

The Effectiveness of Using the SCAMPER Programme to Learn the Basic Fundamentals of Futsal

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Abstract: The current research aimed to identify the effectiveness of using the SCAMPER strategy to learn the research problem is to demonstrate the importance of the impact of the proposed intervention. The research problem addressed that the repeated failure of learners when performing the basic skills of the futsal game prompted the study of this issue and develop appropriate solutions through the development of exercises on the SCAMPER scrambler that will improve the basic skills of futsal. The research sample included students of the Department of Sport and Exercise Science, who numbered (30) students and were divided into two experimental and control groups, each group (15 students). (15) female students, and the researcher applied the research experiment using the methodology described above, and through the results, the researcher found that Scamper has a key role in developing creative abilities, developing independence to reach goals, and investing time and effort. The researcher recommended the need to emphasis the use of SCAMPER as a tool for learning how to play the game in the gym.

Keywords: SCAMPER, futsal game, creativity, sporting events

Introduction

There are several factors that depend on whether an individual is creative or not, such as his/her motivations and attitudes, as abilities can be developed and improved through education and training. This is only possible with a teacher who is able to develop a curriculum that is interesting and motivating to students. To utilize their abilities within the unit, and given the widespread popularity of the game of futsal. The game of futsal has witnessed due to its skills, plans and events, and given the availability of many methods of and questions that contribute to the development of academic abilities, the most important of which is SCAMPER (Al-Zuwainy, 2019; Eberle, 2023; Zhang, 2023). SCAMPER is one of the ways to improve creativity, easy to use in the classroom and is one of the strategies that can help learners to think outside the box, which is one of the most important ways to develop their thinking skills (Fiadotau, 2020; Gündoğan, 2019; Lester, 2020). The importance of generating ideas away from evaluating or criticizing, and thus the importance of research lies in knowing the importance of the research is that it teaches you about the importance of the importance of the research and the importance of the importance of the research for the students.

The research problem arises from the recurring challenges faced by learners in their course performance, prompting an in-depth investigation by the researcher. This inquiry aims to address the persistent difficulties encountered by learners and proposes solutions through the development of SCAMPER exercises (Almawadeh, 2023; Boonpracha, 2023a; Lopes, 2020). These exercises are envisioned to not only enhance the quality of sporting events and activities but also to mitigate the obstacles hindering effective learning. The research objectives focus on two main areas: first, to assess the efficacy of utilizing the SCAMPER tool to expedite the learning process (Boonpracha, 2023b; Hassan, 2023; Solís, 2022); and second, to conduct a comparative analysis between experimental and control groups to discern the effects of different teaching methodologies on learner performance. The research hypotheses predict statistically significant differences between pre and post-test results within the control group, as well as between the treatment and control groups, particularly favoring the experimental group. The study's fieldwork will involve female students in the second stage of the Department of Physical Education and Sports Sciences at the Faculty of Basic Education, Al-Mustansiriya University, spanning from February 10, 2022, to September 5, 2023. The research will be conducted within the internal hall of the Department of Physical Education and Sports Sciences at Al-Mustansiriya University.

Methodology

The research methodology employed a two-group equivalent design tailored to address the research problem effectively. The research sample consisted of 30 female students enrolled in the second stage of the English language and sports science program, divided into experimental and control groups, each comprising 15 students. Before implementing the researcher-prepared program, a homogenization procedure was conducted to ensure comparability between the two groups. Various tools and methods were employed, including Arabic and foreign sources, personal interviews, and curriculum evaluation forms for information collection. Research instruments utilized included a Casio

electronic stopwatch, measuring tape, legal five-a-side balls, plastic screens, whistle, adhesive tapes, wall space, DELL Laptop, manual electronic calculator, and pentathlon targets. Methods utilized in the research encompassed targeting accuracy tests, handling accuracy tests, and ball rolling and shooting tests. An exploratory experiment was conducted on February 20, 2022, with five female students from outside the research department. The main experiment comprised pre-testing on February 27, 2022, and the implementation of the proposed learning curriculum on March 4, 2022. The curriculum consisted of 16 modules over 8 weeks, with 90-minute durations per module. The program underwent evaluation by a panel of experts. The curriculum included preparatory, main, and concluding sections, each featuring mini-games taught in the SCAMPER Strategy Centre (Aldawsari, 2023; Fitz, 2021b, 2021a). The control group followed their standard methodology. Post-tests were conducted on May 27, 2022. Statistical analysis utilized the SPSS software program.

Result and Discussion

Table 1. Arithmetic Means, Standard Deviations Values (T) Calculated for the Standardized Tests for the Two Groups

Significance	Calculated value of (T)	Post-test		Pre-test		tests	t
		Standard Deviation	The arithmetic mean	Standard Deviation	The arithmetic mean		
Moral	3.12	2.34	4.25	1.23	2.41	Handling	1
Moral	5.96	0.89	23.87	0.71	31.46	Rolling	2
Moral	3.67	1.35	3.32	0.69	1.59	Scoring	3

Tabular-value at p-value (0.05) and degree of freedom (14) = 2.14

Table 2. Arithmetic Means, Standard Deviations, and T-Values Calculated for the Standardized Tests for the Experimental Group and the Control Group

Significance	Calculated value of (T)	Post-test		Pre-test		tests	t
		Standard Deviation	The arithmetic mean	Standard Deviation	The arithmetic mean		
Moral	2.94	1.23	3.63	0.76	2.19	Handling	1
Moral	2.98	0.79	29.76	1.49	33.45	Rolling	2
Moral	4.16	0.84	2.65	1.35	1.49	Scoring	3

Tabular-value at p-value (0.05) and degree of freedom (14) = 2.14

Table 3. Calculated Values for the Post-Tests for the Control and Experimental Groups on the Tests Used in the Study

Significance	Calculated value of (T)	Post-test		Pre-test		tests	t
		Standard Deviation	The arithmetic mean	Standard Deviation	The arithmetic mean		
Moral	5.05	1.23	3.63	2.34	4.25	Handling	1
Moral	3.17	0.79	29.76	0.89	23.87	Rolling	2
Moral	3.89	0.84	2.65	1.35	3.32	Scoring	3

Tabular-value at p-value (0.05) and degree of freedom (14) = 2.14

It is clear from the results of table (3) that the Scamper Scanner group showed superiority in the tests of motor abilities. The reason for this superiority can be attributed to several explanations, the most important of which is that the method by which the programme was implemented played an important role in the implementation of the programme. It has an impact on the level of test-takers' performance, as it carries with it multiple objectives, including the development of the students' motor skills, as well as the development of their motor abilities as well as the development of her abilities to think, try, explore and question in order to achieve the ultimate goal of solving the problem. (Abbas, 2009: 81)

It also put the little girl in situations that force her to think, try and innovate using her mind, as well as using her It is emphasised that the development of creativity in children is linked to the practice of new questions and methods, and thus plays an active role (Hassan et al, 1997: 75)

The multiple answers to a single question, as well as the reframing phase of the problem, have contributed to the development of fluency, as Abdul Sattar Ibrahim believes that automaticity can be trained when giving the answers. Abdulstar Ibrahim argues that automaticity can be trained when given games consisting of questions similar to the Guilford and Torrance tests.

She also argues that performing a large amount of appropriate responses to reach the goal allows students complete freedom to perform the task regardless of the type of response.

Osborne's rule that how much begets how is based on the view of the relational school of thought, which holds that the world is hierarchically structured and that the most are the most likely to emerge are the most common ideas that appear frequently, and here the researcher has to launch a programme for all of them in order to reach the end of the process. (Abbas, 2009: 82)

Al-Demerdash also adds that creative problem solving can be deeply understood with stage-by-stage applications and frequent use of exercises, as this helps This method helps the student to increase her experience in the thinking process and find more than one way

to solve any problem she faces, whether it is an academic problem or a personal one. (Al-Demerdash, 1987:119) Also, the teacher's follow-up of the student while she is finding solutions suggests that she expects many results from her and motivates her to solve the problem and achieve her goals, as Cropley (Cropley, A. J. 1970) points out According to Cropley (Cropley, A. J. 1970), one of the factors facilitating the emergence of fluency in female students is the follow-up of their teachers.

Scamper makes the student the centre of the learning process instead of the school and all that the school has to do is to create an atmosphere of excitement and joy. Motivation comes in the form of generating enthusiasm, creating an atmosphere of joy and fun among the school and avoiding criticism of the school at all costs. She asks them to come up with multiple solutions to the question by brainstorming ideas and asking them to come up with multiple solutions to the question by brainstorming ideas. Form questions and find a set of moves to build a solution to reach the goal set by the school and they have to diversify their solutions in creative ways. The diversity of human endeavour is limitless, and the possibilities are limitless (Mosten, 1991:303).

This method also helps in the development of motor flexibility, as the organizers believe that this method is more effective than other forms of exercise. This is because it develops the ability to think and produces interaction between the mind and body, especially if the issue requires mental and physical exertion, and this method also This method activates the ability of the client to deal with herself by thinking about all the solutions that arise between her and herself. I utilize all available means, tools and objects in an effort to find a way out. or to find more than one way out, as a problem sometimes accommodates more than one solution and may accommodate subjective solutions as well. He emphasizes the use of Scamper as a method of group or individual reflection to solve many problems. of various scientific and real-life problems and training with the intention of increasing the efficiency of the organizational structure (Aladeen, Abadeh, 1991:14).

Conclusion

In conclusion, SCAMPER plays a pivotal role in enhancing employees' capabilities and fostering autonomy to achieve goals effectively while investing time and effort efficiently. Conversely, a dictatorial teaching style restricts student participation and hampers constructive dialogue in the classroom. SCAMPER emerges as a vital tool in nurturing students' abilities and autonomy to facilitate goal attainment and resource utilization. Moving forward, it is recommended to train teachers in modern teaching methods and techniques to enhance subject delivery. Additionally, the Ministry of Education should integrate modern teaching and learning programs, especially in sports education, to promote the activation of motor skills among female students.

References

- Abbas, R. A. (2009). The effect of teaching mini-games proposed by brainstorming and visualization methods on the development of students' reading and writing abilities [Unpublished master's thesis, University of Basra].
- Aldawsari, H. K. (2023). Developing Productive Thinking Skills in the field of Artistic Works using the SCAMPER Strategy for Twice Exceptional Students. *International Journal of Learning, Teaching and Educational Research*, 22(12), 1–20. <https://doi.org/10.26803/ijlter.22.12.1>
- Al-Demerdash, S. (1987). *Fundamentals of Science Teaching*. Cairo, Egypt: Dar Al Maarif.
- Ali Al-Din, M. T., & Abada. (1991). *Creative Teaching - Objectives and Strategies of Teaching*. Paper presented at the Seventh Annual Conference, Ministry of Education, April 22-24, 1991.
- Alkayoumi, M. bin T. (1998). The Effect of Brainstorming on the Teaching of History and Creative Thinking of History Students in Baghdad University [Unpublished master's thesis, College of Education, Sultan Bin Qaboos University].
- Almawadeh, N. S. (2023). The Effect of Using SCAMPER Strategy on Developing Students' Achievement. *Studies in Computational Intelligence*, 1056, 489–500. https://doi.org/10.1007/978-3-031-12382-5_26
- Al-Qutami, W. (2000). *Principles of Psychology*. Amman, Jordan: Dar Al-Fakr for Printing, Publishing and Distribution.
- Alrawi, S. H. (1988). *The Education of the Mentally Challenged in Arab Countries between Principle and Practice*. Cairo, Egypt.
- Al-Zuwainy, I. S. M. (2019). The impact of scamper's strategy in developing creative thinking and achievement for fifth graders in the field of eloquence and application. *Indian Journal of Public Health Research and Development*, 10(6), 1274–1279. <https://doi.org/10.5958/0976-5506.2019.01470.0>
- Aqeel, F. (1975). *Creativity and its upbringing*. Beirut, Lebanon: Dar Alalam for Millions.
- Boonpracha, J. (2023a). Creativity of Students' Cultural Product Design Using the SCAMPER Technique. *Journal of Mekong Societies*, 19(2), 179–196.
- Boonpracha, J. (2023b). SCAMPER for creativity of students' creative idea creation in product design. *Thinking Skills and Creativity*, 48. <https://doi.org/10.1016/j.tsc.2023.101282>
- Eberle, B. (2023). *Scamper: Creative games and activities for imagination development (Combined ed., Grades 2-8)*. *Scamper: Creative Games and Activities for Imagination Development (Combined Ed., Grades 2-8)*, 1–96. <https://doi.org/10.4324/9781003423560>
- Elsrour, N. (2002). *The value of the creative process*. Amman, Jordan: Dar Wael for Printing and Publishing.

- Fiadotau, M. (2020). Comparing Ideation Techniques for Games Education: SCAMPER, Gamicards, Brainstorming. *ACM International Conference Proceeding Series*, 22–25. <https://doi.org/10.1145/3409456.3409460>
- Fitz, D. R. (2021a). Characterization of pm₁₀ emission rates from roadways in a metropolitan area using the scamper mobile monitoring approach. *Atmosphere*, 12(10). <https://doi.org/10.3390/atmos12101332>
- Fitz, D. R. (2021b). Scamper monitoring platform to measure pm₁₀ emission rates from unpaved roads in real-time. *Atmosphere*, 12(10). <https://doi.org/10.3390/atmos12101301>
- Gündoğan, A. (2019). Scamper: Improving creative imagination of young children. *Creativity Studies*, 12(2), 315–326. <https://doi.org/10.3846/cs.2019.11201>
- Hassan, S. M. (2023). SCAMPER as a Creative Idea Generation Method: Case Study on Graphic Design Students. *Information Sciences Letters*, 12(4), 1417–1426. <https://doi.org/10.18576/isl/120453>
- Lester, M. M. (2020). Scamper: Generating test suites to maximise code coverage in interactive fiction games. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 12165, 169–179. https://doi.org/10.1007/978-3-030-50995-8_10
- Lopes, R. (2020). A Creative Information System Based on the SCAMPER Technique. *Lecture Notes in Business Information Processing*, 402, 595–606. https://doi.org/10.1007/978-3-030-63396-7_40
- Mahmoud, G. S. (2008). *Football, Concepts, Coaching*. Baghdad, Iraq: Zaki Office.
- Mahmoud, M. A. (2007). *Football and Technique in Football*. Amman, Jordan: Dar Dijlah.
- Master's students. (1998). Faculty of Mathematics, University of Baghdad.
- Mohammed, H. (1996). *Asabeb Al-Asabi Al-Asabi*. Amman, Jordan: Amman Press (2nd ed.).
- Mohideen, A. (1983). Constructing a model of scientific thinking and applying it to find the relationship between academic achievement and academic performance [Unpublished doctoral thesis, Faculty of Education, Azhar University].
- Murad, S., & Suleiman. (1991). The First National Conference on the Care of the Child. Paper presented at the conference, Ministry of Education, Cairo.
- Solís, F. M. (2022). Simplification of the Scamper model for development of creative images in advertising. *VISUAL Review. International Visual Culture Review / Revista Internacional de Cultura*, 9, 2–11. <https://doi.org/10.37467/revvisual.v9.3593>
- Suleiman, A. A.-S. (1999). *Minds of the Future - Strategies for Gifted and Talented Education and Creative Development*. Riyadh, Saudi Arabia: Golden Pages Library.
- Zhang, J. (2023). SCAMPER: Accurate Type-Specific Prediction of Calcium-Binding Residues Using Sequence-Derived Features. *IEEE/ACM Transactions on*

Computational Biology and Bioinformatics, 20(2), 1406–1416.
<https://doi.org/10.1109/TCBB.2022.3173437>