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

Education

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

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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 quasi 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.

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Table of Contents

Topic	page
Abstract	iii
Acknowledgements	iv
Table of Contents	v
List of Tables	ix
List of Figures	x

Chapter 1

Background and Problem

Introduction	3
Context and statement of the problem	5
• Researcher's observation	5
• Previous researches	6
Research question and hypothesis	8
Research purpose	9
Research significance	9
Research method	10
Research tools	10
Delimitations and limitations of the research	11
Definitions of key terms and concepts	11
Mind Maps	11
Visual perception	12
Organization of the Remainder of the Research	13

Chapter 2
**E-mind maps on developing visual Perceptual
skills of kindergartens**

Mind maps.....	17
History of mind maps.....	17
Mind maps significance	18
Mind maps laws	21
Mind maps in education.....	23
Mind maps and Concept maps	26
Electronic mind maps.....	31
Electronic mind maps vs. hand drawn ones.....	34
Summary	38
Visual perception	38
Vision and visual perceptual process	40
Major theories of visual perception	43
Gestalt theory:	44
Brunswick's probabilistic functionalism	45
The neurophysiological approach	46
Empiricism (Nurture)	47
Direct perception and ecological optics:	48
Marr's computational approach	49
Visual perceptual skills	50
Visual Form Recognition/Discrimination.....	51
Visual constancy	52
Visual memory	53
Visual figure-ground	53
Visual closure.....	54
Visual spatial skills	55

Visual sequential memory.....	56
Visual perceptual skills significance.....	57
Visual perception skills challenges.....	60
Summary	62

Chapter 3

Research Methodology

Introduction	67
Research design.....	67
Research variables	68
Research participants	68
Research tools	69
Designing mind maps based content.....	69
Applying Kemp’s model	71
Identify instructional problems and specify goals	72
Examine learner characteristics	73
Stating instructional objectives for learner	74
Identify subject content.....	75
Design instructional strategies.....	75
Designing the message (planning instructional delivery....	77
Developing evaluation instruments to asses objectives.....	82
Visual perceptual skills test	82
Test standardization in Egyptian environment	82
Test reliability	83
Test validity	83
Selecting resources to support instruction and learning activities	85
Summary of Research implementation	85

Chapter 4

Results, Data Analysis and Discussion

Results	91
Finding related to question (1).....	91
Findings related to question (2)	92
Findings related to question (3)	92
Hypothesis (A)	93
Hypothesis (B)	95
Hypothesis (C)	96
Discussion	97
Recommendations	100
Further researches	101
References	103
Appendices	123
Appendix 1: List of Juries	125
Appendix 2: E-Mind maps specifications checklist	126
Appendix 3: Appendix 5 : EELU formal letter.....	131
Appendix 4: E-mind maps	132
Research summary	A
Research summary in Arabic	ج
Research cover and Abstract in Arabic	ب

List of Tables

No.	Table	Page
(1)	Comparison between concept maps and mind maps	28
(2)	Hand- drawn mind maps versus computer drawn maps	35
(3)	Sample distribution according to group	68
(4)	E-mind maps specification list statics	77
(5)	Total results for both control and experimental group pre- test	87
(6)	Total results for both control and experimental group post-test	93
(7)	Total results for experimental group pre-post test	95
(8)	Value of Constant Black for the effectiveness of E-mind maps based content	97

List of Figures

No.	Figure	Page
(1)	Simple concept map	27
(2)	Hand-drawn mind map	37
(3)	Electronic mind map	37
(4)	Hierarchy of visual perceptual aspects development in the CNS	41
(5)	A quasi experimental pre-test/post-test design	68
(6)	The elements of Kemp's model	72
(7)	Running and hopping with kindergartners while displaying an E-mind map	76
(8)	Curved and waves up branches	80
(9)	Zigzag branches	80
(10)	Hyperlinks to display a video	81
(11)	Hyperlink to real pictures	82
(12)	Sample of final mind maps	83
(13)	Thin and transparent sheets of test booklet	85
(14)	Applying test with kindergartners	87
(15)	Column chart of total mean values for both control and experimental group post test	94
(16)	Column chart of total mean values for experimental group of pre-test and post-test	96
(17)	Sample of children hand-drawn maps	100

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