Cairo University Faculty of Education, Fayoum Branch Curricula and Methodology Dept.

# **Evaluation of Math's Teaching Program in Kindergarten and Math's Curriculum in the First Primary Grade**

# in the Light of Recent Trends

(Summary)

# An M.Ed. thesis submitted for the fulfillment of master's degree in education (Curricula and Methodology / Mathematics)

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# **Summary**

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#### Introduction

Kindergarten children and first primary grade students represent. the base of the instructional system, Due to the abstract nature of math's and sensual thinking of children at these stages developing the mathematical skills in these stages without taking into consideration the sensual experiences is considered one of the most difficult matters.

Recent studies show that existing educational programs in many countries have a number of shortcomings, these studies show that the development of any educational program can best be achieved by improving the content and the teaching methods, Improvement, however, should always start with evaluation which is the concern of the study at hand.

#### The problem of the study

The title of the present study is as follow:" Evaluation of Math's teaching program in Kindergarten and Math's Curriculum in the first primary grade in the light of the recent trends " within the content and the teaching methods, so the study will try to answer the following questions: 1-What are the mathematical concepts suitable for kindergarten children? 2-What are the mathematical concepts suitable for first primary grade students?

- 3-What are the activities and teaching methods suitable for teaching math in kindergarten and first primary grade?
- 4-What are the standards in the light of which we can evaluate the kindergarten math's course and the first primary grade math's course?

- 5-What are the results of evaluating the kindergarten math's course and the first primary grade Mathematics course?
- 6-What are the current activities and teaching methods that have been used in teaching mathematics in kindergarten and the first primary grade classes?

#### The aims of the study

The study aims at:

- 1-Evaluating the kindergarten math's course and the first primary grade math's course in the light of the recent trends.
- 2-Specifying the current activities and teaching methods that have has been used in kindergarten and first primary grade classes.
- 3-Giving some suggestions that maybe used in developing the previous courses.

#### The tools of the study:

- 1-A questionnaire with the aim of specifying the mathematical concepts suitable for kindergarten stage.
- 2-A questionnaire with the aim of specifying the mathematical concepts suitable for primary grade first primary grade math's course.
- 3-A content analysis of kindergarten math's course and first primary grade math's course.
- 4- An evaluation checklist to evaluate the previous courses.
- 5-An observation checklist to find out the methods of teaching currently used in kindergarten and first primary grade.

#### The Limitations of the study:

The study will be limited to:

- 1-Evaluation of the content and teaching methods used to teach the kindergarten math's course and the first primary grade math's course.
- 2-The math's course for kindergarten (KGI, KG2) edition (2000/2001).
- 3-The math's course for first primary grade edition (2000/2001)
- 4-A sample of kindergarten teachers from some primary schools in Fayoum.
- 5-A sample of first primary grade teachers from some primary schools in Fayoum.

#### The procedures of the study:

To answer the study questions:

- 1-The researcher sifted the literature about the mathematical content and the teaching methods suitable for both kindergarten and first primary grade both in Arabic and English.
- 2-In the light of above he prepared and established the validity and reliability of the following tools:
- a) A questionnaire to specify the mathematical concepts suitable for kindergarten children.
- b) A questionnaire to specify the mathematical concepts suitable for first primary grade students.
- c) A check-list to evaluate both kindergarten math' course and first primary grade math's course.
- d) A checklist to find out the teaching methods used in kindergarten and first primary grade.
- 3-Applying the previous tools.
- 4-Analyzing the results of applying the tools.

#### The results of the study

The results of the study indicated the following:

1- The content of kindergarten math's course and first primary grade math's course.

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- a) The kindergarten math's course and the first primary grade math's course contain approximately all main mathematical subjects suitable for these stages.
- b) There are some topics related to each main subject had been ignored in both kindergarten math's course and first primary grade math's course.
- c) There was neither sequence nor continuity between the two parts of the kindergarten math's course.
- d) There was sequence and continuity in the two parts of the first primary grade math's course and first primary grade math's course.
- e) The problems contained in kindergarten math's course and first primary grade math's course were varied and suitable for all children.

#### 2- Teaching math in kindergarten classes.

- a) Kindergarten teachers didn't care to provide an introduction to lesson except in few cases, even these few teachers use one aspect only, with the keeping the children's attention.
- b) While presenting the lesson the teachers did it in logical sequence, at a suitable speed, and with a clear voice.
- c) The teachers cared for the advanced learners more than the slow learners.
- d) The teachers depended on and used mainly the models already existed in the classes as a manipulative.
- e) The teachers didn't vary their questioning techniques.
- f) The teachers used basically the blackboard during their teaching.

- g) The teachers used basically lecture method and they rarely used problem solving and guided discovery techniques, storytelling and games.
- h) The teachers paid attention in their evaluation to correcting children's cards and nothing else

## 3- Teaching math in first primary grade classes.

The first primary grade teachers behaved looks like the kindergarten teachers but.

- a) They used things from the environment as a manipulative.
- b) They used to solve problems, guided discovery techniques and telling stories.
- c) They paid attention in their evaluation to correcting students' books and asking questions about the lesson.