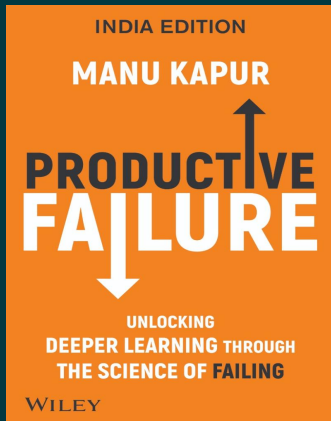




Productive Failure: Unlocking Deeper Learning Through the Science of Failing, India Edition (An Indian Adaptation)

By [Manu Kapur](#)

Paperback

9789373326832

[NOT PROVIDED]
publication_date

₹1,285.00

Pages : 268 pages

Description

How do we design failure experiences in ways that promote more effective learning? While total, inexplicable failure can be intensely frustrating and can push students to drop a subject altogether, repeated experiences of intriguing, constructive failure can develop resilience, creativity, and resourcesfulness when carefully curated. In *Productive Failure*, the author describes evidence-based principles for how readers can curate experiences in a manner that is safe and affirming, so that failure is the norm, not the exception--a signal for learning, not the noise detracting from it.

These principles are not just for designing learning in formal schooling contexts: they are just as powerful for taking charge of and designing one's own learning. From learning a new language or skill to setting up goals that get a reader out of their comfort zone, from designing specific kinds of tasks that push the boundaries of a reader's current abilities, to developing a mindset that supports growth, the author will describe the full set of design principles to harness *Productive Failure* for one's own deep learning.

These design principles then inspire and guide specific strategies that can be used for learning. Retrieval practice, generating analogies, category building, and counterfactual reasoning, amongst others, are strategies readers will learn how to harness to deepen their learning experiences.

This book will not only appeal to the individual learner, but also to teams, groups, and organizations who can apply the *Productive Failure* framework to reach new levels of innovation and success.

About the Author

Manu Kapur

Manu Kapur (Zurich, Switzerland) conceptualized and developed the theory of *Productive Failure* to design for and bootstrap failure for learning better. He has done extensive work in real-field ecologies of STEM classrooms to transform teaching and learning using his theory of productive failure across a range of schools and universities around the world.

Manu's research has attracted high profile media interest (e.g., *TIME Magazine*, *NZZ*, *WEF*, *THE AUSTRALIAN*, *THE STRAITS TIMES*, *THE TIMES OF INDIA*, *The CONVERSATION*, *NZZ*, etc.) and approximately \$13M in research funding. Early in his academic career, Manu also directed a \$50M interactive and digital media R&D program at the Ministry of Education of Singapore to jumpstart interdisciplinary research on interactive and digital media in education in Singapore.

Manu is a prolific keynote speaker at high-profile conferences and events around the world (e.g., *The ROYAL SOCIETY* UK, USA, Canada, Europe, Australia, Japan, South Korea, Singapore, and India). He has also served as an associate editor for two of the leading journals, and has published in the most prestigious journals in the field of the learning and the cognitive sciences.

Table of Contents

Foreword	xiii
Introduction: My Forays into Failure	1
Soccer Dreams	2
Struggling Through My Engineering Studies	3
Into the Classroom	5
Venturing into Academia	6
Finding the Cause and Its Solution	8
Connecting the Dots	10
Part I The Problem and Its Solution	13
Chapter 1 The Problems of Learning	17
Failing to Remember	19
Failing to Understand	22
Failing to Transfer	27
Chapter 2 The Solution: Productive Failure	35
Direct Instruction vs. Discovery Learning	37
Searching for a Problem	38
Designing for Failure	41
The Ideas of a Novice	43
Turning Direct Instruction on Its Head	47
Setting Up the Experiment	48
The Battle: Productive Failure vs. Direct Instruction	52
Part II The Science of Failure	59
Chapter 3 Activation	63
The Activation Spectrum	66
Failure-based Activation	69
Why Does Failed Generation Work?	77
Chapter 4 Awareness	91
From Socratic Dialogue to Tutoring	93
Intentionally Designing Impasses	94
When Intuition Failure Builds Awareness	97
Humbled By a Six Year Old	101
The Warmth Above the Clouds	104
In Awe of Awe	106
Chapter 5 Affect	109
The Zeigarnik Effect	110
The Need for Closure	113
Situational Interest and Curiosity	117

Mastery Orientation	127
Emotional Rollercoaster	131
Chapter 6 Assembly	139
Identify the Lego Blocks	141
Assemble the Lego Blocks	145
The Danger of Learning the Wrong Things Is.	159
Part III Designing for Productive Failure	165
Chapter 7 Designing for Others	167
Designing the Task	169
Designing the Participation	174
Designing the Social Surround	178
Iterate and Calibrate	181
Chapter 8 Designing for Self	185
Entering the Zone	185
Harnessing the Productive Failure Design Principles	187
Chapter 9 Jugaad Meets Productive Failure	205
From Jugaad to a Proof	206
Teachers' Voices from Indian Classrooms	207
The Doon School: Micro-Productive Failure Cycles	208
From Classrooms to a Community:	
The Teachers Academy and	
Good Schools Alliance	209
Beyond Education: From Spacecraft to	
Sight and Steps	212
Designing Around What Can Go Wrong	212
When a Price Wall Becomes a Design Brief	213
Field Failure as a Feedback Engine	213
Turning Jugaad into a Strategic Advantage	214
Conclusion	205
References	211
Acknowledgments	221
About the Author	223
Index	225

