

THE EFFECT OF USING A SELF-ORGANIZED LEARNING STRATEGY WITH GUIDED AND INDEPENDENT PRACTICE ON ACQUIRING THE SKILLFUL PERFORMANCE OF FREESTYLE SWIMMING FOR AGES (10-14) YEARS

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Abstract: Self-organized learners' behavior is purposeful and has a high degree of persistence. They make plans, set goals, and self-assess performance in the various stages of learning, and they can manage their learning efficiently and self-effectively, have internal motivation, and work to prepare an educational environment that stimulates learning to the maximum possible degree. And due to the lack of use of modern strategies in the educational process, especially in the cognitive aspect of the skill and the process of linking previous information and benefiting from previous experiences in the possibility of enhancing it through urging learners to work and stimulate mental processes among learners and take into account the tendencies and desires of learners, Especially since the skill of swimming is one of the difficult skills and needs many neuromuscular compatibility, as well as that it is practiced in a different environment than the natural one, that differs from other activities. The learning of freestyle swimming movements for the learners is one of the problems that swimming teacher's faces because of the difficulty in making the learners understand to keep their bodies afloat during the backward movement of the arms, and their intense fear of new surroundings. As for the research methodology, the researchers adopted the experimental method for its suitability to the nature of the study. The research sample also included (12) learners who were randomly selected from the original community of (24) learners. The researchers took into account the homogeneity and equivalence of the sample. The sample was chosen from among the learners participating in the swimming educational courses at the Specialized Swimming School for the year 2019, in Al-Shaeb closed Olympic swimming pool, and their ages ranged from (10-14) years and from males only, the two researchers sought to homogeneity of the sample, as an increase in accuracy in order to obtain good results. The two researchers reached the results and the findings were presented and discussed. The researchers used the statistical program (sp.ss: 21) to analyze the data regarding an error rate (0.05) for the independent samples, and the value of t was calculated in the skill of the body position (2,676) and the skill of legs strikes (3,445) and the skill of arms strikes (5,576) breathing skill (2,789) and compatibility skill (1,276). The researchers concluded that the self-organized learning strategy through guided and independent practice has a positive effect in teaching children free swimming and that it helps learners develop their cognitive and skill abilities.

Keywords: Self-organized learning. Guided and independent practice

INTRODUCCIÓN

All theories and curricula based on active learning emphasize the importance of working in the educational process where the student has an active and effective role in his learning and the student is the focus of the educational process and has the ability to search and investigate information, where the constructive concept

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of "learning by doing" and "Learning to learn" appear. " (Méndez-Giménez, Fernández-Río, Rolim-Marques and Calderón, 2016).

As (Muñoz-San Roque et al: 2016) confirms, there is a need for an active participant in the interpersonal cognitive, motivational, and behavioral learning processes. You must be able to work on three dimensions of your learning: management for a realistic goal setting process, self-assessment to be able to improve it and self-knowledge as a learner where You must be aware of his degree of knowledge and his own way of processing information and if they are able to define their own study habits, an indicator of this that measures whether the student is aware of the thinking processes used when learning.

Self-learning is an active construction from the cognitive standpoint in general, considering that the activity is a basic feature of the self-organized learner, as it defines his goals and chooses strategies that help him achieve learning and accomplish them using the available information sources in the external and internal environment (Uzun; Unal: 2013).

In addition to the above, understanding both frameworks for thinking and learning would emphasize specific planning of curricula for all types of learning. Teachers need opportunities to reflect on their learning and their teaching style, and without these opportunities, they will not be prepared to engage learners in discussions, not just teachers, but also learners, need to develop an understanding of thinking and learning, especially in the content in which they assume significant individual responsibility for their progress. (Moseley, & et al, 2005).

Self-organized learning strategy is an adaptable and multi-dimensional process, and some of these dimensions are:

- Self-organization of behavior: refers to self-monitoring and modification of performance processes.
- Environmental self-organization: refers to self-monitoring and modification of performance processes.
- Personal self-organization: This includes monitoring and modification of the cognitive and emotional aspects.

These dimensions or components require periodic activity on the part of the learner to become self-organized, and directed actions and processes that

the learner undertakes to acquire information and skills that include the goal and are represented by organizing the individual to know his behavior and his environment in which the learning takes place in order to achieve the goal and it was determined through three stages: (Zimmerman, 2008)

- The stage of thinking and contemplating.
- The stage of performance and administrative control.
- The stage of self-reflection.

Directed actions and processes carried out by the learner to acquire information and skills that include the goal and are represented by organizing the individual to know his behavior and his environment in which the learning takes place in order to achieve the goal. The general framework for self-organized learning is in four main domains: the cognitive domain, the affective domain, the behavioral domain, and the contextual environmental domain. (pintrich: 2004).

Reducing anxiety leads to an improvement in thinking and attitudes, and anxiety can be reduced by using some special methods in teaching that increase the learner's self-confidence and help him in thinking processes and help him achieve the goal. (Kargar & et al, 2010).

As a result of modern theories and curricula, it has become the role of all teachers through the use of cognitive learning strategies and self-organized learning through social cognitive learning models using modern teaching methods, homework assignment and directed discovery. In this type of educational methodology, teachers become mediators and directors of the educational process (Rodríguez et al. 2018).

The participation of students in the educational process is important by developing competencies and skills through a series of elements such as thinking, cooperation, participation, motivation and improvement of results. If learners become together with teachers responsible partners for learning and gradually take responsibility for the processes and steps and develop the capacity for judgment, subjective and objective assessment to perform on the quality of duty and work, as well as the work of others, according to agreed standards. (Martínez: 2018).

From this standpoint the necessity of using a self-organized education

strategy through the practice directed from the educational and independent process that the learner adopts himself through research and investigation of information and this comes through stimulating the learner's tendencies and motives, which are consistent with the learner's tendencies and desires and reach a level of mastery, competence and effectiveness, especially in teaching freestyle swimming because of the specificity required by this sport that differs from other sports, in which the learner is the focus of which he determines the duties and requirements, assesses his own performance and adjusts the movement paths, which require learners to organize their information according to their knowledge and concepts with guided and independent practice, and from here we give more space for learners to develop their talents and abilities in thinking, analyzing and exploring information and making the learner an important and active focus in the educational process and a participant in it.

Methodologies

The design

An experimental study for a period of (6) weeks at (4) educational units per week, as the total number of educational units reached (24) educational units on a group of learners in the Specialized Swimming School of the Ministry of Youth and Sports for the year (2019). The study aims to identify the impact of self-learning through guided and independent practice by guiding learners and developing their thinking skill, stimulating the learner's tendencies and motives, and making the learner active and has a participant role in the educational process and the effect of this strategy on teaching freestyle swimming and its suitability with this activity and its impact with these ages and the possibility of dealing with these ages in other studies and in multiple fields and other activities. As the teacher and the assistant team use this strategy for the experimental group, where the teacher gives the same exercises to the experimental and normal groups, the difference between the two groups is in the way of providing information, engaging the learner, giving him room to think and stimulating his ideas through guidance and counseling, and giving concepts to the learner to search for and understand them in his own way of understanding.

The participants

The research sample consisted of (12) out of a total of (42) learners, and they were divided into two groups randomly, the number of members of the experimental group was (6) learners and the normal group was (6) learners, The research sample represented (48%) of the original total, and (5) learners who participated in the exploratory experiment from outside the research sample, the purpose of the exploratory experiment that the researchers carried out before starting the experiment in order to identify the validity of the tests, tools, the assistant work team and the time taken to take tests.

The processing

A period of one and a half months was set at a rate of (6) weeks to implement the educational curriculum, and the work was standardized for members of the experimental and normal groups in terms of the time of the educational unit, except for the use of the self-organized learning strategy, which was specific to the experimental group only as the educational curriculum was implemented on 5/7/2019 Until 16/8/2019, at the rate of four educational units per week, according to the training days allocated by the Swimming Union and the management of the pool, where the time of the educational unit reached (90) minutes and applied the curriculum prepared by the assistant work team and under the supervision of the researchers.

The educational unit was divided into three sections:

- Preparatory section: its purpose is to prepare the parts and joints of the body to perform the given exercises , and it includes preparation, general warm-up and special warm-up, with a time of (15) minutes.

- The main section: includes the educational side and the practical side, with a time of (65) minutes.

- The educational part: (15) minutes and includes the explanation of the skill in detail, then presenting the model by the teacher. in some educational units, there was a displaying of illustrative pictures or video clips.

- The practical part: (50) minutes and includes the application of skill exercises prepared by the trainer, repetition of skills exercises, directing learners, correcting mistakes, giving immediate and remote feedback, and continuous follow-up by the teacher.

- The final section: at a time of (10) minutes and includes

- Asking questions and stimulating learners through straightforward and direct questions and answering them.

- Evaluate learners' performance.

-Assigning learners to duties and tasks.

- An entertaining water game.

Search procedures

The two researchers worked to present the strategy in a scientific way according to scientific, calculated and systematic steps according to the capabilities and levels of the learners. Where the two researchers intended to conduct homogeneity of the research sample for the experimental and normal groups for the purpose of identifying and verifying the homogeneity of the individuals of the research sample. The arithmetic mean, median, standard deviation and coefficient of torsion were extracted, and the torsion coefficient was used in the anthropometric tests (height, weight, age).

Initial evaluation

After achieving the homogeneity of the members of the research sample and identifying the homogeneity of the research sample in the anthropometric tests (weight - height - age), the two researchers worked to conduct initial tests to identify the level of the two research samples, The experimental and normal groups in skill tests (breath holding, horizontal floating, front glide) The tabular (T) value appeared greater than the calculated (T) value, and this indicates the insignificance of the differences between the two groups, i.e. the equivalence of the research sample. The researchers also used the (S.P.S.S. — V-20) program to analyze the results and treat them statistically as shown in Table (1).

The skill tests for regulated and approved swimming in free swimming were determined by the two researchers, which are appropriate for the age stage and the skill level of the learners, as these tests were developed by the American Red Cross for the purpose of evaluating basic swimming skills for beginners, this test is suitable for academic achievement in swimming for some study programs specialized in teaching swimming, and these tests are among the most internationally approved tests to the present time, which are) The American National Red Cross .1990((Table 2).

- breath holding test for 10 / sec.

- back float test.

- flow test (front glide on the abdomen).

- Technical performance test for backstroke.

Tools

- Arab and foreign sources and references.

- Personal interviews.

- Questionnaire form.

Table 1: The researchers also used the program to analyze the results and treat them statistically.

Variable	Measuring unit	Arithmetic mean	Median	Standard deviation	Coefficient of torsion
height	cm	164.52	164	2.149	0.752
weight	kg	57.687	75	3.112	0.0917
Age	month	154.5	154	1.248	0.685

Table 2: The table shows the parity of the two groups in the skill tests.

Variables	Experimental group		Normal group		Calculated (T) value	indication
	X	Y	X	Y		
Regular breathing test for 10 / s	3.798	3.777	4.700	2.215	0.875	Non indicating
Floating /s	9.653	5.231	6.363	6.342	0.665	Non indicating
flow test (front glide on the abdomen)	7.798	4.250	5.190	4.516	0.585	Non indicating

- Illustrative pictures.
- ThinkPad laptop.
- CDs.
- Float board (12).
- Stopwatch (2).
- A device for measuring height and weight together.
- Nose clip.
- (Sony) Video camera.
- Hand Calculator, type ECO.

Final tests

A quantitative methodology is used. Results of quantitative values are given through arithmetic means and standard deviations, the (t-test) was used for independent samples and to be able to determine if there were moral differences with statistical indication at an error ratio (p <0.05) between the experimental and normal groups. The two researchers were keen to conduct the post-tests with the same atmosphere, conditions and time in which the pre-tests were conducted, as the two researchers intended to film the post-tests for the learners in the 25/m freestyle swimming test, and it was presented to the experts in order to determine the test scores for each learner according to the evaluation form prepared for this test to evaluate the performance of freestyle swimming, regulated and approved for this test. As for the data, they were analyzed using the (S.P.S.S-V-20) statistical program to analyze the data statistically.

Statistical process

The statistical processes, after analyzing the data statistically, included presenting, analyzing and discussing the results of the post-test between the experimental and normal groups for the 25/m freestyle swimming tests, and then discussing the results that the researchers reach and the extent to which they achieve the research objectives. Table (3) shows the values of the arithmetic mean and standard deviations for testing body posture, leg strokes, arm strokes, breathing and kinetic compatibility in freestyle swimming between the normal and experimental groups.

Results Discussion

Table (3) shows the differences between the results of the skill tests (body position, leg strokes, arm strokes, breathing and kinetic compatibility) for the experimental and normal groups, as the results showed that all the differences are significant and in favor of the experimental group, and this indicates the effect of the self-organized education strategy used which It had a positive effect in teaching freestyle swimming to the experimental group.

The two researchers attribute the reason for the superiority of the experimental group to the effectiveness of the self-organized learning strategy by guided and independent practice in addition to providing the educational material and the participation of the learner in the educational process and raising his inclinations and desires, which helped to speed education among the learners and invest time and effort in a better, faster, more acceptable, interesting and enjoyable way through using different strategies through feedback and joint work between the learner and the teacher and giving a wider space to the learner through his assimilation of ideas and information, organizing prior knowledge through previous knowledge and forming ideas in addition to the self-evaluation of the learner, which helped learners to identify correct knowledge and experiences, identify mistakes and work to correct them, had a positive effect in getting these results.

(Rodríguez-Gómez et al.2018) emphasizes that by using instruction in which students are in charge of the teaching and learning process, teachers become mediators, operations managers, environmental designers of learning and promoters of independent learning from students helping them receive and learn faster.

Both Bartman and Ruegs (2011) view the concept of perceived competence as building self-efficacy to measure students' perceptions of their own

competencies.

(Fernández et al. 2013) identified self-efficacy as one of the main factors in the implementation of strategies of learning self-organization, and it shows that students who see themselves as more capable will benefit from being more strategic and committed to their learning, compared to those whose awareness is less efficient.

The results of the skill (kinetic compatibility) showed the absence of significant differences and the researchers attribute that the young age of the learners, their inability to fully harmonize, and the inability to complete the kinetic paths properly had a negative effect in the absence of significant results in the lack of appearance in the skill of kinetic compatibility Which requires the limbs, body, eyes, hands, legs, and the trunk as a whole, it requires agility, balance, speed, a sense of movement, flexibility, accuracy and speed of movement, as well as it needs repetition, correction, training and practice. The two researchers also agree with (Najah Shalash, 2010), "Good kinetic compatibility requires agility, flexibility, accuracy of kinetic performance and its speed."

(Ibrahim Ahmed, 2007) emphasized that self-organized learning is the process by which the learner sets goals, uses specific strategies to achieve those goals, directs his learning experiences and modifies his behavior to facilitate the acquisition of information and skills.

This is confirmed by (Ahmed Walid, 2003) that self-organized learning ((is a planned, evaluation and adaptive process made up of processes and strategies that students start and organize in a planned manner, which helps them to deal more effectively with school tasks and students usually strive to be successful in the classroom and this requires them to have skill and this is what self-organized learning does)).

(Al-Husseini, 2006) confirms ((The cognitive component means the learner's understanding of the knowledge system, so the more the learner knows about a situation, the greater the success he will achieve)).

Conclusions

The self-organized learning strategy with guided and independent practice had an effective role in achieving good results in swimming education, as it was shown through Table (3) in the 25 / m freestyle swimming test that we can see in the results of the body position skill test, where the value of the arithmetic mean of the experimental group reached (13, 735) and the normal group (11,350) and the calculated (T) value is (2,676), which means the presence of significant differences and in favor of the experimental group, In the test of the leg strikes, the value of the arithmetic mean of the experimental group is (14,291), while the normal group reached (10,650), and the calculated (T) value is (3,445) indicates the presence of significant differences in favor of the experimental group. As for the arm strikes test, we find the value of the arithmetic mean of the experimental group (19,387) and the normal group (15,296) and the calculated (T) value reached (5,576) indicating the presence of significant differences in favor of the experimental group, In the breath test, we find the arithmetic mean value of the experimental group (19,355) and the normal group (17,759). As for the value of (T) computed (2,789), indicating the presence of significant differences and in favor of the experimental group, as for the kinetic compatibility test, we find the value of the arithmetic mean of the experimental group reached (18,123). As for the normal group, it reached (1,276), indicating that there are no significant differences between the arithmetic averages between the experimental group and the normal group.

By looking at the results of the skill of the body position, the strikes of the legs and arms, and the breathing, we notice the superiority of the experimental group in these tests, which indicates the effectiveness of the strategy used, which is the strategy of self-organized learning with guided and independent practice, Because of its positive aspects, it considers the components of self-organized learning as general determinants of the individual's ability to self-organize for his learning, and the weakness of the individual's level in any of them leads to a weakness in the level of self-organized learning. Zimmerman introduces three components of self-organized learning that active students practice during their own learning processes, making them more aware of the functional relationships between their thought patterns and actions and the social environmental outcomes (Zimmerman,2008).

In addition to the effectiveness of the self-organized learning strategy

Table 3: The values of the arithmetic mean and standard deviations for testing.

Variables	Experimental group		Normal group		Calculated (T) value	indication
	X	Y	X	Y		
Body position	13.735	2.123	11.350	1.887	2.676	indicating
Leg strokes	14.291	2.190	10.650	2.233	3.445	indicating
Arm strokes	19.387	2.677	15.296	3.777	5.576	indicating
breathing	19.355	2.221	17.759	2.853	2.789	indicating
kinetic compatibility	18.123	3.124	17.758	4.672	1.276	Non indicating

with guided and independent practice in learning freestyle swimming, the researchers concluded that the program prepared by them with the self-organized learning strategy has a positive effect on learning freestyle swimming, and that the diversification in the process of presenting the concept that the self-organized learning strategy allows in using many resources, techniques and evaluation have effectively contributed to teaching the skill of freestyle swimming, the active participation of learners and considering them part of the educational process and stimulating their ideas is a self-organized learning strategy that has the advantage of focusing on the learner himself, not on those around him. Accordingly, it not only improves the learner's achievement, but also helps him in assessing his progress and directing him to make the necessary changes to achieve his goals, as self-organized learning is one of the modern and important strategies.

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