



## A Proposed Educational Design According to the Reigeluth Model in Learning Some Basic Skills in Gymnastics Floor Exercises

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**Abstract:** The current study aimed to design educational sessions according to the Reigeluth model in learning some basic skills in gymnastics, the research problem was manifested in the presence of failure by learners when they performed some basic skills in gymnastics, the researcher deliberately studied this problem and developed appropriate solutions to it through a proposed educational design according to the Reigeluth model, that would raise the level of student performance, and the sample was represented by students of the Department of Physical Education and Sports Sciences, their number was (40) students, And they were divided into two groups: (experimental and control) groups, each group included (20) students, The experimental design was used, and through the results, the researcher concluded that the use of modern and advanced educational methods represented by modern educational design according to the Raygloth model has positively affected the learning process, The researcher recommended the need to work on organizing the content of the study material and designing the classroom environment according to Reigloth model and in line with achieving the educational goals set.

**Key words:** Instructional design, Reigloth model, Basic skills, Gymnastics.

### The study importance:

Gymnastics is one of the important sports that need advanced methods, methods and strategies to teach it so that the level of students' performance can be advanced and this is achieved by knowing the principles and specifications that serve this purpose, which is subject to the extent of consistency and linkage between the external range in which the student moves, whether in the air or on the ground, in which coordination is made between the different parts of the body and how to use the muscles that result in movement and ground movements form an important basis on which most of the movements performed depend on all devices as it forms the cornerstone of teaching skills so it is the basis of

gymnastics, Hence the importance of a proposed educational design according to the Reigeluth model in learning some basic skills on the floor movements in gymnastics to reach scientific results that can be used in the learning process and develop the level of performance.

### The study problem:

The study problem was manifested in the presence of failure by learners when they perform some basic skills in gymnastics, so the researcher deliberately studied this problem and developed appropriate solutions to it through a proposed educational design according to the Reigeluth model that would raise the level of student performance.

### The study objectives:

Designing educational units according to the Reigeluth model in learning some basic skills in gymnastics. Identify the significance of the differences between the experimental and control groups in learning some basic skills in gymnastics.

### The study hypotheses:

- There are statistically significant differences between the pre- and post-tests of the experimental group in favor of the post-tests.
- The existence of statistically significant differences in the post-tests between the experimental and control groups in favor of the experimental group.

### Method:

The researcher used the experimental method in the manner of two equivalent groups for its suitability to the nature of the research problem. Research sample: represented by students of the second stage in the Department of Physical Education and Sports Sciences, which numbered (40) students and they were divided into two experimental and control groups each group (20) students.

**Table (1) shows the homogeneity of the equivalence of the members of the research sample**

Tests	Units	Experimental		Control		Calculated (t)	Sig.
		M.	St.d	M.	St.d		
Forward roll	degree	3.245	0.512	3.222	0.711	0.533-	Insig.
Back roll		3.777	0.612	3.475	0.423	0.491	Insig.
Handstand		3.625	0.432	3.612	0.355	0.124-	Insig.
Cartwheel		3.725	0.421	3.478	0.477	0.077 -	Insig.

### The study tests:

The skill tests included the vocabulary approved within the sectoral board for the gymnastics lesson for students of the second stage in the Department of Physical Education and Sports Sciences, which includes each of the following skills within the skills of the ground exercise (front rolling - back rolling - handstand - Cartwheel).

### Pre-tests:

The researcher conducted the pre-tests for the research sample on 27/2/2023.

Proposed instructional design: Through access to scientific sources and previous studies in gymnastics, educational units have been prepared according to the educational design with the Reigeluth model of the skills studied, as well as benefiting from the results of the exploratory experiment conducted by the researcher on part of the research community and after reviewing a set of sources for the model and taking the opinion of teachers in gymnastics, and appropriate exercises were developed, and

vocabulary was formulated to be appropriate for the members of the research sample divided into (12) units and by two educational units in week, With a time of (90) minutes per unit for the period from 17/3/2023 to 29/4/2023, each unit contained a set of exercises with gradual exercises from easy to difficult, the exercises were applied in the main section of the educational unit, as the educational part included three stages of the model, which is the first stage (comprehensive introduction), which is the main and comprehensive ideas included in the content of the educational material to be learned, with the submission of a set of questions individually or in a group For students. The second stage is a comparison of performance (similar) by displaying educational pictures and videos The third stage (expansion levels) At this stage, the teacher presents the main ideas in the first step and takes all the details of the skill, for example (front rolling) and the mechanism of its implementation through the three levels, which are:

The first level:

Is to detail the skill of front rolling through the presentation of posters or educational videos about the skill of front rolling, the mechanism of its application and types.

The second level:

It is the relationship of what has been mentioned to the first level by presenting the common mistakes of the front rolling skill and then asking students answers to questions asked by the teacher about handling errors.

The third level:

It is related to the second level by addressing common errors when implementing the skill through the typical answer adopted by the teacher or corrected by it, as for the applied part, it includes two parts, the first is to present a live model of the skill and then start applying and through exercises of different levels after moving to the second part, which is to provide feedback and compare performance with what the student has learned.

Post-tests:

The researcher conducted the post-tests for the research sample on 3/5/2023.

### Results:

**Table (2) shows the results of the pre- and post-tests of the experimental group**

Tests	Units	Experimental		Control		Calculated (t)	Sig.
		M.	St.d	M.	St.d		
Forward roll	degree	5.32	0.56	7.88	0.33	2.56	3.9
Back roll		5.14	0.69	7.65	0.52	2.51	3.81
Handstand		4.55	0.71	7.22	0.88	2.67	4.22
Cartwheel		6.34	1.64	7.63	2.81	2.29	6.65

**Table (3) shows the results of the pre- and post-tests of the control group**

Tests	Units	Experimental		Control		Calculated (t)	Sig.
		M.	St.d	M.	St.d		
Forward roll	degree	5.27	2.79	6.35	2.29	0.43	4.23
Back roll		4.15	3.61	5.21	3.72	1.06	2.97
Handstand		4.25	4.96	5.19	8.72	0.55	5.05
Cartwheel		5.43	2.18	6.14	3.19	0.56	5.08

**Table (4) shows the results of the post-test for the two research groups**

Tests	Units	Experimental		Control		Calculated (t)	Sig.
		M.	St.d	M.	St.d		
Forward roll	degree	7.88	0.33	6.35	2.29	1.53	2.06
Back roll		7.65	0.52	5.21	3.72	2.44	5.67
Handstand		7.22	0.88	5.19	8.72	2.03	3.58
Cartwheel		7.63	2.81	6.14	3.19	1.49	2.09

**Discussion:**

The researcher attributes the reason for these differences between the two research groups to the educational design of the Reigeluth design and its role in obtaining the learning process for some basic skills on the floor mat in gymnastics, as it has a positive impact with its content of a variety of exercises, which have been selected with extreme precision, and this is confirmed by Adel Abdel Basir (1998-11) that the gymnast needs special physical components developed by the work of one muscle or muscle groups in the same way that they work during the performance of The basic movements used in the competitions in terms of the kinetic path and the strength and time of their performance. The researcher also attributes the differences that appeared in favor of the experimental group to the educational design in the Reigeluth design as it was adopted in the learning and teaching process to present the educational material in an organized manner based in its work on modern sources to display footage and videos, still and moving images, sound, and written texts of the skills under research on the site designed by the researcher, which contains a set of exercises that work in the same kinetic paths of the skill, but performed by the student in more than one way, including Standing and sitting, whether as part of a skill or grouped in the form of a skill, each complex skill is basically a combination of the basic forms that the body takes and is formed by, Kristy Browland points to the importance of qualitative exercises, which means the type of exercises in which the motor path is similar to the skill and in the forms that are collectively the final form of the movement (2017-13), which helped the members of the experimental group learn better.

**Conclusions:**

The emergence of a discrepancy in the tests used in the research for the two groups in the pre- and post-test and in favor of the post-test there are significant differences between the two research groups and in favor of the experimental group. The use of modern and advanced educational methods represented by modern educational models according to the Reigeluth design has positively affected the learning process in gymnastics. The number of educational units used was more appropriate and appropriate to the skills under consideration.

**Recommendations:**

Emphasis on the use of modern educational models in all learning processes and placing them within educational programs. Work on organizing the content of the study material and designing the classroom environment according to the designs in the Reigeluth model and in line with achieving the educational goals set. Develop special exercises that contribute to learning in the educational curriculum.

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