

Cambridge University Press

978-1-107-11261-2 - Effective Teaching and Successful Learning: Bridging the Gap between  
Research and Practice

Inez De Florio

Table of Contents

[More information](#)

## Contents

<i>Preface</i> .....	<i>page xi</i>
Introduction .....	1
1. Premises .....	1
2. Aims .....	2
3. Structure .....	2
1 Main Features of Scientific Research on Education .....	8
1.1 A Conference Talk .....	8
1.2 Science and Research .....	10
1.3 Jean Piaget (1896–1980): Major Contributions to Developmental Psychology .....	12
1.4 Lev Vygotsky and Jerome Bruner: Going Beyond Piaget .....	16
Lev S. Vygotsky (1896–1934) .....	16
Jerome Bruner (born 1915) .....	19
1.5 Educational Science and Educational Research .....	22
Review, Reflect, Practice .....	25
2 Important Types of Scientific Research on Education .....	27
2.1 Main Types of Research: Description and Explanation .....	27
2.2 Theories, Hypotheses, and Models .....	28
2.3 Research Design and Methodology .....	32
2.4 Psychometrics .....	35
2.5 Experiments (RCTs), Quasi-Experiments, and Correlation Studies .....	37
2.6 A Presentation of John Dewey’s Main Ideas .....	41
Review, Reflect, Practice .....	43

Cambridge University Press

978-1-107-11261-2 - Effective Teaching and Successful Learning: Bridging the Gap between  
Research and Practice

Inez De Florio

Table of Contents

[More information](#)

viii

Contents

3	Main Features of Evidence-based Research on Education .....	45
3.1	Evidence-based Medicine and Evidence-based Education .....	45
3.2	A Question of Age .....	47
3.3	Essential Features of Evidence-based Research .....	49
3.4	Potential and Pitfalls of Randomized Controlled Trials .....	51
3.5	The Measurement of Interventions in Teaching and Learning ..	54
3.6	Assumptions about <i>What Works</i> .....	56
3.7	How to Deal with Results of Evidence-based Research .....	58
	Review, Reflect, Practice .....	62
4	Meta-Analyses on Education .....	63
4.1	Meta-Analyses and Effect Sizes .....	63
4.2	A Critical Look at Research on Teaching Effectiveness .....	69
4.3	Thinking without Thinking .....	71
4.4	A Theory-based Meta-Analysis of Research on Instruction .....	73
	Review, Reflect, Practice .....	77
5	A Synthesis of Over 800 Meta-Analyses Relating to Achievement ...	79
5.1	Hattie's Study <i>Visible Learning</i> .....	80
5.2	"Know Thy Impact" .....	83
5.3	Shortcomings of <i>Visible Learning</i> .....	84
5.4	Hattie's Resource Book <i>Visible Learning for Teachers</i> .....	87
5.5	An <i>International Guide to Student Achievement</i> .....	90
	Review, Reflect, Practice .....	92
6	Scaffolding Effective Teaching and Successful Learning .....	94
6.1	Hattie's Model of Direct Instruction (DI) .....	95
6.2	Links between Facts and Values .....	100
6.3	Premises of Effective Teaching .....	102
6.4	MET – A Model of Effective Teaching and Successful Learning .....	110
6.5	Research Evidence and Teacher Expertise .....	113
	Review, Reflect, Practice .....	117
7	Planning and Starting the Lesson .....	118
7.1	A Thoughtful Review of Effective Teaching .....	119
7.2	Planning the Lesson .....	121
7.3	The Realm of the Smartest .....	128
7.4	Starting the Lesson .....	130
	Review, Reflect, Practice .....	136

Cambridge University Press

978-1-107-11261-2 - Effective Teaching and Successful Learning: Bridging the Gap between  
Research and Practice

Inez De Florio

Table of Contents

[More information](#)

<i>Contents</i>	ix
8 Presenting Knowledge and Skills – Assertive Questioning .....	137
8.1 Classroom Management and Classroom Climate .....	139
8.2 Presenting Knowledge and Skills .....	143
8.3 The Impact of an Expert Peer .....	149
8.4 Assertive Questioning and Interactive Dialogue .....	151
Review, Reflect, Practice .....	155
9 Guided and Independent Practice .....	157
9.1 Summary of the Preceding Steps of the MET .....	157
9.2 Types of Practice .....	158
9.3 Planning Guided Practice .....	164
9.4 Even Good Things Can Be Improved .....	170
9.5 Independent Practice .....	170
9.6 All’s Well that Ends Well .....	173
Review, Reflect, Practice .....	174
10 Cooperative and Project-based Learning .....	175
10.1 Cooperative vs. Collaborative Learning .....	175
10.2 The Message of John Dewey .....	176
10.3 Basics of Learning in Small Groups .....	178
10.4 Newer Research into Cooperative Learning .....	179
10.5 Major Forms of Cooperative Learning .....	182
10.6 A Joint Venture: <i>Othello</i> .....	190
10.7 PBL – Project- and Problem-based Learning .....	191
10.8 Newer Research into Problem-based Learning .....	195
Review, Reflect, Practice .....	196
11 Feedback – Reciprocal and Informative .....	198
11.1 Newer Research into Feedback .....	199
11.2 The Feedback Model of Hattie and Timperley .....	202
11.3 Feedback Given by Teachers to Students .....	204
11.4 Peer Feedback .....	208
11.5 Love is Not Always Blind .....	211
11.6 Feedback Given by Students to Teachers .....	212
Review, Reflect, Practice .....	214
Concluding Remarks: Standards Need More Evidence .....	215
<i>References</i> .....	221
<i>Index</i> .....	231