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### The Effectiveness of Using Problem Based Learning Strategy on Achievement and Development of Creative Thinking in Home Economic Subject for Pupils in Preparatory Stage

#### **THESIS**

Submitted To M.A. Degree in Education (Curricula and Teaching Methodology Home Economics)

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2010

#### First: The Summary of The study

#### **Introduction**:

Teaching Home Economics aims at upbringing the learners on the basis of independence from the others, urging them to initiative, self-confidence, and finding out solutions to their problems. Further, it concerns with developing society through the ideal usage of all physical and human capabilities by solving the problems in creative economic way.

In spite of, the importance of the creative thinking and its necessity in finding solutions to many problems, there is no actual interest by some teachers in the schools in developing the creative thinking of the learners, especially in prepartory ones.

In order to make students creative, we have to depend on teaching strategies, which provide the girl students with the opportunity to freely interact in the educational situations and express their thoughts frankly and freely. Hence, that is the interest of teaching methods professionals in creative modern strategies, ways, and methods helping the learner in developing his ability of creative thinking by increasing it in producing many ideas in solving problems.

This is consistent with the constructive philosophy concerning the learner's mental construction; among the constructive strategies arousing the learners' creativity is the strategy of (problem-based learning) whereas this strategy helps the learners in constructing sense and meaning of what they learn as well as developing trust and confidence in their abilities in solving problems since they depend on themselves and do not wait for the others to tell them the solution directly. In addition, the learners, then, realize that learning is making meaning and not mere keep information. Further, this strategy is appropriate for presenting education including several topics where as

answering to some questions sometimes requires data and information on many academic topics. Furthermore, this strategy encourages the learners to carry the responsibility of their learning and developing their efficiency in a number of skills such as skills of cooperation, communication, solving problems, and thinking. It, thus, makes the learner active, and develops his creative thinking as well.

Consequently, strategy of problem-based learning is used in order to demonstrate its effectiveness on developing the creative thinking and achievement in Home Economics.

#### **Problem of Study:**

The problem of the current study represents in the low – leveled achievement and the creative thinking of girl students of the preparatory stage in the Home Economics Subject.

Therefore, the current study is an attempt to answer the following main question:

- What is the effictiveness of using the Strategy of problem – based learning strategy concerning on achievement and developing the creative thinking in Home Economics for the girl students of the preparatory stage?

Some subordinate questions can be derived from these main question:

- 1- What are the principles of constructing problem based learning strategy?
- 2- What is the effictiveness of using problem based learning strategy on achievement in Home Ecomonics subject to the girl students of the prepartory stage?
- 3- What is the effictiveness of using problem based learning strategy on creative think in Home Ecomonics subject to the girl students of the prepartory stage?

#### **Delimitations of the Study:**

This study is restricted in the following:

- 1- Sample of girl students from first grade in preparatory school since this grade includes girl students in the outset of the adolescence stage, in which the characteristics of the self-dependence, constructing the character and the need of thinking development.
- 2- The First unit in the book of first grade in preparatory school and, its title is (Let's Know).
- 3- Preparing an achievement test in Home Economics. Concentrating on cognitive aims (memorizing, understanding and application in the chosen unit.
- 4- Preparing a creative thinking test on Home Economics in (The fluency, Originality, flexibility, the details, sensitivity to problems).

#### Significance of the study:

The significance of this study is due to:

- 1- Presenting guidelines for teacher which contains activities, educational ways and teaching methods, which help teachers in teaching Home Economics, so, it leads to increase students, achievement, and developing their Creative Thinking.
- 2- Organizing the content of unit Home Economics by using problem based learning strategy which, so, may lead to develop creative thinking for students, and which may help curricula developers in organizing the curricula contents in a way which may develop creative thinking.
- 3- Conformity the recent directions in teaching in getting benefit from the strategies which are depending on constructivism in organizing the content of Home Economics and its teaching.

#### The study objectives:

The study aims at:

- 1- Developing the creative thinking for girl students in preparatory stage, in the following levels (fluency, flexibility, originality, the details, sensitivity to problems).
- 2- Raising the achievement levels for girl students in Home Economics.

#### **Procedures of the study:**

The following Study goes according to the next steps:

- 1- Reviewing the literature , previous studies , local and international researches , about :
  - A- The constructive theory in terms it its (definition, objectives, teaching strategies).
  - B- Studying what is concerning problem based learning strategy.
- 2- Analyzing the content of the chosen subject unit.
- 3- Preparing teacher guide according to problem based learning strategy.
- 4- Preparing work sheets according to problem- based learning strategy.
- 5- Presenting both of teacher guides and work sheets to groups of experts and modifying them according to their opinions.
- 6- Preparing the used tools of the study and controlling them statistically:
- A Achievement test in cognitive levels (memorizing, understanding, and application).
- B Creative thinking test in Home Economics (fluency, flexibility, originality, the details, sensitivity to problems).
- 7- Selecting sample from students the first grade of the preparatory stage dividing them into two groups (experimental group, control group).

- 8- Pre application of the tools.
- 9- Teaching to the experimental group by using problem based learning strategy, and to control group by traditional method.
- 10- Post application of the tools.
- 11- Recording, statistically, manipulating and interpretating data.
- 12- Presenting recommendations and proposition in the light of findings of the study.

#### The used statistical methods:

The researcher uses the following statistical methods in processing data:

- 1- Correlation coefficient of the tools used.
- 2- Test (t) to determine the differences between the degrees of the girl students of both of experimental and control group in educational achievement and creative thinking.
- 3- Measuring the extence of  $(\eta 2)$  in order to estimate the power of the strategy quantitatively on the study variables.

#### The findings of the study:

- 1- There are statistically differences in level (0,01), among averages of the experimental group which (studied in the strategy of problem-based learning) and the control group which (studied in the traditional (usual) method) in achievement in terms of (the total degree, memorizing, understanding, and application) for the experimental group.
- 2- There is statistically differences in level (0,01), among averages of the experimental group which (studied by the strategy of problem-based learning) and the control group which (studied by the traditional (usual) method) in creative thinking in terms of (fluency, flexibility, originality, details, sensitivity to problems, the total degree) for the experimental group.
- 3- The effictiveness of the strategy of problem-based learning in developing achievement and creative thinking in Home Economics for the girl students of the first year in preparatory stage.

#### Second: The recommendations of the study:

# In the light of the aforementioned findings and their interpretations, the study recommends the followings:

- 1-The necessity of teaching the students how they can construct knowledge themselves and how they can link between what they have learned in the actual life of teaching Home Economics and not restricting only in teaching information and knowledge.
- 2-Using the strategy of problem-based learning in teaching Home Economics since it increases the ability of the active participation and involvement of the students, developing their abilities and skills, increasing their academic achievements, in addition to its capability in developing their creative thinking.
- 3-Holding training courses for the female teachers during their service in order to train them on using of problem-based learning strategy either through the internet monitors existing in all governorates or through their presence in faculties of education and the likes.
- 4-The necessity of paying the great attention and interest to the students and providing them with the opportunity of involving in the educational activities inside the class and outside it.
- 5-Concerning with using the structural strategies in teaching on the ground that they develop many learning aspects.
- 6-The necessity of teaching staff's interest in faculties of education to learn the teacher students the constructive strategies and training them on it so as to facilitate them its usage in teaching.
- 7-The necessity of concerning with using strategies developing thinking, in general, and creative thinking, in particular, in teaching the topics of Home Economics.

#### Third: The propositions of the study:

The study proposes conducting the following researches:

- 1- The impact of using of problem-based learning strategy in developing the critical thinking skills.
- 2- The impact of using of problem-based learning strategy on decision-making.
- 3- The impact of using proposed strategies from integration of constructive strategies on acquisition of practical skills and the positive direction towards Home Economics.
- 4- Conducting comparative study between of problem-based learning strategy and the modified strategy of Ogle in developing the critical thinking of preparatory schools` students.
- 5- The application of the current study on the other levels of Bloom's cognitive ones (analysis, synthesis, and evaluation)
- 6- Comparison between using this strategy for ordinary students and those of special needs.

The Title of the Study: The Effectiveness of Using Problem Based Learning Strategy on Achievement and Development of Creative Thinking in Home Economic Subject for Pupils in Preparatory Stage

#### Presented by: Noha Mohamed Abdel-Mongy Ali

**Submitted to** Department of Curricula and Teaching Methodology, Faculty of Education, Benha University.

**The study objectives**: The current study aims at developing the creative thinking and raising the achievement of the girl students in preparatory stage in Home Economics.

**The Problem of the study:** The Current Study tries to answer to the main following question:

- What is the effictiveness of using the Strategy of problem – based learning strategy concerning on achievement and developing the creative thinking in Home Economics for the girl students of the preparatory stage?

**The sample of the study**: The sample of the study consists of 69 girl students in the first-grade of preparatory school in Modern Tanta Preparatory School, the academic year2009-2010, the first term.

The tools of the study: The tools of the study represented in educational achievement test, verbal creative thinking test (prepared by the researcher), copy of creative thinking test (prepared by Torance, translated by Foad Abu-Hatab and Abdullah Suleiman)

#### The findings of the study: the study reached the following finding:

- 1-There are statistical differences in level (0,01), among averages of the experimental group which (studied by the strategy of problem-based learning) and the control group which (studied by the traditional (usual) method) in the educational achievement in terms of (the total degree, memorizing, understanding, and application) for the experimental group.
- 2- There is statistical differences in level (0,01), among averages of the experimental group which (studied by the strategy of problem -based learning) and the control group which (studied by the traditional (usual) method) in creative thinking in terms of (fluency, flexibility, originality, details, sensitivity to problems, the total degree) for the experimental group.
- 3-The efficiency of the strategy of problem-based learning in developing achievement and creative thinking in Home Economics for the girl students of the first year in preparatory stage.