control groups, in favor of the experimental group. In the motor compatibility test, the arithmetic mean of the experimental group was (17,176) with a standard deviation of (1,778), while the arithmetic mean of the control group was (15,321) with a standard deviation of (2,567), and the value of (T) calculated (3,814), and the value was (sig0.001), which is less than the level of significance (0.05), which indicates the existence of statistically significant differences between the experimental and control groups in the skill of agreement, in favor of the experimental group.

### Discuss the results

It is clear from Table (2) the differences between the results of the post-test between the two experimental groups and the control group to learn the basic skills of free swimming, as the results showed that all the differences were significant and in favor of the experimental group, and this indicates that the educational modeling strategy in the direct education style helped greatly to generate accurate

perceptions And sequential knowledge of the educational steps, and the use of the direct teaching method had a positive effect on acquiring the skillful performance of free swimming for ages (10-12) years for the experimental group, by evaluating the teacher's presentation of educational models and showing the picture clearly and giving an ideal model for the learner with clear features and correct perceptions from all its aspects.

The researcher attributes the reason for the superiority of the experimental group to the effectiveness of the educational modeling strategy in the direct teaching method, which helped to speed up the education of the learners and invest time and effort in a faster, more interesting and enjoyable way through knowing the correct performance of the learners and directing them to the appropriate guidance and evaluating their educational level and identifying by the learners where the educational level begins them and when it ends.

The researcher also attributes the reason for this to the harmony of the nature of learning the skills in question with the specificity of what the swimming game needs and the educational method that seeks to communicate the knowledge and previous experiences of the teacher and deliver them directly to the learners to face the different situations that the individual resorts to when he faces a situation or a problem that requires him to find suitable solution for it <sup>[5]</sup>.

In addition to the above, the researcher finds that there is another explanation for this result, which is the consistency of the educational modeling strategy with the mechanism of applying the direct teaching method, because this method includes characteristics that contain everything <sup>[6]</sup> related to learning the skill in a detailed, sequential manner and with interrelated steps, which helped the student to understand and gain optimal performance for each A skill based on the principle of feedback "The development and development of feedback among learners requires the existence of a correct model learning and the selection of correct scientific methods and methods to provide the correct information" <sup>[7]</sup>. The researcher also agrees with Al-Qadi that the modeling strategy and the steps that the teacher takes as a model by highlighting the different steps, behaviors, and metacognitive skills while he is practicing the skills under training in front of the students, relying on thinking out loud, where he pretends that he is thinking out loud in front of his students and directs himself in space to express what is going on. In his mind of information and perceptions and communicate them to the learners <sup>[8]</sup>.

<sup>5</sup> Emad Abdel Rahim Zaghloul: Principles of Educational Psychology, 2nd Edition, University Book House, United Arab Emirates, 2002, p. 302

<sup>7</sup> Qasim Lizam: Topics in Motor Learning, BM, Baghdad, 2005, p. 374.

<sup>8</sup> Saeed Ismail Al-Qadi: Moral education for parents and children, Dar Al-Qalam Library, Riyadh, 2013, pg. 48.

It is also the method of direct education, which is similar in terms of content to the method of regular education, but it differs in how it is applied and in the level of teacher's intervention within the class and the amount of his control over the educational process. Commands, the amount of learner freedom in direct education is more than in regular education<sup>[9]</sup>.

As (Abu Al-Naga, 2005) emphasizes that the educational methods contribute to the development of students' kinesthetic perception, where the learner in this method observes his performance and then evaluates it on the basis, and this method also contributes to the development of cognitive mental processes such as the ability to compare and deduce<sup>[10]</sup>.

One of the characteristics of direct education is that the teacher is directed to the educational process to a lesser extent than the traditional teacher, and the application of educational methods within organized curricula while giving the student a space of freedom to move and obtain information, which saves time and effort for the learner in the first place<sup>[11]</sup>.

As (Ismail Abd Zaid, Firas Ajeel) believes that real learning is that each learner has his own meaning about things. Students do not want more content, but rather want one meaning for the things that a good teacher does, which is understanding the importance of creating meaning and providing the necessary environment that consists of the elements a necessary to form meaning<sup>[12]</sup>.

## Conclusions and recommendations

### Conclusions

1. The effectiveness of the educational modeling strategy using the direct direct education method in acquiring the skillful performance of free swimming for ages (10-12) years.
2. The superiority of the experimental group taught by the educational modeling strategy in the method of direct education in acquiring the skillful performance of free swimming for ages (10-12) years.
3. The educational modeling strategy in the direct teaching style has a great impact on learning the basic skills of free swimming.

### Recommendations

1. The need to use the educational modeling strategy in the direct direct education method in teaching other types of swimming.
2. Using the direct teaching method in teaching the basic skills of free swimming, as it helps the learner in correct guidance and gaining experience and knowledge.
3. Adopting the educational modeling strategy in the direct teaching method in teaching other skills and other sports.

4. Using the educational modeling strategy using the direct teaching method and other methods, on other samples and groups (males - females).

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<sup>9</sup> Jaquith D.B., & Hathaway N.E. (2012), *The Learner-Directed Classroom: Developing Creative Thinking Skills Through Art*, 1st ed., USA: Teachers College Press.

<sup>10</sup> Abu Al-Naga Ahmed: *Methods of Teaching Physical Education*, Cairo, 2005, p. 86.

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<sup>12</sup> Ismail Abd Zaid, Firas Ajeel Yawar: *Brain Research-Based Learning*, Al-Kalima Press, Baghdad, 2018, pg. 213.