E E L U
الجامعة المصرية للتعلم الإلكترونى
Egyptian E-Learning Univeristy

Faculty of Educational Studies
Education master programe
Elearning department

Research Titled

THE EFFECTIVENESS OF E-MIND MAPS BASED CONTENT ON DEVELOPING VISUAL PERCEPTUAL SKILLS OF KINDERGARTNERS

A Thesis submitted to Egyptian E-learning University in partial fulfillment of the requirements for the degree of Master of Education

Prepared by

Salma Ali Ahmed Abdelnabi

Specialist in Child Education

Supervised by

Prof. Dr. Maysa Fadel Abu-Muslim
Professor of Educational Psychology
NCEEE

Dr. Mohamed Elsayed EL Nagar
Lecturer of E-learning Technology
Faculty of Educational Studies
Egyptian E- Learning University

2017

Abstract

The Effectiveness of E-Mind Maps Based Content on Developing Visual Perceptual Skills of Kindergartners

Prepared by:

Salma Ali Ahmed Abdel Nabi

Supervised by

Prof. Dr. Maysa Fadel Abu-Muslim

Dr. Mohamed Elsayed EL Nagar

This research investigated the effectiveness of E-Mind Maps based content on developing visual perceptual skills of kindergartners at Smart Vision Language School in Egypt. For data collection, the researcher used a qausi experimental method by using an experimental group of (25) kids and a control group of (25) kids. The main tool of the study is TVPS-R (a test of visual perceptual skills) while the experimental treatment tools are: an E-mind maps specifications check list and E-mind maps based content. The pre-test of visual perceptual skills was applied to examine children levels of both group. The experimental group was taught using the E- mind maps based content while the control group was taught the content traditionally. At the end, the test was also applied for both groups to check improvement. The data was collected and the test scores were computed on Assistat 7.6 software to answer the questions of the study. On the basis of the findings, the researcher found that there was a significant effect using E- mind maps based content on developing kids' visual perceptual skills in favor of the experimental group. The researcher recommended that teachers should give more emphasis to the use of E-mind maps for its positive effects on developing children visual perceptual skills.

Keywords: Electronic Mind Maps, Visual Perceptual Skills, Kindergartners.

ACKNOWLEDGMENTS

First of all, I would like to thank Allah for the uncountable blessings and for providing us with many great chances to learn.

Special thanks to Egyptian E-learning University for offering this master program. Also special thanks for my supporting colleagues; I'm so grateful that we have been all together throughout this journey.

Next, I would like to express my sincere gratitude to my advisor, Prof. Dr. Maysa Fadel Abu-Muslim, for her guidance, support and cheerful smile I always get. Additionally, I'm deeply grateful to Dr. Mohamed EL Nagar: thanks for your continuous advice, time and your guidance which helped me throughout the research and writing of this thesis, I could not have imagined having a better advisor for my thesis.

I must express my very profound gratitude to Prof. Dr. Nabil Gad Azmy who called me a "fighter": thanks for your continuous support. Additionally, my deep thanks to Prof. Dr. Amany Saeida whom I really appreciate her great advices and support. Also, thanks my lovely mother Dr. Eman yehia who has always been pushing me forward saying "you can do it" and thanks to my dad, Prof. Dr. Ali Ahmed for your continues prayers. Finally, My sincere thanks goes to my loving caring husband , Ahmed EL Azazy, I would never have been able to finish my research without your persistent help cheering me up and standing by my side through the good times and bad times. To my children, Taqey EL Deen, Taj EL Deen , Taiem Allah: wishing you all a bright future and hope that I could attend your thesis one day.

Table of Contents

Topic **page**

Chapter 2

E-mind maps on developing visual Perceptual skills of kindergartens

Chapter 3
Research Methodology

Chapter 4
Results, Data Analysis and Discussion

List of Tables

List of Figures

Chapter One
Background and Problem

- **Introduction**
- **Context and statement of the problem**
- **Research questions and hypothesis**
- **Research purpose**
- **Research significance**
- **Research method**
- **Research Tools**
- **Delimitations and limitations of the research**
- **Definitions of key terms and concepts**

Introduction:

Technology becomes an essential part of our lives and it is everywhere around us. Although it has a significant role in education in general, it is still not widely implied in our classrooms and the traditional methods dominate our educational system which deprive learners from discovering new learning chances especially in their early stages.

The early stages in education are considered the most important ones. They have a major impact on successful learning experiences in school and personal development. They introduce opportunities for the child to learn many skills that affect his following years in education. And whereas children are now surrounded with technology, good planning for implying this technology would be so helpful for them to discover new learning chances.

Kindergarten is a very important stage in child's learning. It is the key to a full productive life and a critical stage of development and form the foundation for children future well-being and learning. It is a period of development when environment has an important impact on his whole development (UNICIF, 2001, p.1)* and while technology allows children to learn in a whole new way and develops positive educational impact on students as young as kindergarteners so more concern should be paid to updating classrooms with technology (Hatch, 2011, p.5).

* The researcher used APA Documentation system version (6) in documenting this research

Technology should be used in the right way to serve children needs at this age .One of the most important skills in kindergarten are visual perceptual skills because they help children interpret what they see through organizing and obtaining the visual information from the environment around them Also, These skills are important in learning how to form letters, for copying, spacing, sizing, and orienting letters and words in a correct way (Swearingen, 2007, p. 1). Children even with good vision can struggle with recognizing that a shape is still the same regardless of its size ,or have difficulties with putting shapes or symbols together or remembering them (Case, 2005, para.2).Thus, these skills should be developed as they are the basic skills and the initial process for any learning.

And as Mind mapping appears to be a great technique in education, many mind-mapping software applications are introduced to facilitate structuring concepts and sharing ideas. At this point, mind mapping is certainly worthy of more attention in the research literature as its popularity is on the increase,(Tucker, Armstrong & Massad, 2010, p.12) .It is a spider web-like visual representation facilitate meaningful and cooperative learning (Howitt, 2009, p.42). Mind Mapping brings together your left brain (words, logic, numbers, linearity) and right brain (curves, colour, creativity, images, space) which dramatically increases your mind power. By using both cortical sides simultaneously you are maximizing your brain's potential. The more you integrate left and right brain activities, the more the brain's performance becomes synergetic. This means that each

cortical skill enhances the performance of other areas so that the brain is working at its optimum (Sperry, 1968, p.725-726). A good mind map helps in teaching and learning process .It empowers students advance their own learning as it helps them to devise hypotheses more quickly in the learning process than the traditional text based (Ligiero, Romano& Douma, 2009, p.1) .Concerning the kindergarten, Mind Mapping is a strategy that helps children to improve comprehension, memory and imaging as they think in pictures and words .Therefore, using Mind Maps is one more tool that go beyond the chalk and talk as a traditional method and instructors should add to their portfolio of active learning activities as they seek to (Budd, 2003, p.1).

Motivated by these twin goals of using electronic mind maps to imply technology in classes and developing the most initial skills in kindergarten, this research introduced an electronic Mind map based content that presents a rich visual presentation to develop some visual perceptual skills of kindergarteners.

Context and statement of the problem:

The problem was derived from the following resources:

- **Researcher's observation**

Being a Specialist in Child Education and Soft skills trainer at many centers & schools, the researcher has noticed that teachers use the same traditional methods in Kindergarten that don't suit children needs at all. Moreover, they are not aware of kids' initial skills they must develop to copy a letter or a word, to