

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Some Observations	2
1.2	Social Responsibility and Youth	5
1.3	PISA and Its Problem-Solving Test	6
1.4	The Movement for Social and Emotional Education	7
1.5	An Argument for Designing a New Literacy	8
1.6	Statement of the Problem, the Aims, and the Research Question	8
1.6.1	Sources that Influenced the Formulation of the Problem, Aims, and Research Question	8
1.6.2	Statement of the Problem	9
1.6.3	Aims	9
1.6.4	Research Question	9
1.7	Outline of This Book	10
1.8	An Important Note	11
	References	12
<b>2</b>	<b>Open Research and Philosophical Reflections</b>	<b>13</b>
2.1	Characteristics of Open Research	14
2.2	Ameliorative Beliefs and Scientific Research	17
	References	20
<b>3</b>	<b>Building a Framework for Sensitizing Concepts</b>	<b>23</b>
3.1	The Five Sensitizing Concepts	24
3.2	What Should Be Done? Building an Ameliorative Model from the Child Convention's Directives	26
3.3	What Could Be Done? Building a Model for Thinking from Neuroscientific Insights	27
3.4	How to Do It? Building Models for the Classroom Context	30
3.4.1	How to Do It? Building a Model for Understanding Pupils as Persons	30

3.4.2	How to Do It? Building a Model for Social Problem Solving . . . . .	31
3.4.3	How to Do It? Building a Model for Learning . . . . .	35
3.5	Toward a Holistic Approach to Pupils and the Classroom Context. . . . .	36
3.5.1	A Three-Level (and Three-Moment) Pedagogical Context and a Mental Model. . . . .	37
	References. . . . .	39
<b>4</b>	<b>The Methodology. . . . .</b>	<b>43</b>
	References. . . . .	48
<b>5</b>	<b>Intervention in the Classroom: The Teacher's Description . . . . .</b>	<b>51</b>
5.1	Learning for Life . . . . .	52
5.2	A Note on Ethical Considerations. . . . .	56
<b>6</b>	<b>Results Based on Multiple Evidence . . . . .</b>	<b>57</b>
6.1	Reality-Humble Research and the Issue of a Researcher's Selections . . . . .	57
6.2	A Difference. . . . .	59
6.3	Pretest: First Day, Before Learning the Problem-Solving Model . . . . .	60
6.4	Posttest and How Pupils Used the Model and What They Learned? . . . . .	61
6.4.1	Step 1 Definition of the Problem: Theme 1 of the Analysis . . . . .	62
6.4.2	Step 2: Theme 2 of the Analysis. . . . .	64
6.4.3	Step 3: Theme 3 of the Analysis. . . . .	65
6.5	Interview with Pupils . . . . .	71
6.5.1	The Model Helped with Slowing Down and Learning/Training to Stop and Think . . . . .	71
6.5.2	Systematic Thinking in the Problem-Solving Process . . . . .	72
6.5.3	Pupils' Experiences from Being in the Project and Using the Model. . . . .	72
6.6	A Year After the Start of the Project . . . . .	74
6.6.1	A Practical Problem. . . . .	75
6.6.2	Keeping the Environment Clean . . . . .	76
6.6.3	Social Problem Solving. . . . .	76
6.7	The Second Year . . . . .	77
6.7.1	A Letter to UNICEF . . . . .	77
6.7.2	Climate Change. . . . .	79
6.8	Third Year: Integrating Executive Functions of the Brain with Educational Goals. . . . .	82
6.9	Testing Adults . . . . .	83

6.10	Summary of All Results . . . . .	84
	References. . . . .	87
<b>7</b>	<b>Reflective Integration of Conclusions for Theory Building. . . . .</b>	<b>89</b>
7.1	Toward a Proposition for Multilevel Action in the Classroom. . . . .	90
7.2	Toward Creating a Method (or Pedagogy) for Successful Multilevel Action in the Classroom . . . . .	91
7.3	Learning at a Deeper Level . . . . .	93
7.4	Knowledge of Capacity Building . . . . .	94
7.5	Integrating Conclusions for Theory Building . . . . .	94
	References. . . . .	96
<b>8</b>	<b>An Evolving Theory for Social Problem-Solving Literacy . . . . .</b>	<b>99</b>
8.1	Theory, “Phenomena,” and Data. . . . .	100
8.1.1	The Philosophical Assumptions for Building the Theory. . . . .	102
8.1.2	The Challenge of “Acknowledging-Finding”. . . . .	103
8.2	The Statement of the New Theory . . . . .	106
8.3	Complementary Description of the New Theory. . . . .	108
8.3.1	What Should Be Done: Child Convention’s Directives for Schools Worldwide. . . . .	109
8.3.2	What Could Be Done? the Prefrontal Cortex, Executive Function, and Problem Solving. . . . .	112
8.3.3	How to Do It? Operationalizing the Executive Functions in the Classroom. . . . .	116
	References. . . . .	123
<b>9</b>	<b>The Power of Systematic Thinking. A Challenging Comparison: The Middle-Aged Iranian Mother and the Swedish Teenager . . . . .</b>	<b>125</b>
9.1	Hortensia Junior’s Text. . . . .	126
9.2	Analysis of Hortensia Junior’s Text . . . . .	127
9.3	Problem of Presenting Such a Case . . . . .	128
9.4	Conclusions from These Two Projects and the Need for Further Research. . . . .	130
	References. . . . .	130
<b>10</b>	<b>Discussion . . . . .</b>	<b>133</b>
10.1	Practicing Hard Thinking Within Research. . . . .	134
10.2	Description and Selection . . . . .	134
10.3	Representation . . . . .	140
10.4	Inference and Synthesis . . . . .	142
10.5	Verification and Evaluation in Qualitative Intervention Research. . . . .	145
10.5.1	Quality as Relational Praxis. . . . .	145

10.5.2	Quality as a Reflexive-Practical Outcome . . . . .	146
10.5.3	Quality as Plurality of Knowing . . . . .	147
10.5.4	Quality as Engaging in Significant Work . . . . .	147
	References. . . . .	150
<b>11</b>	<b>Applying the New Theory in Other Subprojects. . . . .</b>	<b>153</b>
11.1	Subproject II: How Can Youths Make Deliberate Decisions and Solve Fictive Problems . . . . .	154
11.1.1	Aims of Subproject II . . . . .	154
11.1.2	Pupils and Personnel . . . . .	154
11.1.3	Method . . . . .	154
11.1.4	Facts . . . . .	155
11.1.5	Emotions . . . . .	155
11.1.6	Positivity . . . . .	156
11.1.7	Weakness or Risks . . . . .	156
11.1.8	Creativity. . . . .	157
11.1.9	A Holistic Approach . . . . .	157
	<b>Epilogue. . . . .</b>	<b>159</b>
	<b>References . . . . .</b>	<b>163</b>
	<b>Appendix 1: The Problem-solving Model Used for Learning How to Solve Fictive Problems. . . . .</b>	<b>165</b>
	<b>Appendix 2: The Posttest That Was Given to Pupils in the Fourth Month of the First Subproject. . . . .</b>	<b>167</b>

Brain, School, and Society

The Neuropsychosocial Preparation Theory

Moula, A.

2017, XV, 167 p. 13 illus. in color., Softcover

ISBN: 978-3-319-55169-2