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The Abstract of the study of
*"The development of creative thinking for 5 years old
children - Jerusalem"*

TEZĂ DE DOCTORAT

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Abstract

This PHD Thesis is so important since it studies the development of the creative thinking for 5-year old children. The study has been implemented in two kindergartens in Jerusalem. People started to be more aware of the importance of learning and teaching the children creativity in thinking in early ages. Thus, the thesis will also show the steps that all the concerned parties have to go through in order to hold the child into creativity.

Learning is an enjoyment process where its objectives will be achieved over days. This matter depends on the teacher and on the student. The parents may have an active role in cooperation with the educational staff in order to reach our children to a safe place. Of course we never forget the importance of the curriculum in formulating and instructing the student to the better whether through the new and beneficial information or in its presentational methods in order to invest it in our daily life.

The educational process aims at creating desired changes in the educated students' behavior; by acquiring the students the desired information, knowledge, skill, trends and values. To realize these educational objectives which seek to create such desired behavioral changes. The teacher should transfer this knowledge and required information in an attractive way which arouses the students' attention and desires and push him to learn, accomplishment and innovation as well as to understanding, analysis and connection; taking into consideration the psychological, emotional, mental, social, physical and lingual characteristic and features of the students.

To raise up the educational process to the best and raise up our students to a level of beneficial and useful knowledge, we should pay attention to all the aspects of thinking arousing and personality building through also working on developing and supporting their creativity. Accordingly, ***the question will be how can we help students to develop their intellectual and creativity?***

Childhood is a very important stage, where the child gains most of his/ her knowledge and develops thinking, passing through various experiences and challenges. Taking care of childhood first years lead to a fruitful future. Those who were invested in, in their childhoods will achieve success, progress and productivity in the future. The most important stage of the child's growth that needs attention from different aspects and the most prominent is the first stage of the early childhood growth.

On the other hand, the Kindergarten stage is considered as one of the most important educational stages not less important than other stages. It is the basis for all other following stages. Its importance stems from its relevance to the first early childhood stage especially the third, fourth and fifth year of the child's age.

The stage of kindergartens is known as the pre-school preliminary stage. It is usually divided into the stage of nurseries for four or five year-aged children. They aim to take care and manage the children's affairs at the first years of their ages and qualify them for the following school life. The Kindergartens develop the physical abilities, awaken the conceptions and the hidden capacities on knowing the appearances of nature, knowing the secrets of the society, and empower their believes.

Since the 1st stage of the child is very important, this study will focus only on it, taking into consideration the different challenges and the variables that may appear using different methods, such as the experimental method and etc. Different tools have been used during the implementation process, such as interviews, observations, case study, tests, questionnaires ...etc.

The study is limited only on 26 students from Al-Woroud Kindergarten and 26 students from Rowa Kindergarten in Jerusalem of the year 2011/2012. The students were all about 5 years old from both genders males and females.

Through the tools that have been used and after analyzing the results, it was clear that there is an alternative hypothesis between the two Jerusalemites kindergartens, Al-Woroud KG and Rowa KG. The alternative hypothesis shows that *there is a statistically significant difference (alpha = 0.05) between the two kindergartens (Al-Woroud Kindergarten/ The experimental group and Rowa Kindergarten/ The controlled group) for the 5 years old students, in effect to the concept of developing the creative thinking through training programs.*

Validity of the study tools/instruments:

The researcher used a valid and standardized instrument/test to ensure adequacy and accuracy of the test to the study population. The instrument was implemented previously in Russia and later in Jordan through the psychology department in Jordan University which yielded strong internal consistency. The researcher has also presented the test to five university academics with doctorate degrees in education and psychology, in addition to five kindergarten headmasters. He also piloted the test on a sample of 26 students in Jerusalem.

Cronbach's alpha statistic was used to measure internal consistency and yielded a result of 0.98 which is considered an excellent result. The following formula was used: $(K/K-1) * (1 - \sum \delta^2 / \text{TOTAL } \delta^2)$

The study is divided into five main chapters. In the first chapter, a general introduction has been given beside the study background where also it shows the historical development for the kindergartens. In the second chapter, after presenting the literature review part come the research objectives, the research methodology, the research tools and the process that has been followed, and the research population. In the third chapter, the study focuses on the objectives of the innovative thinking and how to develop the children's intellectuality and creativity in thinking. In the fourth chapter, data and data analysis have been shown. Recommendations for all the concerned parts have been given in the fifth chapter. And finally, References and Appendixes are also attached at the end of the study.

What is new in this study?

This thesis focuses on highlighting the role of several important elements that contribute to rise up the level of children's capacities, the kindergartens' esthetic environment and its administration, educators, innovative thoughts citizens and methods of dealing with students. This presentation, through this thesis, agrees with the thoughts and opinions of the psychologists and scientists of education and childhood, and with the presentation of the international organizations which are concerned with childhood, the most of which are OMEP, UNESCO and UNICEF. .

Through presenting this, "Thinking Innovative Title" of childhood, specifically early childhood Education (ECE), I tried to indicate, show and concentrate on the importance of what is provided to children including care, education and development which contribute to building their personality and their thinking level to the better. The pre-school 5- year age stage is considered one of the most important stages in polishing and building the child's personality, his/her ability on acquiring approaches, distinctive effective and useful training. The selection of this subject has been precisely made with a higher grade of credibility and proof either in the opinion of the arbitrators or by the statistical analysis of the empirical controlling group.

I hope to cover and highlight easily handled and applicable thoughts and materials on the ground, with benefitting from the theoretical presentation of many psychologists; scientists, of education, writers, new speakers and the published contributions at Arab and international levels, hoping that the thoughts of the thesis will serve the early childhood generation in Jerusalem and in the world.

This thesis is concerned with showing this important stage in the child's life, the importance of the role of the female teachers of the kindergartens to support the different aspects of childhood, and highlighting the importance of using the methods of development of the innovative thinking to make

the educational process succeed from the young age. Therefore, the researcher held a course, titled, “Development of Innovative Thinking of Female Teachers of Kindergartens”: and at the end of the course, the recommendations were mentioned and documented in the thesis. Also meetings, lectures, educational symposiums and individual sessions were held with children, citizens as well as with the female teachers of Al-Woroud Kindergarten in Jerusalem. During such meetings, the empirical sample was selected, and the pictures of guidance for citizens, teachers and students were documented.

The thesis concentrates on processing the most important features and characteristic of different aspects of children growth, provided that at the end of this study, an earnest attempt should be made to conclude the most important psychological bases, controls and considerations that should be considered and committed to when dealing with children of the early childhood stage to care with them, breed them, educate them, develop them and enrich their thinking and personality during these important stages of the child’s life so as to grow up in a better state and better objective educational conditions.

The research or the study main objectives are:

- 1- To identify the methods and styles of the innovative thinking of the kindergarten pre-school stage 5 - year old students;
- 2- To show the characteristics and the impact of different growth aspects such as conceptual growth, motional sense, physical growth and lingual, social and reactive growth at the pre-school childhood stage on the child’s personality and the development of the innovative thinking level;
- 3- To know the educational space system and its positive impact on supporting, enriching and increasing the percentage of mental and performing capacity at kindergartens as shown through the results of the research on this educational thesis;
- 4- To show the psychological and behavioral communication with kindergartens students and its impact on rising up their intellectual and performing level;
- 5- To measure and assess the mental and knowledge growth of the children who experienced this new methodology;
- 6- To compare the results of the study , growth levels with the approaches stated in the methodology;
- 7- To explore the weaknesses in the children’s acquirements in the mental, knowledge lingual field and study their causes;
- 8- To present proposals and recommendations handling the new methodology according to the results of the study.

The research methodology

Many universities' studies have been developed since they have started to follow the path of the scientific methods in using the quantitative and qualitative researches including the main method, the experimental. Moreover, they have developed their modern educational theory and the methods of it, effectively and beneficially.

The researcher, in this study, used the experimental method since it is one of the best methods. This method depends mainly on scientific experiment allowing the opportunity to know the facts and enact laws through experiences by using the needed tools to collect the data, taking into consideration the variables that the research may face.

The main aim of this study is to serve the development of creativity in thinking for 5 years old children, in Jerusalem, and for better and professional results, *this research is based on the experimental method beside the quantitative and the qualitative methods which improve the validity of this research results.*

Research Population

Members participating in this type of research are generally: 5 years old children in Al-Woroud and Rowa kindergartens which included a sample of 52 male and female children; and it was limited to the questionnaire only. Additionally, interviews were held with teachers, administrators, parents and educators.

The research process and the used tools:

In the thesis about the innovative thinking, the researcher depended on several methodological sources including the following:

- 1- Observation;
- 2- Class reports written by the class female teachers ;
- 3- Interviews
- 4- Pre-test and post –test , statistical analysis , analysis of results and comment on them ;

The study focuses on:

1. Different growth aspects during childhood stage – pre-school stage

2. Effects of growth aspects on the child's personality and improving the creative thinking

However, there were some **Difficulties and challenges** that the study and the researcher passed through:

- Lack of studies available in Arabic, the mother tongue;
- Lack of books and references available in Arabic;
- Persuading the female teachers with the importance of the innovative thinking for 5-year old students, especially teachers who have 10 years of experience. The female teachers is used on the traditional method and type;
- Difficulty in selecting a kindergarten for selecting the controlling sample, because all administrations are willing to finally show that their kindergartens support the advanced innovative thinking;
- Difficulty of gathering 25 female teachers on one day for several meetings representing the study;
- Curiosity of citizens to know the results of the work with their children and their attainment in the tests;
- Curiosity of kindergartens female teachers, specifically the empirical sample and the female teachers of the controlling sample to know the type of the tests and how to conduct them. I was taking care of not knowing the type of the tests so as not to be handled and applied by the female teachers as the test loses credibility constancy and objectivity;
- Absence of some students in winter times due to the heavy rain or children's illness, and this compels me to go at other times on school days not agreed upon with the administrations of the kindergartens.
- Non- availability of an appropriate place at the kindergartens due to the small and weak potentialities of the kindergartens in Jerusalem.
- Non- participation of the citizens at the first phase of the thesis in the meetings held in the kindergartens, especially the controlling sample; but after phoning the citizens, the percentage of participation rose up very well.
- Lack of experts of SPSS statistical analysis in Jerusalem city' and this compelled to go to other far places in order to obtain good statistical analysis.

The development of thinking in childhood stage is much more difficult than building factories and workshops. The nation who treats children very well and raise up with them in thinking, it has the right to be a comfortable and happy nation, advanced in its production and proud with its innovative, scientific, cultural and literary creativeness; and its children should be taken care of happily and comfortable in this great impetus of production and innovation as they are its wealth and perceptive, reserve future stock. In the **third chapter**, a detailed explanation about developing the innovative thinking and its objectives has been clarified.

Thinking Aspects and Modes of a Kid

Educational studies indicate to several patterns of thinking, as thinking of a kid may gradate from the simple to the complex, and may be closely linked to the cognitive stage experienced by the child, the characteristics and his thinking style and ways of handling the problem he faces and the nature of mental activity he exercises. "John Dewey" supposes that thinking is a suitable tool to address the problems and overcome and simplify them. (Ghanem, 2001; Khouja, 2002) Thinking gives us the best and the most skillful life ways of happiness, adaptation, balance and progress.

The Objectives of Developing the Innovative Thinking

The objectives of the development of innovative thinking cannot be limited to a group of specific point, so as to respect of the highest thinking objective to make humanity happy, to serve childhood to respect and appreciate the human soul created by the Almighty God and providing the best methods of dignified living for it. These objectives include the following:

- To prepare the human very well to be able to face life conditions and to give him the opportunity to gain skills that make him capable on thinking in seeking the solutions of the problems which face him .
- To make the human learn the ability on logical analysis and take decisions appropriately.
- To perform work very well and develop the methods of industry, commerce and scientific research.
- To achieve the need of the individual for developing the proper skills of thinking which assist them in managing them life and individuals affairs efficiently and successfully? (Al-Sorour, Nadia, 1998).
- To advance with the thinking process to the level of innovative thinking.

Thinking gives us the best and the most skillful life ways of happiness, adaptation, balance and progress, there are different types, such as:

the Intuitive Thinking, the Precarious Thinking, the Fabulous Thinking, the Imaginative Thinking, the Self Thinking, the Tangible Thinking, the Critical thinking, the Precognitive Thinking, the Innovative

Thinking, the Intuitive Thinking, the Scientific Thinking, the Analytical Thinking, the Relational Thinking, the Innovative Thinking, the Critical Thinking and the Inferential Thinking.

After explaining each of the abovementioned thinking type, the study shows how we can develop our students in schools from the stage of kindergarten till the twelfth grade on innovative thinking through providing with the innovative teacher first and then through the modern vital non curricular educational material with paying attention to providing all environmental supportive conditions for this. The teacher plays a mediating positive role between the school and the family. He brings to the family the extent of their child's innovation in a certain aspect or several aspects with the hope of communication, continuity, support and follow-up. The teacher also brings to the school administration the innovation of his students and provides the financial support for them from the school budget as well as spiritual support and appropriate enhancement. As a central educational system, the school supplements this role and in its turn, through the educational material, it provides with the various curricula in a modern lovely attractive image.

How to Develop the Innovative Thinking?

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Some Ways, Methods and Programs of Students' Thinking Development has been also explained:

Addressing thinking provocation can open the way for those are interested in research, studying and application about thinking, in order to improve development methods in our kindergartens and schools:

- Shapes Fluency Method, Symbols Method, Flexibility Method, Stipulating Method, Advanced System Method, Montessori Method, “Pestalozzi” Method for Teaching Thinking, Socratic Method, and Playing Method.

Playing with Children and other steps that motivate the children to develop their creativity:

Playing with children

Playing achieves the following functions and benefits:

Playing is considered an important factor in the process of developing and teaching the child. Children's use of their senses such as smelling and tasting; means that they have gained personal knowledge and this knowledge cannot be assimilated to the mere knowledge which comes to children through narration and teaching. Playing gives them the opportunity to understand their world, discover and develop personal relationship with those around them. This knowledge also gains the child the basic skills in different subject of science, language and arts.

Playing is one of the important elements of the beginning of the child's growth, especially at kindergartens:

- 1- Through artistic playing, children experiment using many materials and raw materials including paste, clay, to help him/ her discover its characteristics.
- 2- These materials used by the child help develop the small muscles and consequently the child becomes more prepared for the writing process.
- 3- These games and activities give the child the opportunity to express his/her feelings with freedom and innovation, and enhance his/her positive image about him/herself.
- 4- The child's confidence in his/ her abilities increases when s/he performs the artistic activity on the board allocated for showing the arts of all children.
- 5- Developing the aesthetic taste.
- 6- The child is given the opportunity and means for self expression and the way is open to him/ her for abreacting him/herself and discharging the energy positively.
- 7- Playing may be a means for reveling great problems suffered by children.

Educational lessons through small groups

The idea of the small groups is a practical idea for modern learning group. The group is a gathering of two or more children, where interaction and exchange occurs between them in order to achieve common goals. Members of the group know and understand each other and see that they are a distinctive and unique group in their internal relationship and also with their relationship with the environment surrounding them. According to this definition, **the components that compose the group are:**

- Mutual Relations (works and activities, common matters and mutual feelings).
- Goal or a set of Common Objectives (for all members).
- Mutual Close Relationships between members of the group, each individual has to contribute to and participate in order to achieve common goals.

Cooperative Education Strategy

The strategy of cooperative learning method can be considered as a modern educational method, Modern didactic which contribute to raising academic standards for students, and at the same time getting away from familiar methods or styles in making the learning more attractive, enjoyable and interesting.

The concept of cooperative education:

Literature varies in setting up a unified definition for collaborative learning. However, we can infer from those definitions, the following points which clarify what is meant by the concept of cooperative education:

- It is one of the teaching methods that aim at the development of enhanced academic achievement for the individual character through the group which belongs to.
- The member group consists of 2- 6 members or 3-5.
- The group has objectives seeking to achieve through assigning them learning tasks.
- Team-work is characterized by the interaction between members of the group to exchange experiences and employ them in an integrated manner.
- Evaluation is not individually but collectively, so each individual works for the completion of the group through applying the tasks entrusted to him.
- Competition, if found, is not among members of one group, but between groups.
- Collective action is in the form of an integrated system, where the feedback occurs between the working group members to improve performance so as to achieve the desired objectives.

Systematic Teaching Concept

Using modern methods in teaching based on deliberate basis and proved research is a teaching technology. In its comprehensive sense the Systematic Teaching Concept includes the methods, tools, materials, equipment and disciplines used in a certain teaching system aiming at achieving specific teaching goals. It also means the adoption of work methods and means that go ahead in an organized way, and using all possibilities offered by technology according to teaching and learning theories. This method asserts the integrated view of the role of teaching methods and mutual association with other systems.

At the end of this chapter, the mediation in learning and Feuerstein' s theories was discussed in the thesis.

To achieve the purpose of this study, different mental and cognitive diagnostic tests have been made in order to examine the development of the cognitive thinking for pre- school students. The tests have been in particular in the fourth chapter.

The researcher used a measurement test that was applied before in Jordan and has been developed in Russia. 10 specialists in education and psychology, from Jerusalem, have been consulted, where their advices have been implemented 100%.

The research has been applied on the 1st group (the experimental one) from Al-Woroud Kindergarten which consists of 26 students. The 2nd group (the control group) from Rowa Kindergarten which consists of 26 students. Both pre and post measurements were applied to find the significant statistical differences between both.

The measurements that the researcher used are 15 tests divided to 5 main titles. They examine the cognitive side, memory, thinking and the effective thinking, imagination and attention.

1. Diagnosing the growth of the cognition process through:

- a. What is missing in the picture?
- b. Knowing who is this?
- c. What is hidden in the three drawings A, B and C?
- d. Which label is needed to patch the carpet?

2. Diagnosing the growth of the attention process in terms of productivity, stability, transition, size and measurement through:

- a. Find and remove.
- b. Remember then distribute the points.

3. Diagnosing the growth of the imagination process through creating a story

4. Diagnosing the growth of the memory process through:

- a. know the crafts (models).
- b. Remembering the numbers.
- c. Remembering the words.

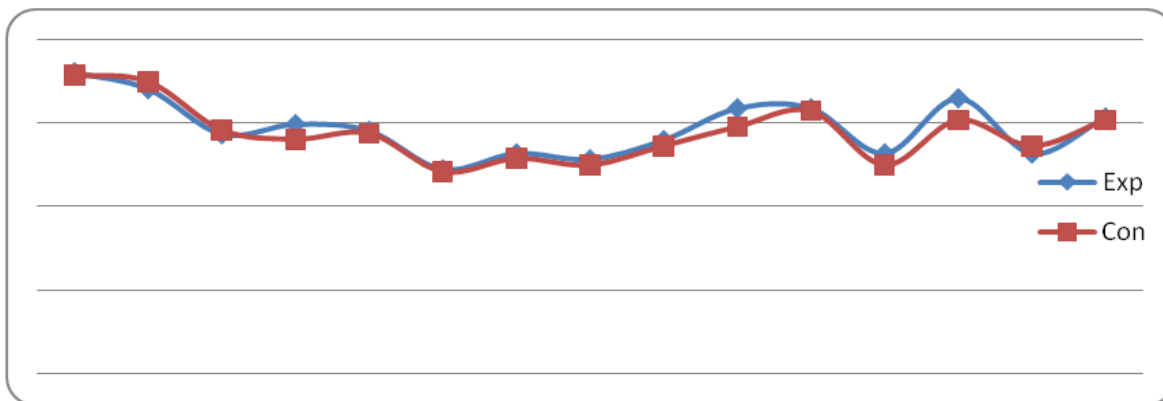
5. Diagnosing the growth of thinking and the effective thinking (practical) process through:

- a. The nonsense or illogical thing.
- b. What is the different thing?
- c. Classifying in groups.
- d. Passing through the mazes.
- e. Cutting the geometric shapes.

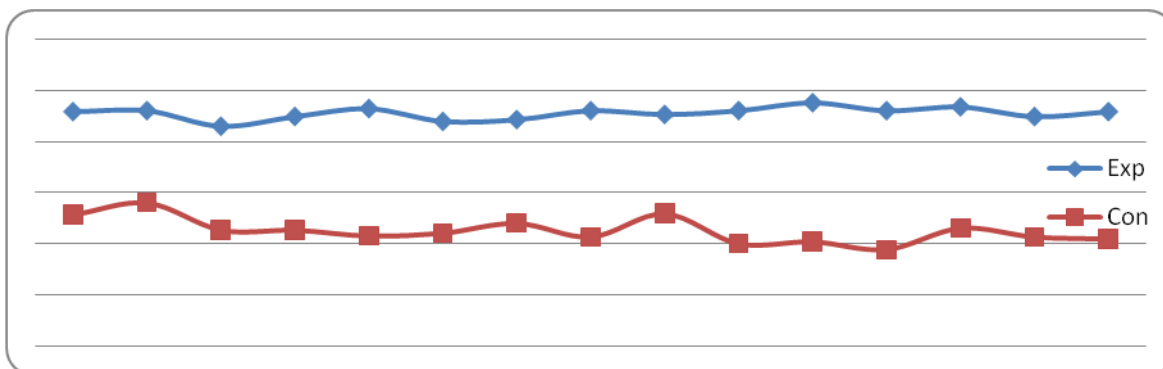
SPSS and Graphical analysis have been made to draw results out of the tests in order to compare between the experimental and the controlled groups. Through this analysis the abovementioned alternative hypothesis appears.

In order to improve the hypothesis, the researcher used “Analysis of Covariance” which removes the pre-achievement’s impact between both groups.

Performance of the Pre-Test



Performance of the Post-Test



After Implementing and analyzing the data it is important to understand the results of the tests which were conducted and executed with the experimental sample in Jerusalem with the preliminary class five-year aged students at Al Woroud Kindergarten, we should stop a little at one of the most important stations of the explanation of the educational space system function or what also so-called the educational space system inside Al Woroud Kindergarten on whose students the study was conducted during the academic year 2012/2013. This study produced the alternative hypothesis which states that the difference between using and not using the training program should be shown. Such hypothesis emphasized the existence of differences with statistical function at alpha level = 0.05 of the innovative thinking level of the students of the kindergarten in the two (experimental and controlling) groups attributed to the experimental program and for all sub-skills.

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The work at Al Woroud Kindergarten depended on the good organization of learning environment which is considered one of the professional tasks of the female teacher at Al Woroud Kindergarten in Jerusalem. The good organization of learning environment facilitates the effective learning of the kindergarten's child. We will handle the organization of the educational spaces at the activity hall which contributed to showing the statistical difference in favor of the controlling sample.

Organization of the Educational Spaces System at the Activity Hall

The children hall at Al Woroud Kindergarten was distinguished in that it is different from other kindergartens in its shapes internal division, order, arrangement, cleansing and interaction of children either with the type of games or care of near colors to childhood such as a green, yellow, blue and pink.

The children hall was divided into several educational spaces where the children were distributed in accordance with the selection of the work of each space. When the child finishes the work in one space, s/he moves to another. The work period of children is considered the longest period in the daily program, and it includes the greatest work tests performed by children.

The work in the spaces considers the "free work" period an application of self-learning principle which should prevail the kindergartens; in which the child seriously interacts with his/ her surrounding, touching and enthusiastic to all things around him/ her. His/ her need becomes saturated for movement, experiment and desire in exploration. Such work and practice are characterized with practicality and vitality. The children harmonized with playing at the educational spaces and at the beginning they expressed their refusal of going into the classrooms. This is natural and ordinary. But the teacher's behavioral intervention, which is very important in kindergartens, contributed to make children understand that time distribution is important. There is a program methodologically divided to

the children, the playing time ends and we should start the other activity. Thus, children were accepting the matter well.

The female teacher's skill at kindergartens in work and communication with children in accordance with the space system requires accurate practice, organization and planning so as to obtain the sought results. The work with the Educational Space System at Al Woroud kindergarten is distinguished with the following characteristics:

- Fulfilling the tendencies of the children of Al Woroud Kindergarten in Jerusalem;
- Providing different educational opportunities;
- Providing opportunities for experiment and test;
- Giving opportunity to children to bear responsibility;
- Responding the needs of self-learning;
- Contributing to the child's integral growth.

The Educational Space System Organization

This Educational Space System was built to achieve the aim of the study of the research by the researcher for attaining the Doctorate (PHD) degree in Psychology. The System depends on the specific spaces which were separated from each other with safe natural wooden and plastic partitions as shown in the appendix of the study. Each space is allocated for exercising a certain activity. The female teacher provides each space with materials, means and tools relating to the subject. Then she attractively shows them to the children in order to interact with her. These spaces are not fixed; they are changed and developed with adding new activities according to the conditions of the attitude, the activity and the potentialities, provided that the change should be at quick intervals so that the child becomes familiar with the place, and feels with security and attention to it. The child's interaction and positivity to these spaces required the skill of the female teacher of the kindergarten in their organization, in the shape which allowed the children to freely exercise the activities without disturbance to them from other spaces. The requirements of each one should be near it, such as basins near the art space where the children wash their hands. The spaces should be also organized in a shape which allows the female teacher to see the children and follow-up them while they are performing the activities in the spaces to give assistance or instruction.

The Educational Spaces System Types:

Among the basic educational system, which have been provided at Al Woroud Kindergarten which, as the study showed, contributed to the progress of its students in the tests of the innovative thinking development, are the following:

1- Educational Space for the cognitive instruction:

This space is provided by a library provided for each classroom at Al Woroud Kindergarten in Jerusalem, in addition to the central library. This space responds the tendencies needs and different levels of the children to see the pictured books and stories in different fields of knowledge, or listening to a story narrated by the female teacher to the children on the objectives. It has some shelves for putting children books and magazines, a small table in the middle, some chairs around the table (3-4) chairs, a carpet with a beautiful color, some big cushions made of thick sponge covered with harmonized colored cloth.

2- Educational Space for Natural and Environmental Discovery:

This Space is one of the most important spaces for the children. It contains things and tools which assist the child to develop some practical and mathematical approaches, lingual and social skills through natural and non-natural things; so as to be a wealth of information and answers to different questions relating to the child and the physical environment. It surrounds the child and stimulates his/her desire to discover and test things to saturate the needs for knowledge, and set the first seeds of innovation. It was equipped with many simple things, tools and appliances, such as natural things like: tree-leaves, some plants and different shapes of small animals in the stages of their development, pieces of stones, gribbles, sand, bird cages, fish basins and some shells.

Educational Space for Musical and Artistic Activities:

It is involved in the activities of the expressionistic art which are considered basic in breeding and educating the child in this stage of age for many approaches and skills to gain the child the feeling with psychological comfort.

3- Educational Space for interpersonal Family Relationship:

In this space, children exercise their imaginary playing, and act different social roles and exercise their favorite works. They also perform the roles of the family members and explain many inner feelings which help the female teacher understand the child and his/ her family environment and how to deal with him/ her .The roles which children perform as family members or friends require lingual communication of children as if they are at their homes so as to feel psychological comfortable.

4- **Educational Space for technical instruction and for teaching various professions:**

This space is called by this name because of the educational importance of building, destruction and formation processes in training and teaching the child conceptual, mathematical, scientific and lingual operation in this stage.

It is also provided with some formation games such as puzzles and domino games from which figures are made to develop the capacity on conformity.

5- **Educational Space destined for Musical Training:**

This space contains recording-tapes and cassettes, a small piano, rhythmic different tools.

Children were sitting in the external yard of Al-Waroud kindergarten in Jerusalem, joyfully singing what they have learned during the day at the music space.

6- **Space designed for Play:**

a- Cars - Toy:

It is an external space, depending on true plastic cars, which children pull at the external yard. They enjoy the cars as if they are really on the street. It is so important for boys. Plastic traffic signals were provided to achieve the enjoyment objective and carrying out the traffic instructions.

b- Bear-Toy – My Game:

This space is near to the child's world. Children like it and play with it as if it is a part of their life. Children show ties of friendship with the toys as if they are real with the toys world. It is great that each child has what he likes from beautiful toys.

7- **Educational Space designed for the Development of Imagination:**

Here, children have free and oriented acting, playing.

8- **The Educational Space for Drama:**

The Drama Space is concerned with children's movements and motional innovative performance. This develops the children's abilities and various talents, and contributes to enrich their future talents.

9- **Educational Space designed for the development of creative thinking:**

This space is exiting and available in Al-Woroud Kindergarten in Jerusalem. It is not mentioned in the books of kindergartens or early childhood. The name was used for the greatest importance of the

Innovative Thinking Development which contributes to enrich and develop different aspects of growth of children. A special room was allocated to develop this aspect; and this room was called, "My Smile Room", because with each progress, the children smile, the teacher smiles and the families also smile.

In order to ensure the success of the educational programs in al-Woroud Kindergarten in Jerusalem, and to achieve the principle of developing creative thinking in the PhD thesis, **methods and programs of al-Woroud Kindergarten (in Jerusalem) have been used to help with achieving the following:**

1. Employment of knowledge in daily life of the child.
2. Modifying the child's behavior towards natural and social environment.
3. Developing practical skills used in the daily life.
4. Developing the proper healthy habits of the child.
5. Developing the mental process that the child needs in his daily life.
6. Developing the linguistic preparations for the kindergarten child through improving the four skills, listening, speaking, reading and writing.
7. Developing the social skills to enable the child to interact with the members of his/her society and cooperate with peers.
8. Developing the perceptual (visual, auditory, etc.) for the child.
9. Providing the child with rules of safety, security and prevention of diseases.
10. Developing the skills of self-reliance of the child.
11. Enhancing the principle of child's ability to express his/herself and feelings strongly and fluently.
12. Providing means of psychological comfort for the al-Woroud Kindergarten children in Jerusalem, through using the system of educational system and good treatment.

As these aims include the three domains of cognitive, emotional and psychomotor objectives that could be achieved through providing the kindergarten program. **Methods and techniques providing in al-Woroud Kindergarten (in Jerusalem) are classified in accordance with the aims to be achieved as follows:**

1- Kindergarten teachers' skills to implement the programs of the activities to achieve the cognitive objectives including the following:

There are two methods to teach concepts as common abstract elements among a number of facts. Induction starts with displaying a group of facts and the children observe the similarities among them, then, coming to the concept. This method is distinguished by training children to observe, compare and think in abstract terms. In addition, children can connect the concepts to the facts. If the teacher wants to improve any concept for children, she has to show them the new facts. Deduction begins with

concepts then moving to classifying the facts exist in the environment in accordance with this concept. This method characterized by shortening the period of learning. The two methods can interact together. We can start by displaying few examples and conclude to the concept, then, applying this concept to new examples.

2. Kindergarten teacher's skills to implement activities programs to achieve emotional objectives:

There are many methods and techniques proved effective in improving positive trends of the children, improving their independence, feeling of tranquility and safety in the kindergarten, adjust the emotions, improving the child's confidence abilities, estimate the value of cleanliness and orders in the kindergarten and the importance of cooperation with peers. **Method and techniques have been used with pupils of experimental sample in al-Woroud Kindergarten (in Jerusalem) as follows:**

The method of educational plays is one of the suitable and preferred means of communication for kindergarten children. It is considered as a behavioral imitation for daily life positions. Also, it is a pedagogical guided amusing method and an alternative to the reality which leads to acquisition of children for some important values in a fun and simple way fits their mental abilities(Amesi,1979;Apger,1972;Holme,1993).

Plays method helps in discovering talents of children of proper pronunciation during performing their roles which they keen to do it successfully. It develops self-confidence and improves spirit of cooperation in similar situations in the daily life. It gives the chance to each child to progress according to their special abilities.

Playing roles is considered one of the most important methods to improve the kindergarten children's values, attitudes and interests. In this method, the child perform a specific role that embodies the personal he/ she wishes to display it to the rest of his colleagues in an spontaneous style, for example, playing the role of some professions.

3. Kindergartens teacher's skills to implement activities programs to achieve the psychomotor objectives:

There are various methods and techniques that achieving the psychomotor objectives which are practicing in the classroom or in the playground. Some are performed individually or in small groups and others are organized to be performed by the whole calls to take part in. These methods and techniques concern with improving senses and sense kinesthetic compatibility through coloring,

cutting and pasting games and different activities which concern with improving motor skills. **One of the methods used to achieve the psychomotor objectives is the:**

- Task analyses approach concern with analyzing and fractionating the educational tasks in sequence, since the kindergarten children learning is organized in short, gradual and sequential chains of steps which finally leads to achieving the ultimate aim(Amesi,1979;Khouja,2000).

One of the methods and techniques that concerns with improving creative thinking of the al-Woroud kindergarten children (in Jerusalem) as laid down by the researcher as follows:

A. Methods and techniques of providing acceleration of thinking:

Programs of improving skills of creative thinking and acceleration of thinking are provided by different methods:

1.Discussions: the discussions that conducted by the teacher with the children about activities and methods of providing them are aiming at creating common language between the teacher and the children. The role of the teacher is to facilitate occurring the learning and directing the activities and discussions that result to improving thinking. There are three stages of discussions: before, after and during the discussion.

2.Cognitive conflict: it is intended to expose the children to views through the activity as a surprise as they consistent with their expectations or previous experiences. As a result of this surprise, a state of astonishment drives the child to reconsider the cognitive structure and way of thinking to adapt to the new experimental evidences. Then, thinking skills grow. The state of astonishment force the carry out the activity with enthusiasm to solve the cognitive conflict he/ she faces.

3.Building bridges of knowledge: it means the linking of experiences he has obtained through this activity with his/ her experiments he/ she obtained in his/ her daily life. Linking the new with the previous experiments helps in forming an integrate image to the experiment. (Elkind,1969; Zahran,1999; Yalom,2005) .

B. Methods and techniques of improving thinking skills:

In order to raise and improve creative thinking in the experimental sample of al-Woroud kindergarten pupils in Jerusalem, some programs were used to improve thinking skills. They depend on self-learning skills through improving deduction and classification skills and forming patterns of exploring. The program seeks to introduce the children to the resources of knowledge, improve the skills of getting them and use the method of integrating thinking skills through all activities.

C. Methods and techniques of improving for kindergarten child's creativity:

This depends on the building and finding a creative climate during the presentation of the kindergarten programs. It is considered a must to run generators of creativity in the children. Kindergarten children have the capacity to create. This creative could be urged and stimulated when they practice free thinking in an atmosphere of friendship, respecting for his character, feelings, ideas and positive support. It needs to encourage him/her to play and express him/ herself freely in safe environment free from threatens. Also, it needs to use open-ended questions, observing his/her interests, helping him/her with experience his/her ideas and giving him/her enough time to perform his/her the activities.

Skills of improving creative thinking in al-Woroud Kindergarten (in Jerusalem):

1. Providing activities that raise curiosity and desiring to research. The role of the activities is to generate the spark of creativity. Stories are considered one of the artistic stimuli for creative thinking and the questions could be raised about the story stimulate the creative thinking. The style of story has been used in pre and post- tests for experimental sample and control sample. It was founded that the difference statistically for the improving of al-Woroud Kindergarten (in Jerusalem) by using the story in the post-test was a result of that the researcher used modern methods and techniques to improve the creative thinking. Also, the method of asking children questions during watching the talking posters and the method of brainstorming are considered an effective mean to generate ideas. This encouraged the children to build on each other's ideas and changed the ideas of the child to good ones. In other words, to rebuild the thoughts of the child in a new style.

2. Exploration method: since creative is a rearranging of what we know in order to know what we do not know, many children fail in their creative work because they cling to the first idea of the first solution they have faced. There are several methods to help the child to search for new alternatives, such as branching thinking which generates multiple and untied correct answers. Also, giving the child enough time and encouraging him/her to experiment creates importance in the improvement of creativity. So, we recommended for patience. With patience, children will progress and achieve a lot.

We can emphasize on the must of using different methods and techniques to provide the kindergarten programs which concern with improving the creativity. The repetition of using the one method or technique in teaching the child leads to stop his mind from thinking. Fixed steps results in blocking thinking and disable thinking processes. So, children should be helped to realize they are different among themselves and everyone has his/her special characteristic which are unique to his colleagues (creativity for all). The teacher has to encourage the excellence of every child (excellence for all). This could be achieved through offering the suitable atmosphere to encourage the participation of

personal children's experiences, asking questions in a way that allow them to express their feelings and thoughts freely, offering the free activities available in the spaces and offering the necessary materials to encourage curiosity. In addition, enough time must be given to the previous practices. The activities must be exciting and interesting for children and provided flexible frameworks and could be adjusted according to the children's needs and requirements, such as thinking games. (Church, 1973; Ghaneam; 2001; Khouja, 2002; Levy, 1988; Maccoby, 1989; Tomlinson, 1995).

In the **fifth chapter**, the study has come to several important points which I can put them in close and synaptic points to serve the real life of children whether in the place of the study, the city of Jerusalem, or to spread them in different kindergartens in this small world. These results were obtained from notes and observations that I took during the field work through discussions, interviews, listening to parents, children and teachers, and analyzing the results of the questionnaire given to teachers, and also discussed with parents.

I worked hard and showed points in the form of results and recommendations. I included in my study both formal and non-formal participants and they are:

1. Teachers: they've had a wide space in showing recommendations and results;
2. Kindergartens' administration;
3. The ministry of education;
4. Families of kindergartens children.

Several important points in follow up and counseling teachers, have been clarified through this chapter for the reality of kindergartens. These points have been sorted through analyzing questions which have been submitted to the teachers of the kindergartens, educators, parents, university lecturers, inspectors and kindergartens' principles.

Finally, I consider implementing and working with today's children for a bright and safe future; to positively and effectively develop the status of childhood and humanity. The preparation for a bright future of any people appears through care of childhood and working earnestly at kindergartens. This stage is important and sensitive in their mental, psychological, social, lingual, physical, sensitive and emotional development. This thesis highlights the attention and concern to the status of childhood. We, in Jerusalem, urgently need to pay attention and concern to children, and to develop all different aspects of growth to direct children towards the way of peace, safety, psychological support, realization of self-confidence and rising up their innovative thinking.

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