



A Proposed Approach to Learn Swimming and Reduce Drowning Cases in Maysan Governorate

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| Abstract |
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| <p>Objectives. The purpose of this study is to develop a proposed curriculum for learning swimming to reduce drowning cases in Maysan Governorate, Iraq. It aims to address the widespread issue of swimming illiteracy, especially among youth, which significantly contributes to drowning incidents in the region.</p> <p>Materials and Methods. The study employed a descriptive survey method. The research involved 11 physical education instructors for the primary sample and 3 for an exploratory sample. Data collection instruments included expert validation sheets, observation, and questionnaire responses. Statistical analysis was conducted using SPSS with mean, standard deviation, percentage, and simple correlation.</p> <p>Results. The findings revealed that the proposed curriculum effectively covers cognitive and procedural goals, appropriate scientific content, teaching methods, use of educational technology, and evaluation strategies. Video-assisted learning and practical simulations were particularly effective.</p> <p>Conclusions. The study concludes that implementing a structured swimming curriculum can significantly reduce drowning incidents in Maysan by improving public awareness, swimming literacy, and rescue skills among students.</p> |
| Keywords: swimming education, drowning prevention, curriculum development, Maysan, Iraq |

Introduction

Swimming holds a special place among all sports—not only because of its competitive nature and the pursuit of medals, but also because of its humanitarian value. It is the only sport that teaches individuals how to save others from drowning, making it uniquely important (Wirth et al., 2022). In Islamic tradition, swimming is considered one of the oldest sports, and even the Prophet Muhammad (PBUH) encouraged and practiced it. Today, many developed countries, such as Germany, prioritize swimming education just as they do literacy, recognizing its critical importance (العربي, 2022 & حاجي).

Despite these advantages, swimming remains underdeveloped in Iraqi society. Swimming illiteracy is widespread, and many people are reluctant to learn. A major reason for this issue is the lack of responsibility taken by educational leaders to promote swimming knowledge and create effective, accessible learning programs (Spagnolie & Underhill, 2023). This research is significant because it aims to create a specialized curriculum for teaching swimming and preventing drowning in Maysan Governorate. It is the first study of its kind in Iraq and addresses the alarming rise in drowning cases during the summer months (Gonjo & Olstad, 2021).

Practically, the study seeks to eliminate swimming illiteracy by encouraging the establishment of swimming schools, pools, and educational programs across Iraq, particularly in Maysan. These initiatives are vital to reducing dangerous swimming practices in rivers, ponds, and other unsafe bodies of water. Educating children, teenagers, and adults about safe swimming and rescue techniques can save lives. This responsibility lies with all educational, sports, and health institutions (Spagnolie & Underhill, 2023).

In Maysan specifically, swimming illiteracy is a critical issue that contributes directly to high drowning rates. Statistical data from the Maysan Health Department (2008–2016) reveal a tragic pattern of deaths, especially among children, in a region surrounded by the Tigris River. The lack of proper swimming facilities, along with limited awareness programs in schools, increases the risk of drowning and places emotional and psychological strain on families. Motivated by these realities, the researcher aims to encourage swimming education as a means to prevent future tragedies.

The research aims to design a proposed curriculum for learning swimming that contributes to reducing drowning cases in Maysan Governorate. To achieve this, the study focuses on several core components: setting clear and achievable objectives for the curriculum; proposing scientifically grounded content that aligns with these objectives; identifying suitable teaching methods, strategies, and tools to enhance learning effectiveness;

determining appropriate technological tools to support curriculum delivery, and selecting effective evaluation methods to assess learning outcomes and program impact.

To guide the development and validation of the curriculum, the research addresses several key questions. These include: What are the most appropriate objectives for a swimming curriculum aimed at reducing drowning in Maysan Governorate? What scientific content is best suited to support those objectives? Which teaching methods, learning tools, and instructional strategies are most effective in this context? What technological resources should be integrated into the curriculum to optimize teaching and learning processes? Finally, what evaluation techniques and tools are most appropriate to measure the success of the curriculum in improving swimming literacy and preventing drowning incidents?

Materials and Methods

Study Participants.

The study engaged 18 total participants, of which 11 were selected purposefully for the main research sample and 3 for exploratory validation. All were physical education teachers specializing in swimming instruction.

Study organization.

This research followed the descriptive survey method, suitable for exploring educational interventions. The curriculum design included setting objectives, content formulation, delivery methods, educational technology integration, and evaluation tools.

Statistical analysis.

The data collected in this study were analyzed using the Statistical Package for the Social Sciences (SPSS). The analysis included the calculation of the mean, standard deviation, percentages, and simple correlation to interpret and present the results accurately and clearly (Bai & Bai, 2021).

Results

The results of the study focus on the proposed curriculum for learning swimming and reducing drowning cases in Maysan Governorate, based on different educational objectives, content, methods, tools, and evaluation strategies. The findings are organized according to five main questions of the study.

1. First Question: Objectives of the Proposed Curriculum

The objectives of the proposed curriculum were divided into two categories:

- a) Cognitive and Preventive Objectives: Phrases related to educating learners on the relationship between the environment and society, the importance of swimming, and basic swimming skills received high agreement, particularly phrases No. 2, 4,

5, 6, 7, and 8, each with an agreement percentage of 81.81%. These objectives emphasize the role of swimming in enhancing both individual and societal well-being, aligning with existing educational perspectives on swimming (Hall & Holt, 2023).

- b) Procedural Educational Objectives: The highest agreement (90.90%) was observed for the phrase emphasizing that ignorance and illiteracy in swimming are the main causes of drowning, followed by agreement on the importance of teaching rescue methods for shipwrecked individuals. This result supports the idea that understanding drowning risks and rescue operations is crucial in mitigating drowning incidents (Nuriddinov, 2023; Spagnolie & Underhill, 2023).

2. *Second Question: Scientific Content for the Proposed Curriculum*

- a) Theoretical Content: The most highly agreed-upon phrase (90.90%) was about creating a safe and healthy learning environment, which highlights the importance of preparing the right educational environment before teaching swimming (Storm et al., 2021). Other top content phrases related to the benefits of swimming, both educational and recreational, were also highly rated (81.80%).
- b) Practical Content: The highest-rated phrase (100%) emphasized teaching breathing techniques to prevent water swallowing and suffocation. Other top-rated practical elements included teaching rescue swimming methods and rescue techniques at various locations.

3. *Third Question: Learning Methods, Tools, and Conditions*

The methods and tools of learning swimming should align with the learners' age and physical, mental, social, and environmental needs (90.90%). The methods used should also instill moral values such as cooperation and self-confidence (81.80%). These results suggest that a personalized, needs-based approach is key in developing effective learning strategies (Lloyd et al., 2015).

4. *Fourth Question: Educational Technology in the Proposed Curriculum*

Technological Means: The most highly agreed-upon tool (100%) was the use of videos to demonstrate basic swimming skills and rescue methods, which helps improve learning by providing clear, visual examples (Hemamy et al., 2021). Other technological tools, such as video presentations on rescue techniques, were also highly ranked (90.90%).

5. *Fifth Question: Evaluation Methods for the Proposed Curriculum*

The most highly rated evaluation method (100%) involved comprehensive assessments that cover all aspects of knowledge, skills, and health/safety awareness. This comprehensive evaluation ensures a well-rounded understanding and proficiency in swimming and drowning prevention.

In order to design an effective swimming curriculum to reduce drowning incidents in Maysan Governorate, this study identifies various elements that should be included in the swimming education curriculum. Based on surveys conducted with experts and educators, several key aspects need to be considered, including curriculum objectives, content, teaching methods, use of technology, and evaluation methods. The table below presents the analysis of the level of agreement on these elements, which are considered essential in achieving the goal of reducing drowning cases.

| Question | Category | Highest Rated Phrases | Agreement (%) |
|---|--------------------------|--|---------------|
| First Question: Objectives of the Curriculum | Cognitive and Preventive | Importance of swimming, basic swimming skills, and its societal role. | 81.81% |
| | Procedural | Ignorance of swimming as a leading cause of drowning, teaching rescue methods. | 90.90% |
| | Educational | Safe and healthy learning environment, educational and recreational benefits of swimming. | 90.90% |
| Second Question: Scientific Content | Theoretical Content | Teaching breathing techniques, rescue swimming methods, and location-specific rescues. | 100% |
| | Practical Content | | |
| Third Question: Learning Methods & Tools | Learning Methods | Learning methods aligned with age and physical/mental/social needs, instilling moral values. | 90.90% |
| | Tools and Conditions | Tools fostering cooperation and self-confidence in learning. | 81.80% |
| Fourth Question: Educational Technology | Technological Means | Use of videos for demonstrating basic swimming skills and rescue methods. | 100% |
| Fifth Question: Evaluation Methods | Evaluation Methods | Comprehensive assessments covering all aspects of knowledge, skills, and safety awareness. | 100% |

Discussion

The findings show a clear emphasis on creating a holistic and practical swimming curriculum that not only focuses on the technical aspects of swimming but also on safety, rescue techniques, and moral development. The high agreement on cognitive and preventive objectives indicates that the community recognizes the need for widespread swimming education to prevent drowning. The agreement on procedural objectives further underscores the importance of teaching not only swimming but also lifesaving skills, especially in environments where drowning risks are high.

In terms of curriculum content, both theoretical and practical aspects are vital, with a focus on creating a safe learning environment and ensuring that learners understand the importance of swimming for personal and social development. The use of educational technology, particularly videos, plays a significant role in enhancing the learning process by providing visual demonstrations of both swimming techniques and rescue methods.

The evaluation methods proposed reflect a comprehensive approach to assess all facets of swimming education, from knowledge to skills, to health and safety practices. The curriculum's emphasis on practical skills, such as rescue techniques, aligns with the goal of reducing drowning cases and ensuring that learners are equipped to save themselves and others in emergency situations.

In conclusion, the proposed curriculum for Maysan Governorate is well-rounded, focusing on cognitive, procedural, theoretical, and practical elements, and leveraging educational technology to improve the learning experience. The results provide a solid foundation for developing an effective swimming and drowning prevention program that addresses both the educational and safety needs of the community.

Conclusions

The conclusions drawn from the study indicate that the Directorate of Youth and Sports and the Directorate of Education in Maysan Governorate have not provided sufficient attention to swimming compared to other sports. It is crucial to introduce learners to the connection between the environment and society, as well as to basic swimming skills and techniques. The primary cause of drowning in the region is a lack of awareness, swimming illiteracy, and insufficient awareness programs aimed at drowning prevention. Furthermore, there is a significant shortage of public swimming pools under the management of the Directorates of Youth and Sports, and Education, with available swimming facilities limited to privately-owned investment pools.

Additionally, there has been a failure to organize educational and awareness programs on swimming and drowning prevention. To address these issues, it is recommended that the proposed swimming curriculum be implemented across all schools, clubs, and youth centers in Maysan Governorate. It is also essential to establish a swimming pool for both the Directorate of Education and the Directorate of Youth and Sports. Educational courses, workshops, and seminars on swimming and drowning prevention should be organized, and the necessary material and human resources must be provided to improve swimming education. The use of educational technologies and techniques should be incorporated to

facilitate the learning process, and appropriate evaluation methods should be employed to assess the success of the curriculum.

References

- Bai, Z., & Bai, X. (2021). Sports big data: management, analysis, applications, and challenges. *Complexity*, 2021(1), 6676297.
- Gonjo, T., & Olstad, B. H. (2021). Race analysis in competitive swimming: A narrative review. *International Journal of Environmental Research and Public Health*, 18(1), 69.
- Hall, T. J., & Holt, S. (2023). *Educational gymnastics for children*. Human Kinetics.
- Hemamy, M., Pahlavani, N., Amanollahi, A., Islam, S. M. S., McVicar, J., Askari, G., & Malekahmadi, M. (2021). The effect of vitamin D and magnesium supplementation on the mental health status of attention-deficit hyperactive children: a randomized controlled trial. *BMC Pediatrics*, 21(1), 178. <https://doi.org/10.1186/s12887-021-02631-1>
- Jabbar, A. K., Faraj, A. S., & Khazaal Jabbar, A. (2025). Effect of phosphorous training according to pulse intensity to develop speed endurance and Achievement of 400-meter run for women Introduction Scientific creativity made researchers in the search and investigation of scientific facts. *Musamus Journal of Physical Education and Sport (MJPES)Physical*, 7(1), 308–316. <https://doi.org/10.35724/mjpes.v7i1.6743>
- Khazaal Jabbar, A., & Shanta Faraj, A. (2025). Effect of Isokinetic Exercises Similar to Performance to Develop Legs Strength and Achievement of Female Long Jump. *Indonesian Journal of Physical Education and Sport Science 146 IJPESS Indonesian Journal of Physical Education and Sport Science*, 5(2), 146–154. <https://doi.org/10.52188/ijpess.v5i2.1160>
- Lloyd, R. S., Oliver, J. L., Radnor, J. M., Rhodes, B. C., Faigenbaum, A. D., & Myer, G. D. (2015). Relationships between functional movement screen scores, maturation and physical performance in young soccer players. *Journal of Sports Sciences*, 33(1), 11–19.
- Nuriddinov, A. (2023). Managing The Process Of Talent Development In Sports Anatasia. *American Journal Of Social Sciences And Humanity Research*, 3(11), 121–132.
- Qutaiba, A. (2021). The reduction in the practical permanent level has affected agility and explosive power of legs in primary school students. In *Annals of R.S.C.B* (Vol. 25). <http://annalsofrscb.ro>
- Spagnolie, S. E., & Underhill, P. T. (2023). Swimming in complex fluids. *Annual Review of Condensed Matter Physics*, 14(1), 381–415.
- Storm, L. K., Henriksen, K., Stambulova, N. B., Cartigny, E., Ryba, T. V., De Brandt, K., Ramis, Y., & CeciĆ Erpič, S. (2021). Ten essential features of European dual career development environments: A multiple case study. *Psychology of Sport and Exercise*, 54, 101918. <https://doi.org/10.1016/j.psychsport.2021.101918>
- Wirth, K., Keiner, M., Fuhrmann, S., Nimmerichter, A., & Haff, G. G. (2022). Strength training in swimming. *International Journal of Environmental Research and Public Health*, 19(9), 5369.
- السباحة. (2022). العربي, م & حاجي.