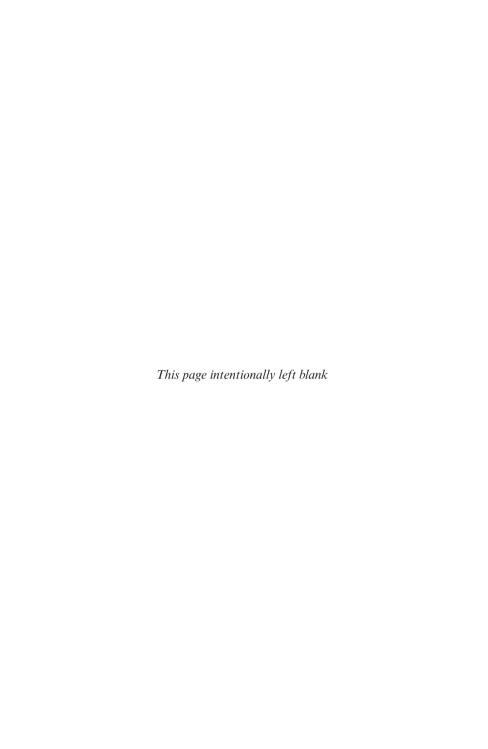
# MEDIATION AND THINKING DEVELOPMENT IN SCHOOLS



## MEDIATION AND THINKING DEVELOPMENT IN SCHOOLS

## Theories and Practices for Education

### HEIDI FLAVIAN

Achva Academic College, Israel



United Kingdom – North America – Japan – India Malaysia – China Emerald Publishing Limited Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2019

Copyright © 2019 Heidi Flavian

Published under an exclusive licence

#### Reprints and permissions service

Contact: permissions@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. No responsibility is accepted for the accuracy of information contained in the text, illustrations or advertisements. The opinions expressed in these chapters are not necessarily those of the Author or the publisher.

#### British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-78756-023-9 (Paperback) ISBN: 978-1-78756-020-8 (E-ISBN) ISBN: 978-1-78756-022-2 (Epub)



ISOQAR certified Management System, awarded to Emerald for adherence to Environmental standard ISO 14001:2004.

Certificate Number 1985 ISO 14001



## CONTENTS

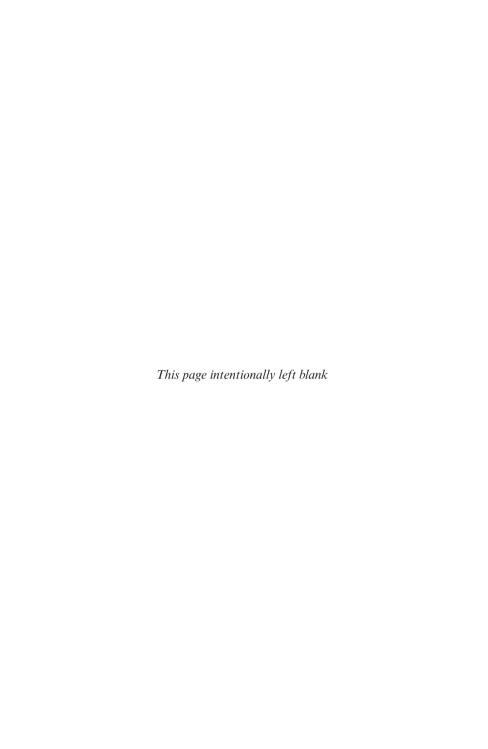
List of Graphic Models			i>	
Acknowledgements			X	
Pre	Preface			
۸ ۸ .	diatio	n and Thinking Development in Schools:		
		and Practices for Education	1	
1110		luction	1	
1.	Thinking Development		5	
	1.1.	John Dewey (1859–1952)	6	
	1.2.	Jean Piaget (1896–1980)	11	
	1.3.	Lev Vygotsky (1896–1934)	13	
	1.4.	Reuven Feuerstein (1921–2014)	16	
		1.4.1. The Input Phase	17	
		1.4.2. The Elaboration Phase	18	
		1.4.3. The Output Phase	19	
	1.5.	Howard Earl Gardner (1943–)	22	
	1.6.	The Neuropedagogy Approach	26	
2.	Mediation: A Unique Educational Process		31	
	2.1.	Mediation, Teaching and Learning		
	22	Mediation as a Key for Thinking Development	34	

vi Contents

	2.3.	Mediation				
		2.3.1.	Feuerstein's Universal Parameters of Mediation	42		
		2.3.2.	Situational Parameters Reinforcing and Elaborating MLE	43		
3.	School Students; Learning Differentiations Teachers Need to Recognise					
	3.1.	Motivat Develop	ion, Learning and Thinking oment	50		
	3.2.	Culture,	Learning and Thinking Development	53		
	3.3.	Pedago Strategi	ogy, Taxonomy and Teaching es	58		
4.	Mediation and Teaching for Students' Thinking Development					
	4.1.	•	grated Model for Planning Thinking oment through <i>Mediation</i>	68		
	4.2.	Mediation and Learning Processes in Early Childhood in a Family Setting and on a Daily Basis		<i>7</i> 8		
		4.2.1.	Mediation in a Family Setting; Example No. 1: Family Dinner	80		
		4.2.3.	Mediation in a Family Setting; Example No. 2: Completing a Jigsaw Puzzle	84		
		4.2.4.	Mediation in a Family Setting; Example No. 3: 'Arguing versus Discussing'	88		
		4.2.5.	Mediation in a Family Setting; Example No. 4: Getting Ready for School	03		

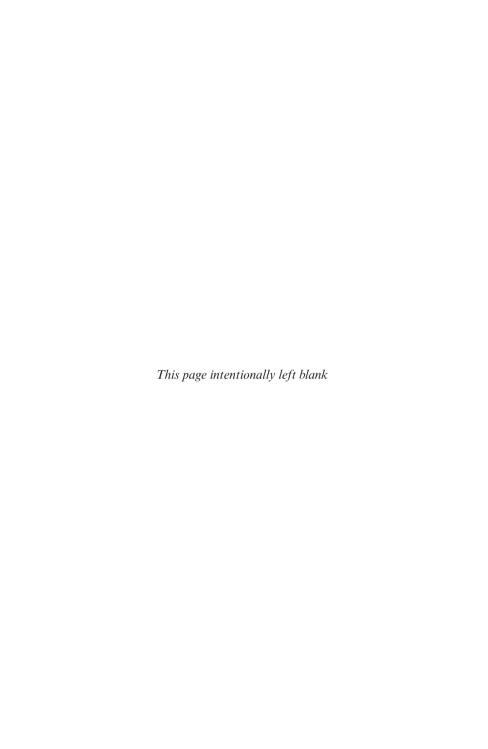
Contents

4.3.	Mediation and Learning Processes in the Classroom			
	4.3.1.	Mediation in the Classroom; Example No.1: Why Should We Come to School?	100	
	4.3.2.	Mediation in the Classroom; Example No. 2: Learning to Write	105	
	4.3.3.	Mediation in the Classroom; Example No. 3: The Four Arithmetic Operations	112	
	4.3.4.	Mediation in the Classroom; Example No.4: Different States of Matter	116	
Bibliography			121	
Index			129	
About the Author				



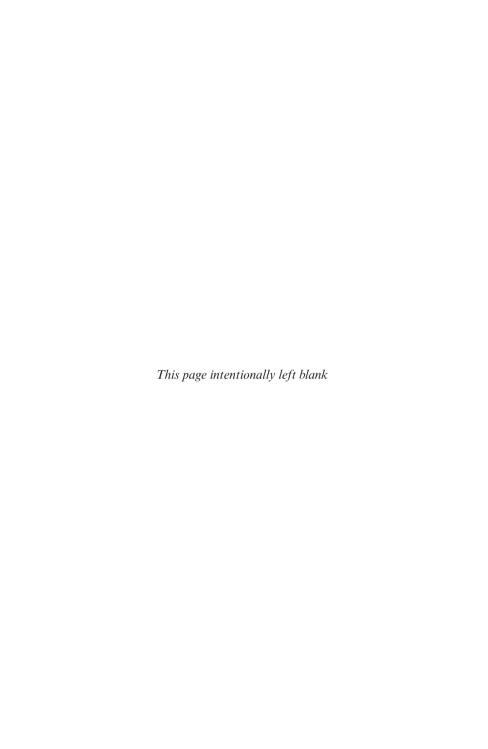
## LIST OF GRAPHIC MODELS

Model 1:	The Role of Human <i>Mediation</i> in	
	Learning Theories	30
Model 2:	Planning and Conducting Thinking	
	Development through Mediation	77



## **ACKNOWLEDGEMENTS**

I would like especially to thank my husband and children, who encouraged me throughout the process of writing this book. In addition, I would like to thank all the researchers and theoreticians who shared their ideas and knowledge with the world and contributed to my understanding of the core meaning of *mediation* and thinking development.



### **PRFFACE**

My understanding that everyone is capable of developing independent thinking skills once they have been guided on how to do so was developed many years before I officially became a teacher, an educator and a mediator. Throughout the three years of high school, once a week, I volunteered as a caregiver of a child who was diagnosed with autism. Although professionals decided that he would not be able to communicate in any way, his parents refused to accept this diagnosis and decided to invite a variety of caregivers who would stimulate him to communicate in different ways. Step by step, it worked and communication slowly developed. Back then I thought it was a miracle, later in life I understood it was mediation. Another revelation I experienced was after a few years, as a teacher, during a workshop with Prof. Reuven Feuerstein, who clarified for me the role of the mediator throughout mediatees' thinking development and opened the door for me to the world of *mediation*.

Mediation theories were developed for many years to emphasise society's responsibility towards the success of learning among all children, even though the term mediation was usually not used. Out of the several twentieth-century learning theories, I have chosen five main theoreticians who approached learning from different perspectives, at different times and in different cultures. The five theories I will focus on in this book are those developed by Dewey, Piaget, Vygotsky,

xiv Preface

Feuerstein and Gardner. All five theories include environment, schools and parents in the process of children's learning and thinking development, and they all share the view that children's thinking can be modified. In addition, key results from research in the field of neuropedagogy will be presented to strengthen these theoretical attitudes, since we know today that the brain actually changes as a result of social interactions and interventions. Each perspective discussed here represents a different understanding of society's role in education. Moreover, although these theoreticians did not know each other, their different views of society's role as responsible for all children's development, is the link that may provide educators with a wider and more professional basis for better mediation.

While each theoretician believes that his/her theory will be the one to solve most of the dilemmas of education, this book intends to offer practical integration of several existing *mediation* theories. It offers a unique model that integrates different approaches from different periods that can be used effectively by mediators and educators today. Nevertheless, I invite each of the readers to look for other theories and possibilities that also encourage integrating *mediation* for thinking development.

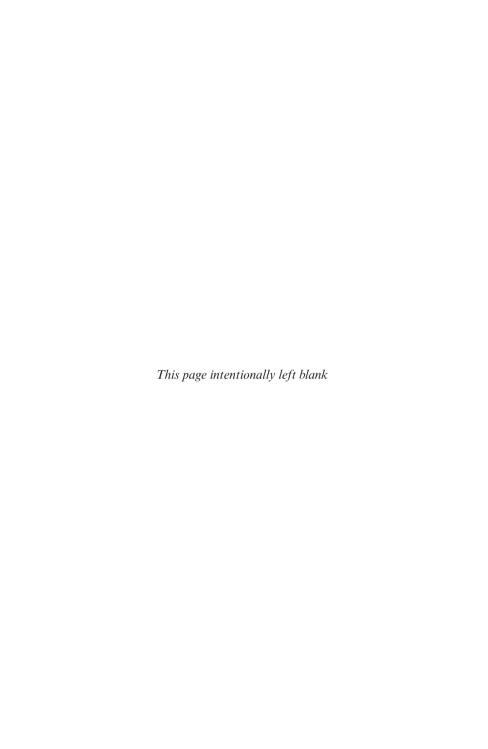
This book offers an opportunity to better understand the role of *mediation* in an era of dynamic social and cultural changes that influence education, in order to better prepare the next generation to become part of society. Hundreds of years ago, ever since leaders of society began to understand the concept of education, the common goal of all was to better educate people in order to make them a productive part of their society in the future. As a result of this broad goal, various approaches to education were developed in order to help individuals become better learners. In other words, theoreticians and researchers studied the human mind and thinking

Preface xv

processes in order to develop better and more efficient learning models.

Mediation, as mentioned, is a process that promotes learning as a result of learner interactions with the environment. Without reducing the importance of classic learning models, nowadays other goals are at the forefront of the education processes: teachers do not need to keep focussing only on teaching specific disciplines; they also need to focus on knowledge that will be useful in students' future. In addition, students are judged on their achievements in school rather than on their understanding and their thinking development and parents try to help their children excel at school rather than excel as members of society. Although the goals of learning knowledge and reaching new achievements are important, teachers and educators should understand how to mediate knowledge acquisition rather than be the source of knowledge.

Mediation processes as mandatory components in education allow all participants to develop better thinking processes. The ideas about *mediation* are wide and cover all areas of life. Therefore, being a great teacher or educator are only two facets of the *mediation* approach. This book will allow all readers to better understand the concept of *mediation*, following with ideas to practice it, and thereby become true mediators.



## MEDIATION AND THINKING DEVELOPMENT IN SCHOOLS: THEORIES AND PRACTICES FOR EDUCATION

#### INTRODUCTION

The concept of 'mediation' was originally developed as one of the tools psychologists used in order to allow better communication and processes between them and their patients. But over time, understanding the variety ways mediation may be conducted led to possibilities beyond the original notion of the concept. Understanding the role and responsibility of society for individuals' development led a variety of professionals to study the ways mediation may be used within different domains. These professionals contributed much knowledge to allow others to improve their communication skills. Nevertheless, mediation is a process that needs to be planned and not all human interactions can be defined as mediation processes. 'Thinking development' is another concept most people use without understanding its core notion. Whereas the majority of people agree that it is society's responsibility to educate everyone, this consensus is less widespread when it comes to the question of society's responsibility to make sure all people can think well. This is despite the evidence that neuroscientists have shown that the human brain can be modified with the proper stimulation.

From the general perception and understanding of *mediation* along with the possibilities of influencing thinking development, the goal of this book is to share practical ways human can mediate for better thinking development through daily activities both in and out of school.

Throughout this book, the processes of understanding and using *mediation* are presented from the perspectives of psychologists and educators who wished to enhance thinking skills among learners. Although many scholars have dealt with this topic over the years, I have chosen to focus on the five theoreticians that I consider to have paved the way to where we are today.

In the late nineteenth century, Dewey claimed that society's goals should focus on integrating and educating all people within the community and therefore society should treat each individual according to the most efficient way that individual can learn. During the first half of the twentieth century, Piaget developed the *mediation* approach, according to which *mediation* is the core social activity that promotes learning and cognitive activities, although he restricted the effect *mediation* might have on cognitive development to the natural abilities one was born with, cultural differences and age.

Following this theory, both Vygotsky and Feuerstein also developed their theories and addressed *mediation*. Vygotsky focussed on the variety of the types of instruction mediators may provide and on the learning process according to the Zone of Proximal Development of learning along with understanding an individual's culture. Feuerstein, later developed his theory of the Mediated Learning Experience, which also offers practical ways mediators may follow an individual's thinking processes in order to improve them. Feuerstein analysed *mediation* according to 12 parameters, while also

categorising thinking processes into 27 cognitive functions, to allow the mediator to better prepare, proceed and follow the success of an individual's cognitive development.

The fifth theoretician presented in this book is Gardner, who developed his theory of multiple intelligences in the 1980s. Gardner's basic argument was that each person thinks using multiple intelligences. Initially Gardner defined seven different intelligences that everyone has, claiming that it was up to the mediators to provide proper processes through which to develop each one. Over the past decade, the field of neuroscience has been greatly expanded by numerous studies that focus on the intentionality between human activity and brain development. Those studies have contributed to the development of the field of neuropedagogy, which integrates knowledge of neuroscience with practical teaching strategies and mediation. The neuropedagogical approach is also integrated in this book in order to allow educators to develop learning activities that are also based on updated neuroscience studies. The above approaches will be described in greater detail further on in the book, along with the integration of new practical approaches to pedagogy and teaching.

Even though the theories may seem to differ greatly from one another, there are some common parameters, the most important of which is the essence of the mediators' role. Moreover, according to these theories, mediators are people who wish to better introduce knowledge and processes within the environment to all mediatees. Throughout this book, reference to mediators is from the perspective of educators who are not necessarily officially trained teachers, but are involved in educational processes and wish to promote thinking and learning of any kind.

Wishing to promote all learners' thinking development through conducting better *mediation* processes, this book aims to present the core of each of the abovementioned theories, focusing on the practical possibilities that *mediation* theories offer educators within the environment of school and family. The chapters contain several examples of *mediation*. Although these examples are based on real situations, they present only a small number of mediated situations which should be used as a basis for learning possibilities. Readers may use these examples in order to develop new mediated situations according to their own experiences and their mediatees' cognitive needs.