

The relationship between basic skill abilities in basketball and cognitive achievement according to the "dick and carey" model

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Introduction and research problem :

Education depends on converting scientific facts into practice and life behavior, so it plays an important role in determining the future of the nation and its development has become characterized by comprehensiveness to deal with all aspects of the learner, which requires work to develop the educational process in order to keep pace with the requirements of that age. It is necessary for teachers to be aware of With the latest methods and modern technologies that enable them to communicate knowledge to learners and create better areas for improving the teaching and learning process, hence the importance of choosing the appropriate teaching method to achieve the desired goal, and this choice depends on the teacher's experience and the extent of his awareness of the nature, components and variables of different and changing educational situations .

Yasser **Refaat Jamal (2017)** and **Kurdistan Hamid Muhammad (2018)** mention that it is important to focus on what is appropriate to the conditions and capabilities available in the educational environment and the needs of learners, the impact of designing blended learning environments according to models that enhance these educational environments, especially The "Dick and Carey" model, which seriously contributes to the depth of learning and self-regulation of the learning processes of learners by ensuring that educational outcomes are achieved that are commensurate with the functional needs of each discipline, thus enhancing the possibilities of continuous learning and retaining information and using it in other educational and professional life situations. The model is considered one of the most widely used models. In educational design, it is based on the systems method, which includes defining the problem, defining needs and analyzing them in order to start at the starting point in building the educational program, as well as analyzing the tasks to determine the general goals and objectives accurately, taking into account the different characteristics of learners, entrance behavior and pre-learning requirements, while conducting an analysis of educational behavior at every step of the steps. The program, and this model is characterized by comprehensiveness and clarity in its steps and logical sequencing, and it is easy and simplified. In view of the educational design models, recent trends call for the necessity of merging educational design models with modern technological developments, and taking into account that integration during defining the stages and procedures of the educational design model presented to the learner (271:2) , (417:1) .

Instructional design is one of the main processes of educational technology, which has many definitions. There are those who see it as a systematic approach to planning and producing effective educational materials, and others refer to it as a systematic approach to planning, developing, evaluating and managing the educational process effectively, and others refer to it as a set of organized systematic steps and procedures. in which scientific knowledge is applied in a field .

Human learning to define the full educational conditions and specifications of the educational system, including sources, positions, programs, lessons, and decisions. Sills and Ritchie defined the term educational systems design as “an organized procedure that includes the steps of education analysis, design, development, implementation, and evaluation” (14), (16), (18) .

Dick and Carey's educational design model consists of nine phases :

The first stage: needs are assessed for the purpose of defining goals, that is, defining the current situation and the desired situation, then the educational objective is determined, which determines what the learner should be able to do after the end of learning.

The second stage: After the first stage, two steps are implemented simultaneously, which are conducting the educational analysis, and the learners and context analysis. The educational analysis is a hierarchical analysis as suggested by Gagner, with the addition of procedures for building cluster analysis schemes for verbal information. As for the learners and context analysis, it is a step in which the required skills are identified. So that learners can achieve the learning task, such as verbal skill, intellectual, cognitive, and personality traits, as well as information about the learning environment is determined.

The third stage: In this stage, performance objectives are written in a measurable manner, so that needs and objectives can be translated into specific and detailed objectives.

The fourth stage: In this stage, the evaluation tools are developed. The referenced test tools are developed to include each of the learning objectives.

The fifth stage: the educational strategy is developed to help learners achieve the set goals, and this educational strategy is determined before educational activities, during presentation of information, during practice and feedback, and when testing and follow-up, and this strategy is built on the basis of modern learning theories. **The sixth stage:** In this stage, educational materials are developed and selected, using learner evidence, experiments, and educational materials such as: teacher, students, videos, multimedia, and others.

The seventh stage: the formative evaluation is designed and implemented to provide the necessary data to revise and improve educational materials and make them more effective.

The eighth stage: In this stage, the evaluation is summarized , which is the step that defines the various methods for collecting , summarizing and analyzing the data collected during the educational development process, which information can be used to facilitate revision decisions.

The ninth stage: in which the final evaluation is designed, in order to determine the degree of achievement of the goals (280:8) .

The researcher noticed, through his review of research and scientific references that he was able to reach, which dealt with many sports in general and basketball in particular among learners, it became difficult to choose a teaching method based on many variables surrounding the educational process, the most important of which is the goal of the subject to be taught. The educational environment, the available teaching aids, the capabilities, the type of skill, the educational level of the students,

the physical and cognitive level and their relationship to the type of skill learned, the type of learner, the teaching method, the evaluation method, the personality of the teacher and other variables, which imposes the choice of one or more specific teaching methods according to these variables. Therefore, the teacher's job is limited to adapting his method and method in proportion to his educational units and the different levels of students, taking into account individual differences in order to achieve the largest possible number of educational goals to be achieved, and that according to the contrast between the use of traditional methods in education and modern technological methods in teaching the basic skills of basketball to stage students The researcher had to find a new method that combines the integration of the two methods and their advantages in one method according to the "Dick and Carey" model, which is the systems curve method that is the backbone of learning technology, because of its steps and procedures that are compatible with the modern teaching philosophy in terms of analyzing students' needs and organizing the content. The educational program that focuses on the learner's practice of mental processes and their positivity in educational situations and the evaluation of their performance, which called the researcher to the relationship between skill abilities in basketball and cognitive achievement according to the "Dick and Carey" model.

research aims : Identifying the relationship between basic skill abilities in basketball and cognitive achievement according to the "Dick and Carey" model for students of the second cycle of basic education .

Research hypotheses : There is a correlation between the skillful abilities in basketball represented in (the chest pass, the dribble sentence, the free throw) and the cognitive achievement, which is represented in the total score for each of the (historical, legal, skillful) axis .

Terms used in the search :

Dick and Carey model: A set of procedures and steps that are interrelated, organized, and interrelated with each other, which includes identifying and analyzing the educational and behavioral goals and needs of learners, developing assessment tools, developing a learning strategy, developing and selecting teaching-learning materials, and designing final evaluation procedures for educational design

Previous studies :

- "**Kurdistan Hamid Muhammad**" (2015)(1) conducted a study entitled "The Effectiveness of an Instructional and Learning Design According to the Dikokari Model in Achievement and the Development of Scientific and Technological Exploration - Among Students of the Electricity Department at Sulaymaniyah Technical University", and it consisted of (37) (students) They were randomly distributed into two groups, one of which was experimental, which was studied using the instructional-learning design according to the Dick and Carey model and the other as a control group. under search. Karmian University Journal / Kalar Technical Institute, Sulaymaniyah Technical University / College of Education, Salahaddin University 2018 .

Research plan and procedures:

Research Methodology: The researchers used the descriptive approach because it is appropriate to the nature of this study.

Research community and sample: The research sample was chosen by the intentional method from the students of the third year of middle school from the last cycle of basic education in the city of Minya for the academic year 2022/2023 AD .

The moderation of the sample members in the variables under study:

The researcher made sure of the moderation of the distribution of the members of the experimental and control groups in light of the variables of growth rates, including (weight, height, age) and the variables of the basic skills of basketball (debating and peaceful shooting) from the last cycle of basic education in the city of Minia .

Table (1)
The arithmetic mean, median, standard deviation, and skewness coefficient in the variables (under study) for the research sample as a whole (n = 36)

torsion skewer	standard deviation	Madam	average	Single Measurement	the exams	μ
0.227	1.513	44.792	45.370	Kg	the weight	1
0.680	2.661	150	151.57	Centimeter	height	
0.681	0.489	12	12.346	year	the age	
صفر	0.858	4	4	degree	The pectoral pass	2
0.582-	0.604	3.5	3.384	degree	The interlocutor's sentence	
1.250	0.444	4	3.730	degree	free throw	
صفر	0.561	4	3.884	degree	historical axis	4
0.227	1.513	44.79	45.370	degree	legal axis	
0.517-	1.909	16	15.846	degree	skill axis	
0.180-	2.964	40.50	40.538	degree	Total marks	

It is clear from Table (1), which refers to the arithmetic mean, standard deviation, median, and the torsion coefficient of the variables (under study) for the research sample individuals before the implementation of the research experiment, that the torsion coefficient ranged between (-0.517), (1.250), i.e. between (-3), (+3), and this means that these variables fall within the normal moderate curve, which indicates the homogeneity of the research sample members in the variables (under study).

Data collection tools: First:

Devices and Tools: The researcher identified the tools used in the research according to the following conditions .

- To be effective in measuring the specific aspects of the research.
- To have scientific transactions of sincerity, stability and objectivity.

Scientific devices: The researcher used the following scientific devices :

1/100th of a second stopwatch. A manual dynamometer to measure grip strength. - Medical scale (to measure weight) in kilograms. Restameter device for measuring length / cm.

The researchers compared some of the devices by applying the measurement to other devices of the same type and in the same conditions, and they gave the same results, which indicates the validity and reliability of the results of those devices.

B- Tools : The researcher used the following training tools: - basketball . - whistle. - Wooden box, cones and flags. - Parallel bar fixed with wires. Medicine balls weighing 3 kg. - A ruler with a length of (50) cm. Centimeter tape measure. Equipped basketball court. Chalk and explanatory signs.

Second – Tests :

The researcher used the following tests:

1- Skill tests : The researcher identified skill tests based on dealing with the use of these tests to measure basketball skills (under study):

A- Scientific references and previous studies such as Arbaugh, J (2015) (74), Awwad, F., Nofal, M. Salti, N. (2015) (5), Fouad Awad, Nofal, Muhammad Salti. Such as the study of Ayvaz, T (2018) (77), Gradel, K. & Edson, A. (2019) (51), Morgan, Philip (2017). (11). B- These tests were presented to experts who have experience in the field of not less than (10) years to ensure their suitability for measuring these skills and suitability with the dental stage under discussion. The experts agreed on the appropriateness of these tests with a rate of (75% : 100%) .

These tests were as follows:

- (1) The chest pass test.
- (2) Examination of the interlocutory sentence of both its sub and upper types.

(3) The peaceful shooting test. Scientific coefficients for the tests under research: The researchers calculated the scientific coefficients for the tests under research from validity and reliability from the period from Sunday 3/3/2022 AD to Sunday 3/10/2022 AD.

A- Validity : The validity of the tests under study was calculated through the validity of the peripheral comparison, on an exploratory sample similar to the research community and outside the basic research sample, numbering (16) sixteen students. And there are (4) four students from the second cycle of basic education in field and track competitions, and the significance of the differences between the two quarters has been calculated as shown in Table (2).

Schedule (2)

The significance of the differences between the upper and lower quartiles in the skill variables (under study) using the Mann-Whitney labarometric method (n = 8)

Error probability	z	w	u	(4) lower spring		(4) spring top		Single Measurement	the exams
				sum rank	average rank	sum rank	average rank		
0.018	2.366-	10.00	0.00	10.00	2.50	26.00	6.50	degree	The pectoral pass
0.022	2.291-	10.00	0.00	10.00	2.50	26.00	6.50	degree	The interlocutor's sentence
0.017	2.381-	10.00	0.00	10.00	2.50	26.00	6.50	degree	free throw

It is clear from Table (4) that there are statistically significant differences between the two groups of the upper and lower quartiles in the physical tests and the numerical level under study and in the direction of the group of the higher quartiles, as the values of the probability of error are a function at the level of significance (0.05), which indicates the validity of these tools and their ability to distinguish between groups .

B- Stability: To calculate the stability of the tests under study, the researcher used the method of applying the test and re-applying it, on a sample of (20) twenty students from the research community and from outside the original sample, with a time interval for the disappearance of the effect of learning between application and re-application for a period of (7) seven days, and the table (5) Shows the correlation coefficients between application and re-application .

table (3)

Correlation between application and reapplication In physical and skill variables (under research) (n = 16)

correlation coefficient	second app		first application		Single Measurement	Single Measurement	the exams
	p	M	p	M			
0.842	0.640	4.125	0.462	4.25	degree	degree	The pectoral pass
0.917	0.835	2.875	0.886	2.75	degree	degree	The interlocutor's sentence
0.920	0.7440	3.375	0.886	3.25	degree	degree	free throw

(t) tabular value at the level (0.05) = 0.444

It is clear from Table (3) that the correlation coefficients between the application and reapplication of the basic skills variables of basketball (driving and peaceful shooting) from the last episode of basic education in the city of Minia (under study) ranged (0.920: 0.842), which are statistically significant correlation coefficients, as the values of The calculated (t) is greater than the tabular (t) value at the significance level (0.05), which indicates the stability of this test .

Cognitive achievement test (researcher's design) :

To design the cognitive achievement test, the researcher followed the following steps :

The researcher looked at some scientific references specialized in building cognitive tests, including the reference of Nizar Al-Nafakh and others (2016), Mustafa Bahi (2015), and Ali Al-Fartousi (2015), as well as previous studies that dealt with the design of a cognitive test, such as Medhat Abdel-Rahman (2012), and Nabil Khattab (2009), Waleed Mustafa (2009), and by showing the researcher these references and studies, the researcher followed the following steps in designing the test :

A- Determine the purpose of the test:

The test aims to measure the level of cognitive attainment of information and knowledge for beginners in teaching basketball skills (under study), as well as some historical and legal aspects of basketball .

B-Formulating the behavioral objectives of the tests :

After defining the general objective of the cognitive achievement test, it was formulated in the form of measurable behavioral objectives so that the novice becomes able to:

- Determine the date of the start of basketball practice.
- Determine the date of the beginning of the use of basketball skills (under research).
- To mention the date of establishment of the International and Egyptian Basketball Federation and the beginning of the spread of basketball. To know the methods of performing the skills (under research). Mention the number of attempts allowed for the contestant.
- To develop the interests of skills in basketball.
- To mention the legal standards for the basketball court and the legality of playing in accordance with the rules of competition .
- Mention the legal standards for basic skills in basketball. To know some of the legal rules of the match.
- To describe the correct technical performance of the basic skills of technical performance in basketball.
- To mention the technical stages of some of the basic skills of technical performance in basketball.
- To identify the technical errors committed by students in some basketball skills. - To describe the correct technical performance of the skills prescribed for preparatory stage students in basketball.
- To mention the types of dialogue and the legality of its performance in accordance with the rules of the game.
- To recognize the technical errors that he commits within the limits of the movement sequence and the position of the body.
- To mention the technical stages of each of the chest pass, dribble and free throw. - ---
- To mention the stages of technical performance of some of the skills prescribed for students of the preparatory stage for basketball.
- To mention the number of correct steps while walking with the ball, as well as the time intervals. Points are calculated in different scoring modes, in proportion to the scoring locations.
- To describe the technical errors during the interview and calculate the necessary points for these errors.
- To recognize the meaning of the sound signals used in calculating the timing of attack and defense.
- To recognize the lines on the playground and their spatial and temporal implications.
- To recognize the errors that are counted and which are not.
- To be fully aware of the legality of docking with the opponent without committing mistakes.

Table (4)

The percentage of expert opinions on the cognitive achievement test axes under discussion and the relative importance of the agreed axes

approval rate	Number of approvers	the hub
%81.81	9	historical axis
%100	11	legal axis
% 100	11	skill axis

It is clear from Table (4) that the percentage of the experts' opinions about the suitability of the cognitive achievement test subjects under discussion ranged between (81%: 100%). The axis of security and safety factors has been omitted, and thus the axes approved by the experts reached (3) three axes, which are the "historical axis, the legal axis, and the skill axis".

E- Formulation of test questions: The researcher put a set of questions for each axis of the test, and the total number of questions for each axis of the question axes reached (80) questions divided into (3) axes "historical, legal, skillful", and the number of difficult questions was formulated, and he avoided using words that carry more than one meaning .

F- Determine the type of questions: The test took place on one type of questions, which is multiple choice, according to the opinions of the experts, "three tests." The following conditions were taken into account in formulating the test questions: "the appropriateness of the questions for the dental stage – clarity – comprehensiveness – objectivity – scientific accuracy – specificity – the impossibility of pronouncing more than meaning".

g- Test instructions: Before answering the test questions, the following instructions must be followed in terms of writing the data of the learner, then reading each question carefully and slowly, giving the opportunity to think before answering and not leaving any question unanswered. There are some questions that contain more than one molecule that must be answered all together. Knowing that more than one answer to one question counts as the wrong answer .

h- Initial image of the test:

(1) The initial picture of the test was shown to some experts in the field of curricula, teaching methods and teaching basketball, consisting of (11) experts (Appendix 3) in order to identify the extent to which each question represents the axis to which it belongs, and the experts are required to express their opinion by deleting, adding or amending Or transfer any question in the light of their observations, and the questions that obtained a percentage of (81: 100%) were taken from the total opinions of the experts.

(2) A number of (90) questions were set, where the questions that got less than 81% of the experts' agreement were deleted, and the number of deleted questions reached (10) questions, so the cognitive achievement test questions under discussion became (80) questions. Table (5) shows the number And the numbers of questions excluded from the test.

table (5)

The number of questions that were omitted from the preflight of the cognitive test

Deleted question numbers	Deleted question numbers	The number of deleted questions	The questions are in the initial picture	the hub
10	9,8	2	12	historical axis
41	58,57,56,54,53	5	46	legal axis
29	81,80	2	31	skill axis
80		9	89	the total

The researcher has written the form of the test in its final form by arranging the questions according to the axis to which they belong. The test also includes special instructions that explain how to answer and how to deal with the test .

Test Correction: The test was corrected by giving each correct answer one point, and thus the test score ranged between (0:60), and the test correction key was prepared (Appendix 7).

g- Analyzing test items:

The researcher conducted an exploratory study to identify the appropriateness of the test for application to the research community by applying it to a random sample of (16) learners from the research community and outside the original sample. The study aims to the following:

(1) To identify the contribution of the formulation of questions to the research sample.

(2) To identify the extent to which the respondents understood the instructions of reporting.

(3) Calculating the coefficient of ease, difficulty, and discrimination for informative questions.

Ease coefficient : The ease coefficient was calculated for the cognitive achievement test in question using the following equation :

$$\text{Ease factor} = \frac{\text{The correct answer to the question}}{\text{Correct answer} + \text{wrong answer}}$$

Difficulty coefficient: Since the relationship between ease and difficulty is a direct inverse relationship, their sum is equal to (1), true, as:

$$\text{Ease coefficient} = 1 - \text{Difficulty coefficient.}$$

$$\text{Difficulty coefficient} = 1 - \text{Ease coefficient.}$$

Distinction coefficient:

To calculate the uniqueness of the test questions, the researcher used the following equation:

$$\text{Discrimination coefficient} = \text{ease coefficient} \times \text{difficulty coefficient.}$$

Based on the foregoing, table (6) shows the coefficients of ease, difficulty, and discrimination for the questions of the cognitive achievement test under study.

table (6)

Coefficient of ease, difficulty, and excellence of cognitive achievement test questions (under research)

The coefficient of ease, difficulty, and discrimination of the cognitive achievement test questions under study													
		10	9	8	7	6	5	4	3	2	1	phrase number	
		0.50	0.49	0.49	0.40	0.35	0.40	0.30	0.50	0.47	0.44	Ease factor	historical axis
		0.50	0.51	0.51	0.60	0.65	0.60	0.70	0.50	0.53	0.56	Difficulty coefficient	
		0.25	0.24	0.24	0.24	0.22	0.24	0.21	0.25	0.24	0.24	coefficient of excellence	
12	11	10	9	8	7	6	5	4	3	2	1	phrase number	legal axis
0.44	0.42	0.33	0.40	0.50	0.37	0.30	0.40	0.37	0.33	0.32	0.41	Ease factor	
0.56	0.58	0.67	0.60	0.50	0.63	0.70	0.60	0.63	0.67	0.68	0.59	Difficulty coefficient	
0.24	0.24	0.22	0.24	0.25	0.23	0.21	0.24	0.20	0.22	0.21	0.24	coefficient of excellence	
24	23	22	21	20	19	18	17	16	15	14	13	phrase number	
0.40	0.33	0.44	0.49	0.40	0.50	0.35	0.47	0.31	0.39	0.37	0.30	Ease factor	
0.60	0.67	0.56	0.51	0.60	0.50	0.65	0.53	0.69	0.61	0.63	0.70	Difficulty coefficient	
0.25	0.22	0.24	0.24	0.24	0.25	0.22	0.24	0.21	0.23	0.23	0.21	coefficient of excellence	
36	35	34	33	32	31	30	29	28	27	26	25	phrase number	
0.37	0.44	0.40	0.38	0.30	0.30	0.48	0.44	0.31	0.35	0.30	0.49	Ease factor	
0.63	0.56	0.60	0.62	0.70	0.70	0.52	0.56	0.69	0.65	0.70	0.51	Difficulty coefficient	
0.23	0.24	0.24	0.23	0.21	0.21	0.24	0.24	0.21	0.22	0.21	0.24	coefficient of excellence	
							41	40	39	38	37	phrase number	skill axis
							0.31	0.44	0.40	0.34	0.40	Ease factor	
							0.69	0.56	0.60	0.66	0.60	Difficulty coefficient	
							0.21	0.24	0.25	0.22	0.24	coefficient of excellence	
12	11	10	9	8	7	6	5	4	3	2	1	phrase number	
0.50	0.38	0.31	0.40	0.49	0.33	0.34	0.50	0.43	0.30	0.44	0.41	Ease factor	skill axis
0.50	0.62	0.69	0.60	0.51	0.67	0.66	0.50	0.57	0.70	0.56	0.59	Difficulty coefficient	
0.25	0.23	0.21	0.24	0.24	0.22	0.22	0.25	0.24	0.21	0.24	0.24	coefficient of excellence	
24	23	22	21	20	19	18	17	16	15	14	13	phrase number	
0.37	0.38	0.30	0.49	0.50	0.44	0.34	0.37	0.44	0.47	0.40	0.37	Ease factor	
0.63	0.62	0.70	0.51	0.50	0.56	0.66	0.63	0.56	0.53	0.60	0.63	Difficulty coefficient	
0.23	0.23	0.21	0.24	0.25	0.24	0.22	0.23	0.24	0.24	0.24	0.20	coefficient of excellence	
							29	28	27	26	25	phrase number	
							0.35	0.44	0.38	0.30	0.41	Ease factor	
							0.65	0.56	0.62	0.70	0.59	Difficulty coefficient	
							0.22	0.24	0.23	0.21	0.24	coefficient of excellence	

It is clear from Table (6) that: The ease coefficients of the cognitive achievement test questions in question ranged between (0.30:0.50), while the difficulty coefficients

ranged between (0.50:0.70). Thus, the test contains a variety of questions in terms of ease and difficulty to suit the different levels of learners, and it is also clear that the test has strength Appropriate discrimination, as the discrimination coefficients for the test questions ranged between (0.21: 0.25), and thus the test is valid as a tool for evaluating the cognitive achievement of the content of the educational program in question.

D- Determining the time required for the test:

In the light of the findings of the survey results of the test, the appropriate time for it was calculated. The researcher used the following mathematical equation:

The time taken by the first learner + the time taken by the last learner

2

Thus, the researcher was able to determine the test time, which was (30) thirty minutes, not counting the time allotted for the instructions.

Scientific coefficients for the test:

The researcher calculated the scientific coefficients for the tests under research from validity and reliability from the period from Saturday 11/10/2020 AD to Tuesday 11/13/2020 AD .

(1) Honesty:

To calculate the validity of the test, the researcher used the following :

-Content validity.

- Internal consistency validity

The validity of the content: The researcher presented the test in its initial form, which contains (3) axes containing (90) questions to some experts in the field of curricula and teaching methods, teaching and training basketball, consisting of (11) experts (Appendix 3) in order to express an opinion on the appropriateness of the test regarding It was made for him, both in terms of the axes and questions for each axis and the appropriateness of those questions for the axis they represent, and he asked them to express their opinion on that by placing a mark (√) in front of the question and under the word OK if the question was appropriate and putting a mark (x) if the question was not appropriate for the axis Which he represents and under the word "Modify" if the question needs to be amended in the formulation. The questions that obtained a percentage of (81%) or more were selected from the group of experts' opinions, and in light of that, the wording of some questions was modified, as well as (10) ten questions that did not get The specified percentage Thus, the number of test questions in its final form reached (80) questions, and the following table (15) shows the percentage of expert opinions on the test phrases.

Table (7)

Percentage of expert opinions on the cognitive achievement test questions under study (n = 11)

Statistical significance	Ca2 value		number of experts			phrase number	م	
	tabular	value	percentage	not agree	percentage			OK
Morale	3.84	11	صفر	صفر	%100	11	phrase 1	the hub historical
Morale		7.36	%9.10	1	%90	10	Phrase2	
Morale		4.45	%18.18	2	%81	9	Phrase3	
Morale		11	صفر	صفر	%100	11	Phrase4	
Morale		7.36	%9.10	1	%90	10	Phrase5	
Morale		11	صفر	صفر	%100	11	Phrase6	
Not morale		1.33	%66.66	8	%33.33	4	Phrase7	
Not morale		1.33	%66.66	8	%33.33	4	Phrase8	
Not morale		1.33	%66.66	8	%33.33	4	Phrase9	
Morale		7.36	%9.10	1	%90.90	10	Phrase10	
Not morale		4.45	%18.18	2	%81.81	9	Phrase11	
Morale		7.36	%9.10	1	%90.90	10	Phrase12	

It is clear from Table (7) that: The percentage of the opinions of the experts in the cognitive achievement test questions for the historical axis (under study) ranged between (81.81%: 100%), and thus the questions that got less than (81.81%) of the total opinions of the experts reached (4) questions .

Table (8)
Percentage of opinions of gentlemen experts in questions Cognitive achievement test for the legal axis under study (n = 11)

Statistical significance	Ca2 value		number of experts			phrase number	م
	tabular	value	percentage	not agree	percentage		
Morale		11	صفر	صفر	%100	11	Phrase14
Morale		11	صفر	صفر	%100	11	Phrase15
Not morale		1.33	%66.66	8	%33.33	4	Phrase16
Morale		7.36	%9.10	1	%90.90	10	Phrase17
Morale		7.36	%9.10	1	%90.90	10	Phrase18
Not morale		1.33	%66.66	8	%33.33	4	Phrase19
Morale		4.45	%18.18	2	%81.81	9	Phrase20
Morale		7.36	%9.10	1	%90.90	10	Phrase21
Morale		11	صفر	صفر	%100	11	Phrase22
Morale		11	صفر	صفر	%100	11	Phrase23
Morale		4.45	%18.18	2	%81.81	9	Phrase24
Morale		4.45	%18.18	2	%81.81	9	Phrase25
Morale		11	صفر	صفر	%100	11	Phrase26
Morale		11	صفر	صفر	%100	11	Phrase27
Morale		7.36	%9.10	1	%90.90	10	Phrase28
Morale		7.36	%9.10	1	%90.90	10	Phrase29
Not morale		1.33	%66.66	8	%33.33	4	Phrase30
Morale		11	صفر	صفر	%100	11	Phrase31
Morale		7.36	%9.10	1	%90.90	10	Phrase32
Morale		7.36	%9.10	1	%90.90	10	Phrase33
Not morale		1.33	%66.66	8	%33.33	4	Phrase34
Morale		1.33	%66.66	8	%33.33	4	Phrase35
Morale		4.45	%18.18	2	%81.81	9	Phrase36
Morale		4.45	%18.18	2	%81.81	9	Phrase37
Morale		11	صفر	صفر	%100	11	Phrase38
Morale		11	صفر	صفر	%100	11	Phrase39
Morale		4.45	%18.18	2	%81.81	9	Phrase40
Morale		11	صفر	صفر	%100	11	Phrase41
Morale		4.45	%18.18	2	%81.81	9	Phrase42
Morale		4.45	%18.18	2	%81.81	9	Phrase43
Morale		11	صفر	صفر	%100	11	Phrase44
Morale		7.36	%9.10	1	%90.90	10	Phrase45
Morale		11	صفر	صفر	%100	11	Phrase46
Morale		7.36	%9.10	1	%90.90	10	Phrase47
Morale		11	صفر	صفر	%100	11	Phrase48
Morale		11	صفر	صفر	%100	11	Phrase49
Morale		7.36	%9.10	1	%90.90	10	Phrase50
Morale		4.45	%18.18	2	%81.81	9	Phrase51
Morale		11	صفر	صفر	%100	11	Phrase52
Morale		4.45	%18.18	2	%81.81	9	Phrase53
Morale		4.45	%18.18	2	%81.81	9	Phrase54
Morale		11	صفر	صفر	%100	11	Phrase55
Morale		7.36	%9.10	1	%90.90	10	Phrase56
Morale		4.45	%18.18	2	%81.81	9	Phrase57
Morale		11	صفر	صفر	%100	11	Phrase58
Morale		7.36	%9.10	1	%90.90	10	Phrase59
Morale		11	صفر	صفر	%100	11	Phrase60
Morale		7.36	%9.10	1	%90.90	10	Phrase62

legal axis

It is clear from Table (8) the following: - The percentage of opinions of the experts in the cognitive achievement test questions for the legal axis (under study) ranged between (81.81%: 100%), and thus the questions that obtained a percentage less than (81.81%) Of the total opinions of experts (5) questions .

Table (9)

The percentage of the opinions of the experts in the cognitive achievement test questions for the skill axis under study (n = 11)

Statistical significance	Ca2 value		number of experts			phrase number	م
	tabular	value	percentage	not agree	percentage		
Morale		11	صفر	صفر	%100	11	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		7.36	%9.10	1	%90.90	10	Phrase
Morale		7.36	%9.10	1	%90.90	10	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		11	صفر	صفر	%100	11	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		11	صفر	صفر	%100	11	Phrase
Morale		11	صفر	صفر	%100	11	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		11	صفر	صفر	%100	11	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Not morale		1.33	%66.66	8	%33.33	9	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		11	صفر	صفر	%100	11	Phrase
Morale		11	صفر	صفر	%100	11	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		11	صفر	صفر	%100	11	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Not morale		1.33	%66.66	8	%33.33	11	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		11	صفر	صفر	%100	11	Phrase
Morale		11	صفر	صفر	%100	11	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase
Morale		4.45	%18.18	2	%81.81	9	Phrase

It is clear from Table (9) the following : - The percentage of opinions of the experts in the cognitive achievement test questions for the legal axis (under study) ranged between (81.81%: 100%), and thus the questions that obtained a percentage less than (81.81%) Of the total opinions of experts (5) questions .

Presentation and discussion of the results:

Table (10)

The correlation between basic skill abilities in basketball and cognitive achievement for students of the second cycle of basic education according to the "Dick and Curry" model (n = 10)

The total score for cognitive achievement in basketball	Single Measurement	the exams
0.524	degree	The pectoral pass
0.683	degree	The interlocutor's sentence
0.706	degree	free throw

The tabular t value is at the significance level (0.05) = 0.444

It is evident from Table (10), which indicates the correlation between basic skill abilities and cognitive achievement for students of the second cycle of basic education, according to the following "Dick and Carey" model :

- There is a statistically significant direct correlation at the level of 0.05 between the chest pass and the total score in the cognitive achievement of basketball, which amounted to (0.524) .
- There is a statistically significant direct correlation at the level of 0.05 between the total dialogue and the total score in the cognitive achievement of basketball, which amounted to (0.683) .
- There is a statistically significant direct correlation at the level of 0.05 between the total dialogue and the total score in the cognitive achievement of basketball, which amounted to (0.706) .

The researcher attributes the cause of the correlation to skill education according to the "Dick and Carey model" in the cognitive achievement and technical performance of some basketball skills for middle school students, which the researcher used in teaching the experimental group, as it had a positive impact in changing, directing and extracting the main ideas of the cognitive aspects, which were evidence of Stimulating the learner towards his motives for learning and helping him in organized scientific thinking and providing opportunities to move towards constructive learning and a sense of the value of his capabilities through exploratory questions about the skill to be learned and knowing the return of answering these questions, whether right or wrong. The learner evaluates himself, and thus full feedback is given. The "Dick and Carrie" model had an effective contribution and a strong reflection that contributed to reaching the simplest solutions and overcoming difficulties, especially learning difficulties. Controlling the perceptions, movements and paths of the body towards constructive and formative learning at the skill and cognitive levels in benefiting from directing Information within the brain is prioritized in the form of a pyramid The new information enters through the top of the pyramid, while the recognized skills fall to a lower level. As for the information that reached the level of the mechanism in performance, it descends to the base of the formative construction of information to eventually form the basic base on which the skill is built. Therefore, the educational model you have and Carey was a priority. Among all educational models in line with the nature of the blended education strategy To put in the end the students of the preparatory stage of basic education fully aware of the cognitive achievement and the technical performance of some basketball skills according to the course for them, so that the student no longer obtains the information related to the technical performance only, but the goal of learning has become to acquire the necessary skills to access the basic sources The scientific subject, a method of thinking and research, and the development of scientific inclinations and behavioral values that make the student in the present implementation of the learner's motor skills more understanding and able to use science and the realization of the mind in the practical and applied environment effectively by helping them to develop thinking skills according to the learning design "Dick and Carrie" that is parallel to nature Special, in finding solutions and unusual ideas to direct and correct the body's paths in various directions in line with the legality of performance, and the variables of cognitive achievement of the experimental group are the most important thing on the dialogue, which was evidence of the learner's excitement towards his motives for learning and help him in organized scientific thinking and provide opportunities to move towards Constructive learning and a sense of the value of his abilities.

Thus, the basic hypothesis of the research hypotheses is achieved, which states that there is a correlation between the skill abilities in basketball represented in (the chest pass, the interchange, the free throw) and the cognitive achievement, which is represented in the total score for each of the (historical, legal, skillful) axis.

Conclusions:

Within the limits of the research problem and its importance, in light of its objectives, the hypothesis and the nature of the sample, and within the framework of statistical treatments, interpretation and discussion of the results, the researchers were able to reach the following conclusions:

- 1- There is a statistically significant direct correlation at the level of 0.05 between the chest pass and the total score in the cognitive achievement of basketball, which amounted to (0.524).
- 2- There is a statistically significant direct correlation at the level of 0.05 between the total dialogue and the total score in the cognitive achievement of basketball, which amounted to (0.683).
- 3- There is a statistically significant direct correlation at the level of 0.05 between the total dialogue and the total score in the cognitive achievement of basketball, which amounted to (0.706) .

Recommendations:

In light of the results of the study, and within the limits of its field and the sample that was conducted on it, and according to the conclusions reached, the researchers recommend the following:

- 1- Generalizing the use and employment of the Dick and Carey model in the cognitive achievement and technical performance of some basketball skills for middle school students, because of its effective impact on achieving high skill levels.
- 2- The need to keep pace with the global development in modern e-learning systems based on taking advantage of cyberspace as the necessary and basic means in facing pandemics and disasters such as the Corona pandemic.
- 3- The necessity of relying on educational models according to established learning designs that are in line with modern education strategies as an effective means of influencing learning innovations.
- 4- The need to use different and varied models for cognitive achievement tests for the scientific material presented as a reliable basis for ensuring all the information contained in that educational material and as a basis for evaluating the different strategies for learning.
- 5- The need to pay attention to various cognitive achievement tests to ensure that the educational content is consistent for all students, given that individual differences are the basis for drawing up educational programs.
- 6- The need to use modern strategies that depend on the fact that the student is the focus of the educational process in learning basic skills in basketball, especially those based on electronic learning systems.
- 7- Setting a clear vision for the advancement of school sports for students of the first and second cycle of basic education for basketball in the light of modern strategies for learning technology.

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The relationship between basic skill abilities in basketball and cognitive achievement according to the "Dick and Carey" model

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The research aims to identify the relationship between basic skill abilities in basketball and cognitive achievement according to the "Dick and Carey" model for students of the second cycle of basic education. The researchers used the descriptive approach because it is suitable for the nature of this study. The last episode of basic education in the city of Minya for the academic year 2022/2023 AD, and the application was carried out at the Saft Al-Khammar Al-Azhari Institute for Basic Education, and their number reached (26) students for the group. basket, which amounted to (0.524), and there is a statistically significant direct correlation at the level of 0.05 between the total dialogue and the total score in the cognitive achievement of basketball, which amounted to (0.683), and there is also a statistically significant direct correlation at the level of 0.05 between the total dialogue and the total score In the cognitive achievement of basketball, which amounted to (0.706), and the most important recommendations were the generalization of the use and employment of the Dick and Carey model in the cognitive achievement and technical performance of some basketball skills for middle school students because of its effective impact to achieve high skill levels, and the need to keep pace with the global development in e-learning systems The talk based on taking advantage of electronic space as the necessary and basic means in facing pandemics and disasters such as the Corona pandemic, and the necessity of relying on educational models according to established learning designs that are in line with modern education strategies as an effective means of influencing learning innovations, the need to use different and varied models for cognitive achievement tests of the subject The scientific presented as a reliable basis for guaranteeing all the information contained in that educational material and a basis for evaluating the different strategies for learning, the need to pay attention to the various cognitive achievement tests to ensure the compatibility of the educational content for all students, given that individual differences are the basis for drawing educational programs, and the need to use modern strategies that depend on the fact that The student is the focus of the educational process in learning the basic skills in basketball, especially those based on electronic learning systems, and setting a clear vision for the advancement of school sports for students of the first and second cycle of basic education for basketball in the light of modern strategies for learning technology.

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