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Research Article

The effect of the Inverted row strategy on learning motivation fostudents' basic football skills

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Abstract: The research has aimed at to set a measure of learning motivation depending on the use of the inverted row strategy for basic skills in football for students of the first intermediate school level, within the curriculum of the Ministry of Education, where the researcher used the experimental approach. Therefore, the sample was chosen randomly for the average Shishbar Intermediate School in Al- Mahmudiyah Education Department, where the sample was divided into two experimental groups, Division (D) and Controlling Group Division (H), and the number of each group (10) students, i.e. the total total of the research sample is consisted of (20) student.and the pre-test for the research sample was applied through the learning motivation scale prepared by the research, after which the educational program with the strategy was applied to the research sample and continued (8) Weeks and after the completion of the educational program, the post-test of the research ample was completed, and it reached significant results through the significant differences between the pre-test and the post-test in the learning motivation for the research, sample and in intermediate school favor of the post-test.Furthermore, differences were found in the post-test of the control and experimental groups in favor of the experimental group that applied the Inverted row strategy of learning motivation for basic skills in football, so the researcher recommends applying this strategy using a measure of motivation Learning that has been prepared in other stages, because oats clear impact on students' learning motivation.

1. Introduction

Society is witnessing broad advances in information technology that covered many areas and in light of these changes, the learning process had to be reconsidered by searching for strategies that fit these technological developments. Among the strategies that depend on the use of modern education technology, that is, what is done during the class session is done at home, so that the student's exposure to the study material outside the classroom, whether through an educational video that the teacher records to explain a lesson, Learning motivation is one of the basic conditions on which the achievement of the goal of the learning process depends in any of its many fields, whether in learning methods and parties of thinking, forming attitudes and values, modifying some of them, acquiring information and knowledge, solving problems or learning some skills, etc. Here lies the importance of research in a scientific attempt to find out the learning motivation for basic skills in gymnasiums for first-grade students within the curriculum of the Ministry of Education through the numbers of the learning motivation scale. The researcher relied on many previous studies, since the study (Munther Mahmoud Khalifa, 1) came that there are significant differences between the pre and post test in the motivation for learning for basic skills in the sense of mastery and in favor of the post test, and the researcher also noted that there are significant differences between the pre and post test and in favor of the post test in motivation Learning to learn some basic skills of gymnasiums for first-average students, by means of a measure of learning motivation.

2.Research Methodology

The researcher has used and depended on the experimental method (designed by the experimental and control groups) so as to suit it with the nature of the rsearch problem as in Table (1)

Table (1)
Design for the experimental and control groups

The groups	The first step	The second step	The third step	The fourth step

Experimental group (10) students	A pre- test in learning motivation	Implement the reverse row strategy	The post test	The difference between the pre and post tests
Control group (10) students	The post test in learning motivation	Implementing the adopted method	The post test	The difference between the pre and post tests

3.Research community and its sample

The research community was determined represented by the first intermediate class students of the Shishbar intermediate school for boys in (Al- Mahmoudiya Education Department) for the academic year 2020/2021, and the first-grade students were deliberately selected as this stage is new one and the basic skills of football are taught in it, and the research sample was randomly selected (A lottery) for the first intermediate grade in the same school, which consists of six (6) divisions, and Division (D) was chosen, and the number of students in the sample consist of ten (10) students, and Division (E) and the number of students in the sample ten (10), but the number of students in the first grade for all intermediate students in Shishbar intermediate school was consisted of ninety (90) students divided into six divisions , each division consisted of fifteen (15) students, that means , the percentage of the research sample was (22.2of ninety 2%) from the research community. The strategy of the reverse class of Division (D) was applied and the method followed for Division (E) through (lottery), After the people were chosen (by lot).

4.Devices and tools used and depended in the research

* Chinese laptop computer (HP).
*Two Chinese digital cameras.
*Several people of (30).
* four (4) Casio electronic watches.
* ten (10) Footballs for legal count .
*Two (2) whistles.
*Twenty (20) sport dresses.

5.Choosing basic football skill for futsal

The basic skills of football, Futsal, were chosen based on the curriculum of the Ministry of Education for intermediate schools, Physical Education Teacher Manual, Intermediate School - First Grade, Appendix (1).

6.scale of Learning motivation

The researcher used the learning motivation scale designed by (Belah Farroujah,2) and modified by Niran Khalil Abdul Qadir, which aims at identify the student's learning motivation as in Appendix (2). in the research.the researcher has changed the idiom "Gymnastic" into the word "Futsal' so as to be fit with the activity in the research.

7.Scientific coefficients of scale

7-A Validated content: The researcher has used the validity of the content based on the opinion of experts in judging the validity of the measures, and Table (2) shows the survey in which the opinions of the experts will be taken with the truth of the measures or not. It mainly aims at knowing the extent to which the scale represents the behavioral phenomenon or the topic that it aims at measuring by depending on the of experts. Which the researcher will take, therefore, (16) paragraphs were retained after excluding (7) paragraphs out of (23) paragraphs, and after the scale appeared in its final form, (two marks) were given for answering yes and (one score) for answering with the word "no".

Table (2)
Validity of the content of the paragraphs of the learning motivation scale

# item No.	Number of experts	conformists	Non-conformists	Chi-square	Sig	indication
1		**9**	**-**	**9**	**0.00**	**Moral**
2		**6**	**3**	**1.00**	**.3170**	**Immoral**
3		**9**	**-**	**9**	**0.00**	**Moral**
4		**9**	**-**	**9**	**0.00**	**Moral**

5		**9**	**-**	**9**	**0.00**	**Moral**
6		**8**	**1**	**5.444**	**.0200**	**Moral**
7		**8**	**1**	**5.444**	**.0200**	**Moral**
8		**8**	**1**	**5.444**	**.0200**	**Moral**
9		**7**	**2**	**2.778**	**.0960**	**Immoral**
10		**8**	**1**	**5.444**	**.0200**	**Moral**
11		**8**	**1**	**5.444**	**.0200**	**Moral**
12		**7**	**2**	**2.778**	**.0960**	**Immoral**
13	**9**	**8**	**1**	**5.444**	**.0200**	**Moral**
14		**9**	**-**	**9**	**0.00**	**Moral**
15		**8**	**1**	**5.444**	**.0200**	**Moral**
16		**9**	**-**	**9**	**0.00**	**Moral**
17		**8**	**-**	**5.444**	**.0200**	**Moral**
18		**7**	**2**	**2.778**	**.0960**	**Immoral**
19		**5**	**4**	**.1110**	**.7390**	**Immoral**
20		**8**	**1**	**5.444**	**.0200**	**Moral**
21		**6**	**3**	**1.00**	**.3170**	**Immoral**
22		**9**	**-**	**9**	**0.00**	**Moral**
23		**7**	**2**	**2.778**	**.0960**	**Immoral**

8.The scientific foundations of the learning motivation scale

The researcher extracted the scientific basis for the scale in order to make it applicable to the research sample.

8-A Distinguishing Power: The researcher conducted the discriminatory power on a group of eighty (80) students for the Al Khadhra'a Intermediate School for Boys on Tuesday, Feb11th 2020, in Al- Mahmoudiya Education Department and they are from the original community. %) Of the results of the upper group, and (27%) of the results of the lower group, and then the (t, test) was used for the purpose of calculating the discriminatory power as it is shown in Table (3).

Table (3)
The discriminatory power of scale

# item No.	**Lower group**		**The top group**		**The computed t value**	**The real trend**	**Variation type**	**Coefficient of torsion**
	s	**P**	**s**	**p**				
1	1.0000	.00000	1.8636	.35125	11.533	.000	moral	.471
2	1.0000	.00000	1.9091	.29424	14.491	.000	moral	.051
3	1.1818	.39477	2.0000	.00000	9.721	.000	moral	.471
4	1.0000	.00000	1.7727	.42893	8.450	.000	moral	.257
5	1.0000	.00000	1.7273	.45584	7.483	.000	moral	.309
6	1.2273	.42893	2.0000	.00000	8.450	.000	moral	.471
7	1.1818	.39477	2.0000	.00000	9.721	.000	moral	.416
8	1.0000	.00000	1.8636	.35125	11.533	.000	moral	.526
9	1.5000	.51177	2.0000	.00000	4.583	.000	moral	.701
10	1.4091	.50324	2.0000	.00000	5.508	.000	moral	.701
11	1.0000	.00000	1.7273	.45584	7.483	.000	moral	.257

12	1.1364	.35125	2.0000	.00000	11.533	.000	moral	.309
13	1.0000	.00000	1.9091	.29424	14.491	.000	moral	.471
14	1.1818	.39477	2.0000	.00000	9.721	.000	moral	.583
15	1.2727	.45584	2.0000	.00000	7.483	.000	moral	.362
16	1.0000	.00000	1.7727	.42893	8.450	.000	moral	.416

Moral < (0.05) (42at centigrade under indication(0.05)..

8-b Validate the scale:

The researcher has used the validity of the content in order to find the validity of the scale as the correlation coefficient was calculated between the sub-test scores with the total score. If it is high, it indicates internal consistency and then indicates the validity of the test.

Table (4)

Correlation coefficient of the scale paragraphs with the total score of the scale

# Item No.	**coefficient of simple correlation**	**True significant correlation**	**indication**	**Phrase number**	**coefficient of simple correlation**	**True significant correlation**	**indication**
1	.287	.010	Moral	9	.320	.004	Moral
2	.672	.000	Moral	10	.595	.000	Moral
3	.604	.000	Moral	11	.066	.562	Moral
4	.303	.006	Moral	12	.602	.000	Moral
5	.646	.000	Moral	13	.241	.031	Moral
6	.696	.000	Moral	14	.287	.010	Moral
7	.249	.026	Moral	15	.272	.015	Moral
8	.656	.000	Moral	16	.644	.000	Moral

Moral <(0.05)

8-C Stability of scale

The stability of the scale I considered s one of the important scientific foundations in the process of building standards, as it is a major pillar of its construction. The scientific test or scale must be characterized by its stability in measuring any concept or variable aimed at measuring it, and to calculate the stability of the scale as a whole, i.e. its total degree, it is, as is known, for each One of the methods of calculating the reliability has the pros and cons associated with it, especially in each method that differs from the other, and for the purpose of eliminating these negatives, the stability of the scale was verified in four different methods as follows:

A - Split Half Method: Through this method, the consistency is found by dividing the scale expressions into two equal parts, which includes individual expressions and another for even expressions, and find the simple correlation coefficient of Pearson between the degrees of the two parts, and the fact that the number of expressions is an even number (16) A statement for this, the researcher used the half-segmentation method for individual expressions with (8) phrases and an even number of (8) phrases and upon applying this method it appeared that the value of the correlation coefficient (0.857) and because this correlation refers to half the number of expressions, it must be found The value of the stability factor for all of the scale expressions, therefore, the correlation coefficient (Spearman - Brown) was used, which turned out to be (0.831), which is a high stability value.

B- The Alpha- cronbach method: In this equation, mention,(Mahmoud Ahmed Omar and others,3) "The Alpha Cronbach equation is suitable for use with self-assessment measures that allow the subject to choose an answer from among several possibilities that indicate the extent of a certain behavior occurring in him". Therefore, the researcher proceeded to treat the data statistically using the Al-Phacronbach equation and find the interpreted variance to verify the stability of the scale as he interpreted the percentage of more than (50%), as the degree of the alpha coefficient was (0.874), which is a high coefficient and indicates good stability. Very, as shown in Table (4).

C- Finding the standard errors of the stability parameters of the scale:

The circumstances that accompany the application of the scale generate errors in the grades that cannot be controlled by the implementer, and these errors have a meaning that is no less than the reliance of stability to

express acceptance of the scale, as these errors are inversely proportional to the correlation coefficients, that is, the greater the value of the correlation coefficient the fewer the values These errors, and accordingly the standard errors were calculated for the values of the stability coefficients for each of the four methods and as shown in Table (5).

Table (5)
Scale stability coefficients

#	Methods of calculating stability	Stability coefficients	Score (Sig)	Observations
1	Elva - Kronbach	0.874	0.000	Acceptable
2	Halftone hash	0.857	0.000	Acceptable
3	Spearman Brown	0.831	0.000	Acceptable
4	Cotman	0.830	0.000	Acceptable

9.Exploratory experience

The researcher conducted an exploratory test of the scale and before taking the pre-test on Tuesday, 2/4/2020, and a sample consisting of (10) students from the first grade with the average class (A) of the green intermediate was tested by lot..

10.The pretest

The researcher conducted the pre-test on Saturday 12/12/2020 for the scale of learning motivation for the research sample at 9 am, and they are students of the first intermediate class for the Chishbar intermediate level for boys in the classroom of the school and for the experimental and control groups by distributing the questionnaire for the scale to the students.

11.The main experience

The mechanism of action of the reverse row strategy:

The first part: outside the lesson and the nature of learning is self-directed in a direct way that depends on information technology, smart devices and social media, as it was agreed with the students to define a program of communication (Telegram) to communicate by preparing video clips that take (5-10) minutes to record texts He displayed the samples for each skill with giving knowledge about skills and about the paragraphs of the football law to halls. Each section was sent two days before the scheduled lesson. The time for discussion and communication between the teacher and students was set from 9-8 pm the day before the lesson in order to discuss the video and solve problems And difficulties, if any, and at this time the teacher is available to answer questions, if any.

Part Two: Within the lesson, the answers to the questions contained in the content of the video clip were received and the skills were applied in a practical manner, with feedback given by the teacher when needed.

12.Dimensional tests

The post-tests of the research sample were conducted on Wednesday, 1/30/2021, and at nine o'clock in the morning in the halls of the Green Intermediate School for Boys and for the experimental and control groups, by distributing the scale form to the students.

13.Statistical means

The researcher used the statistical bag (SPSS), which included: (arithmetic mean, standard deviation, arithmetic mean (T) test for independent samples, simple correlation, and varconbag equation).

14. Results:

Table (6)
Pre and post test teams for the experimental group

the test	The pretest		Post test		f	F h	Calculated v	Sig	indication
	s	p	s	p					
Learning motivation	22.500	1.840	27.900	1.663	5.400-	.896	6.021-	.000	moral

Significant < (0.05) Degree of Freedom (9) And below the level of significance(0.05).

Table (7)
Pre and post test teams for the control group

the test	The pretest		Post test		f	F h	Calculated v	Sig	indication
	s	p	s	p					
Learning motivation	22.900	1.663	25.400	1.074	2.500-	.341	7.319-	.000	moral

Significant l < (0.05) Degree of Freedom (9) And below the level of significance(0.05).

Table (8)
A dimensional comparison between control and experimental

the test	experimental group		control group		Calculated v	Sig	indication
	s	p	s	p			
Learning motivation	27.900	1.663	25.400	1.074	3.992	.001	moral

Significant < (0.05) Degree of Freedom (18) And below the level of significance(0.05).

15.Discussion

Through Tables (6) and (7) it becomes clear that there is a significant difference between the pre and posttest in favor of the posttest in the two groups, and also through Table (8) it is clear that there is a significant difference in the post test between the experimental group and the control group and in favor of the experimental group that used the strategy Inverted row.

The research attributes the reason for this to the reverse classroom strategy because of its acceptance and excitement, which simulates the aspirations of the target age group through which the desired goals can be achieved due to the ease and possibility of using it at any time and place as through which the educational material is presented clearly, smoothly and accurately, taking into account individual differences. It enables the student to view the educational material with the speed and the number of views that he deems appropriate for him, and through the researcher's design of the educational material that was suitable for the research sample in terms of

content and method of presentation and taking into account the principle of repetition and gradation from easy to difficult and from simple to complex. The researcher agrees with (Ghazi ,4) The use of methods of repeating the practice of the skill intended to be learned for novice players in a balanced manner helps to learn it as required. This is what was confirmed by (Emad Al-Zaghloul and Nael Al-Bakour, 5), Individuals' motivation towards learning classroom experiences increases as learners feel that learning such experiences will contribute to achieving their future goals and this is done by generating a feeling and perception among these learners that learning these experiences meet the needs and motives They have .

The researcher attributes the reason for this also to the effectiveness of the educational program prepared by the researcher, which was applied to the two groups, and the effectiveness of this program has a positive effect on the development of learning motivation, as this program contains techniques that depend on inclusiveness, interdependence, renewal, diversification, excitement and increasing the motivation to learn, which led to the opening of capabilities and capabilities The psychological growth and development of the student, as a result, led to the elimination of the factor of boredom and boredom, but on the contrary, insistence, encouragement and perseverance to improve and develop the motivation of students, which is what the researcher sought and set as a goal, and this is what (Muhammad Nimah,6) confirmed, “The individual tries to reach meaning in his life by setting a goal that lives Striving to achieve it, realize the potentials, and succeed in what it seeks to achieve in terms of goals ".

16.Conclusions

1- The strategy of the flipped classroom had a positive effect on learning basic skills in gymnasium football for first-intermediate students.

2- The flipped classroom strategy clearly contributed to increasing the learning motivation and motivating them to learn better.

3- The motivation to learn by means of the flipped classroom strategy had a great role in breaking the barriers of fear and anxiety for students and learning skills without hesitation.

4- The flipped classroom strategy contributed to taking into account the individual differences between students and positively affected their performance through the possibility of replaying the video more than once.

5- The flipped classroom strategy led to the creation of appropriate educational conditions for students, stimulating their enjoyment and increasing their excitement through educational videos and their ease of use.

6- The learning motivation scale that was prepared revealed the students' level of motivation to learn.

17.Recommendations

1. The dependence of the learning motivation measure by teachers on students of the first average in the halls football subject.

2. Preparing a measure of learning motivation by researchers for other activities.

18.References

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