The effect of using mind maps to teach some fundamental skills in basketball

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Introduction:

At the present time began sports training aware of an interest in mental abilities to their importance in the learning process and the implementation of the plans and how the mind plays an important role in the development of the level of performance skills and affect the physical and mental energy as the body fitness is an important part of mental health. Mind maps is becoming a welcome digital visual learning tool. **Tony buzan(1999).**

In the relevant Mindmap learning applications, the topic of works covers college career planning, learning plan, English learning, course study, group research, project planning and etc, and fully display the image of learning and memory relating with various learning strategies such as memory learning, brainstorm, metacognitive strategies, collaborative learning. **Li Cuibai(2009).**

Basketball game is Contains a set of basic skills and skills that are the basis for achieving the highest level in the game also finds that a highly skilled player can lead any technical plan the basic skills are not developed to limit the ability to maneuver when the player and reduce the technical potential.

This study aims to identify the impact of using mind maps method to teach some basketball skills to students of the Faculty of Physical Education, and the research problem is the ways to teach basic skills rely biggest on skill training in learning, either mental training and the use of mental capacity was not used properly. The importance of research lies in the use of mind maps and the application process to determine their impact on learning and cognitive achievement and timing used optimally in order to assist in the speed of learning some skills basic basketball**.**

Benefits of using a mind map:

- Mental map enables us to read the information in full brain, right and left parts, is done on so the efficiency of learning and absorption, and from there the information is stored in the brain for long time, because they are gathered between pictures and words.
- Easy access to information, and speed review it easier by reference to the mental map, rather than refer to the Information stacked in books.
- Give us a comprehensive picture of the subject you want to study, user mental map is encompassing the subject in all its aspects, parts and ensures that cover all points orderly.
- Enables us to put all our thoughts and what are going on in our minds and the maximum amount of information on the subject in one sheet.

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Objective of this research:
The research aims to identify the effectiveness of using minds maps upon some learning outcomes (cognitive achievement and performance skills) in basketball through:

1. Identify the differences between the mean scores for Pre measurement and post measurement of the sample under discussion in in the level of performance skills of some basic skills in basketball.

2. Identify the differences between the experimental and control group in post measurements for cognitive achievement of the sample under discussion in basketball.

Research hypotheses:
1- There are statistically significant differences between the mean scores pre and post measurements of the experimental group under discussion in the level of performance skills of some basic skills in basketball (chest pass, free throw) in the favor of the post measuring.

2- There are statistically significant differences between the experimental and control group in post measurements for Performance skills in basketball in the favor of the experimental group.

3- There are significant differences between the experimental and control group in post measurements for cognitive achievement in basketball in the favor of the experimental group.

Plan and procedures:
Research Methodology:
The researcher will use the experimental approach using experimental design of two groups (experimental and control) using the pre-test and Post-test measures.

The research sample:
(20) Student of the faculty of physical education,(10) for the experimental group, (10) for the control group. Find of equivalence between the two groups variables in the study which may have an impact on the results of a study (age, Height, weight and skill tests. table (1) (2)

Table (1)

The arithmetic mean, standard deviation, median and coefficient and **Coefficient sprains**, to sample n = 10

The verities		**Measure unit**	**group**	**SMA**	**Standard deviation**	**Median**	**Coefficient sprains**
Growth variables	Age	Year	Experimental	18.496	0.2291	18.5	0.0
			Control	18.496	0.2291	18.5	0.0
	Length	Cm	Experimental	172.0	4.1899	170.5	0.5438
			Control	173.2	4.5166	172.5	0.06295
	Weight	Kg	Experimental	69.345	4.3203	70.4	-0.9713
			Control	69.047	4.2807	68.62	0.07540

It is clear from Table (1) that all coefficients sprains of the variables under consideration confined between ± 3 suggesting of the values fairness and homogeneity of the sample.

Table (2)

The arithmetic mean, standard deviation, median and coefficient and Coefficient sprains, to sample n = 10

The verities		group	SMA	Standard deviation	T value	T test significant
Basic skills	Chest pass	Experimental	9.700	0.6749	0.0	Not significant
		Control	9.700	0.6749		
	Free throw	Experimental	16.30	0.9487	0.31	Not significant
		Control	16.40	0.8433		

Table (2) shows the arithmetic mean, standard deviation, median and coefficient and Coefficient sprains between the experimental and control group and T test result shows not significant means no differences between the samples group in basic skills tests.

The methods of data collection:

The researcher used the following:

1. Chest pass, free throw shooting tests in basketball.
2. Cognitive achievement test.
3. A mind map for chest pass and free throw shoot designed by (Imind map) software. Figure(1)

Design the mind map:

How to design a mind map:

1 - Means:

Drawing the mental map of two ways, the manual method, the way computing, and in the following breakdown of two ways:

Hand: using papers and colored pens

Computer: Software program to draw mind maps, such as program (IMindmap) or (MindMapper)

2 - Steps to draw a mind map:

Researcher use the first grade basketball textbook to help him to draw the mind map for chest and free throw using the performance teaching steps and how to perform the skills.

• Identify the subject.

• extract key concepts.

• define the center of the paper as the center of a starting point, and then draw a small circle, for example, and we put our theme in the form of writing or a symbol or a small fee expresses the main theme and the idea is so easy to remember.

• We are developing the forest to represent the basic ideas, and determine each branch keyword - we write above the lines using the different branches of colors, to become more accurate at an end, with the possibility of drawing a line or a circle around the idea of the task highlighted dramatically.

• can be placed on the symbolic images of each branch of the previous sections reflect the meaning, the aim of the use of these images and colors as well as the granulation is drawing the same classification and clarification of ideas.

• can subsidiarity all the branches to the main secondary branches, with the development of what is represented by the words or words with fees or symbols.

• continue to partial discharges to the very end the ideas generated by the main idea.

• In the end we get a tree by the forest represents the ideas of the subject and its various aspects, a sequential manner organization.

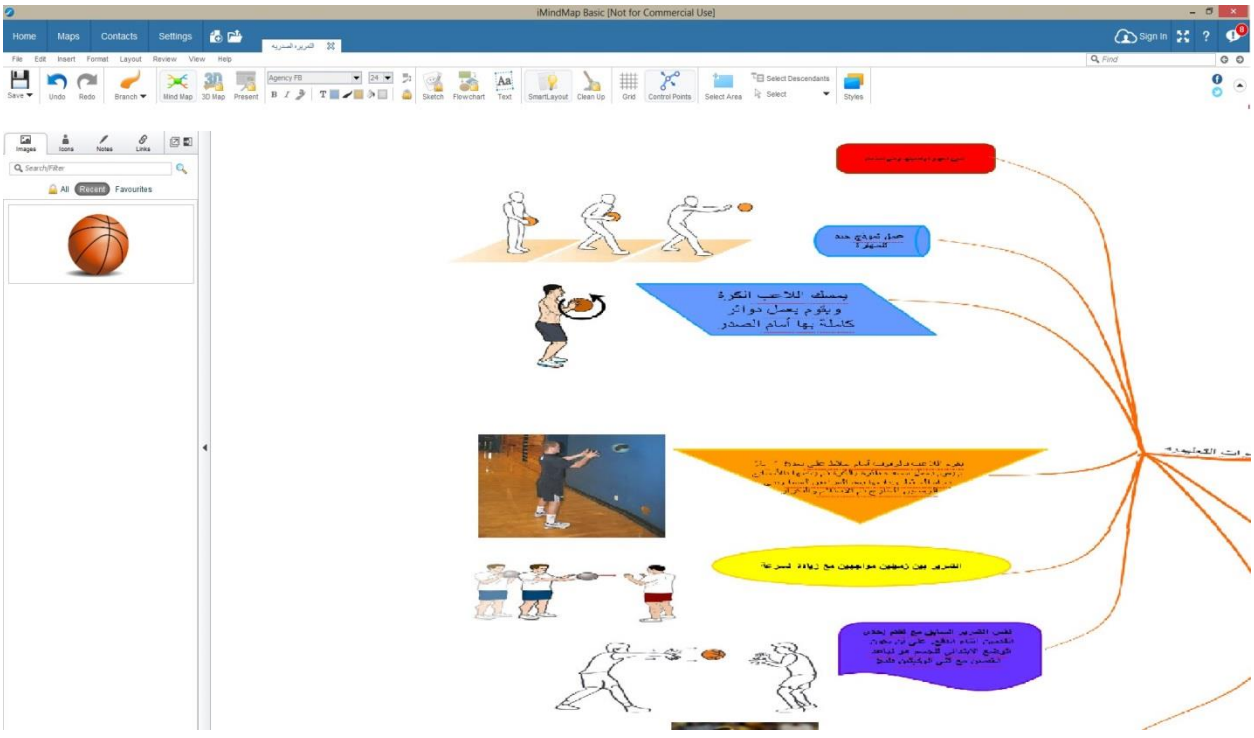

Figure (1) Designing chest pass mind map on Imind map software

The first exploratory study:

- To experience the tools, devices and to identify the difficulties that may face a researcher at the implementation of tests under scientific research for skillful tests and knowledge acquisition .
- Designing mind maps on Imind map 7 software. figure(1)
- The researcher met with students (the experimental group sample) to explain how to use mind maps for each skill, the role of the teacher and the learner, and then answering all student's questions.
- The researcher met with co-operators to explain how they will help in teaching the control group with the ordinary mothed from basketball text book chest pass and free throw skills.

Basic experience pre and post measurements under discussion:

The pre measurement:

The pre measurements were made of the experimental and control groups in skills tests in basketball (chest pass and free throw).

-The basic experience:

The basic Experience has been applied on the experimental group and took (4) weeks, by 2 weekly lessons to each skill, and each lesson takes (90 minutes)

The post measurement:

The post measurements were made of the experimental and control groups in cognitive achievement test and skills tests in basketball under discussion.

Statistical processors:

-Mean -Median

-Coefficient sprains -Standard deviation -T test

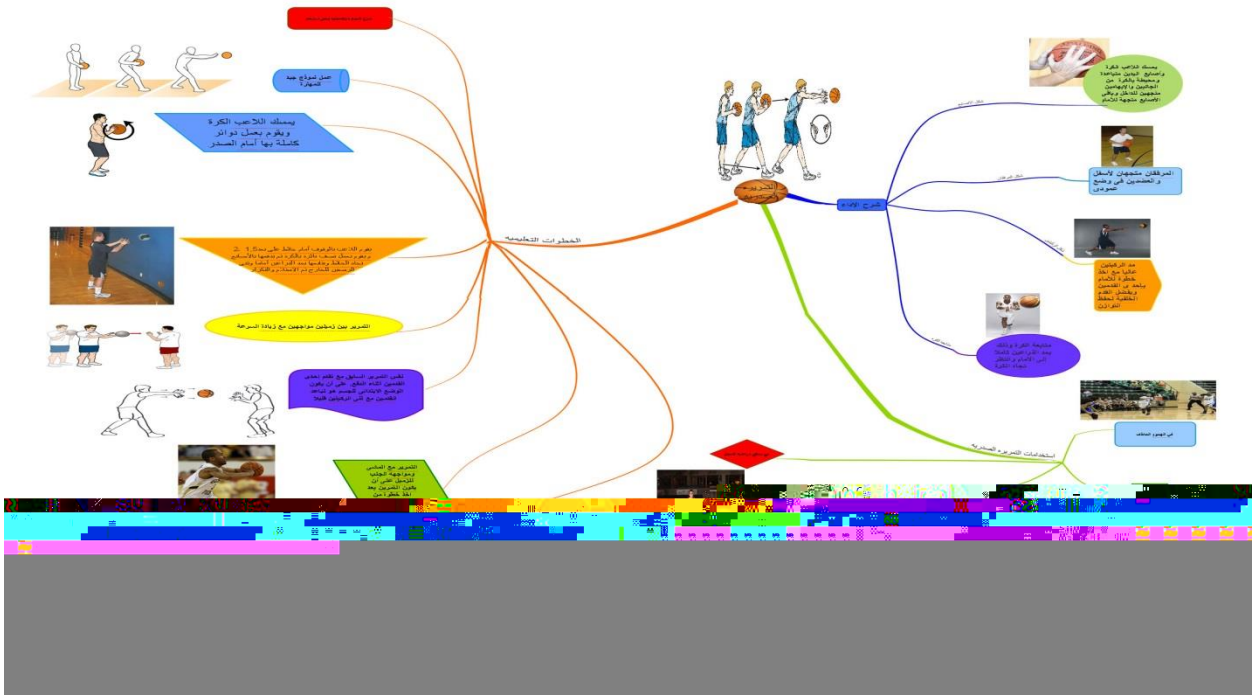

Figure (2) chest pass mind map