

# CONTENTS

	<i>Preface</i>	<i>vii</i>
	<i>Introduction</i>	<i>1</i>
PART ONE	UNDERSTANDING SUCCESSFUL INTELLIGENCE	3
Chapter One	WHAT IS SUCCESSFUL INTELLIGENCE?	5
	A Grizzly Bear's Lunch	5
	Defining Successful Intelligence	6
	The Triarchy of Thinking Abilities	11
	Conclusion	12
Chapter Two	EXAMINING THE THEORY OF SUCCESSFUL INTELLIGENCE	15
	Does Successful Intelligence Work in the Classroom?	15
	Why Are Conventional Notions of Intelligence Still Prevalent?	18
Chapter Three	SUCCESSFUL INTELLIGENCE IN LIFE AND IN SCHOOL	25
	Successful Intelligence in Life:	
	The Changing Demands of the Larger World	25
	Successful Intelligence in School:	
	Giving Everybody a Fair Chance	26
PART TWO	BUILDING SUCCESSFUL INTELLIGENCE ABILITIES	35
Chapter Four	TEACHING FOR ANALYTICAL THINKING	37
	Problem Solving	37
	Lesson 1: Identify Problem	38
	Lesson 2: Allocate Resources	41
	Lesson 3: Represent and Organise Information	43
	Lesson 4: Formulate Strategy	45
	Lesson 5: Monitor Problem-Solving Strategies	47

	Lesson 6: Evaluate Solutions	48
	Lesson 7: Additional Prompts for Analytical Thinking	50
Chapter Five	<b>TEACHING FOR CREATIVE THINKING</b>	53
	The Investment View of Creativity:	
	Buying Low and Selling High	53
	Balancing Analytical, Creative and Practical Abilities	55
	Lesson 8: Redefine Problem	56
	Lesson 9: Question and Analyse Assumptions	58
	Lesson 10: Sell Creative Ideas	60
	Lesson 11: Generate Ideas	61
	Lesson 12: Recognise the Two Faces of Knowledge	63
	Lesson 13: Identify and Surmount Obstacles	64
	Lesson 14: Take Sensible Risks	66
	Lesson 15: Tolerate Ambiguity	68
	Lesson 16: Build Self-Efficacy	70
	Lesson 17: Uncover True Interests	71
	Lesson 18: Delay Gratification	73
	Lesson 19: Model Creativity	75
	Lesson 20: Additional Prompts for Creative Thinking	78
CHAPTER SIX	<b>TEACHING FOR PRACTICAL THINKING</b>	81
	Lesson 21: Motivate	83
	Lesson 22: Control Impulses	85
	Lesson 23: Persevere but Don't Perseverate	86
	Lesson 24: Use the Right Abilities	88
	Lesson 25: Act on a Plan	90
	Lesson 26: Orient to Product	92
	Lesson 27: Complete Tasks	93
	Lesson 28: Commit	95
	Lesson 29: Take a Risk	96
	Lesson 30: Don't Procrastinate	98
	Lesson 31: Assign Responsibility	100
	Lesson 32: Manage Self-Pity	101
	Lesson 33: Be Independent	103
	Lesson 34: Handle Personal Difficulties	105
	Lesson 35: Concentrate	106
	Lesson 36: Schedule Accordingly	108
	Lesson 37: Set Priorities	110
	Lesson 38: Balance Thinking Skills	111

	Lesson 39: Develop Self-Confidence	113
	Lesson 40: Additional Prompts for Practical Thinking	115
PART THREE	DEVELOPING SUCCESSFUL INTELLIGENCE UNITS	119
Chapter Seven	FRAMING TRIARCHIC INSTRUCTION AND ASSESSMENT UNITS	121
	The Nuts and Bolts of TIA	121
	The Structure of TIA Units	125
Chapter Eight	PUTTING IT ALL TOGETHER: A COMPREHENSIVE ILLUSTRATION OF LESSONS FOR TEACHING FOR SUCCESSFUL INTELLIGENCE	145
	Introduction to Unit	145
	Unit Lesson 1: Introduction	146
	Unit Lesson 2: Analytical	149
	Unit Lesson 3: Practical	150
	Unit Lesson 4: Creative	152
	Unit Homework	153
	Unit Assessment	154
	Conclusion	155
	<i>References</i>	156
	<i>Index</i>	160

# INTRODUCTION

## WHY TEACH FOR SUCCESSFUL INTELLIGENCE?

People need all their skills to be operating in very good order to be successful in life. Yet many educational programs seem to develop people's intelligence in only one area—analytical intelligence—giving minimal or even no attention to two other areas of intelligence—creative and practical intelligence—that are just as vital to living successfully. Sternberg (1997a, 1999b) has identified analytical, creative and practical thinking abilities as composing successful intelligence and has noted that successful people use all three abilities to achieve success. Being exceptional in one thinking skill may not be enough to be successful in life.

This book provides teachers with a series of lessons based on Sternberg's theory that use a number of proven techniques to promote development of all three abilities. This book is unusual in two ways. First, it is based quite closely on a particular theory of human intelligence—the theory of successful intelligence. Second, it is unusual because in hard empirical studies this theory has been shown to provide teaching and assessment techniques that work and that are superior to some of the major alternatives. One such alternative is conventional teaching that emphasises memory and critical thinking. Research shows that even if a teacher's only goal were to improve recall of factual knowledge, he or she would obtain better results by using the techniques in this book than by teaching for straight recall. If a teacher's goal is to improve analytical, creative and practical thinking as related to the knowledge students acquire, this is the book to accomplish that goal. These techniques enable students to learn in ways that best suit them and thus cause them to be more motivated to learn.

## WHO IS THIS BOOK FOR?

This book is written for teachers from year one to year twelve and even university who want to improve their skills in teaching and assessment. It is written to give teachers both the basic theory they need to understand how to bring about this improvement and the specific detailed teaching and assessment techniques they need to apply the theory in their classrooms. This book includes numerous classroom examples of all techniques described.

This book was designed to be used. It is not only a reference, but also a primer in how to apply specific techniques in the classroom. For this reason, it encourages both passive and active learning. Teachers will gain full benefit from it only if they initiate active use of the materials.

# WHAT IS SUCCESSFUL INTELLIGENCE?



## A GRIZZLY BEAR'S LUNCH

Two boys are walking in a forest. The two boys are quite different. The first boy's teachers think he is smart, his parents think he is smart, and, as a result, he thinks he is smart. He has excellent scores on both ability and achievement tests, excellent marks, and other notable paper credentials that should take him far in his scholastic life.

Few people consider the second boy to be smart. His test scores are nothing special, his marks are not so great, and his other credentials, although satisfactory, are not notable. At best, people would call him shrewd or street smart.

As the two boys walk through the forest, they encounter a problem: A huge, ferocious, hungry-looking grizzly bear is charging straight at them. The first boy calculates that the grizzly bear will overtake them in 17.3 seconds. This is an impressive feat, given the strain they are under. Not only does this boy know the  $\text{Distance} = \text{Rate} \times \text{Time}$  formula, but he is able to apply it under great duress. The second boy would never be able to calculate the number of seconds until impact, and would never try.

The first boy, panicking, looks over at the second boy, who is taking off his hiking boots and putting on jogging shoes. The first boy says to the second boy, "You must be crazy. There is no way we are going to outrun that grizzly bear!" The second boy replies, "That's true. But all I have to do is outrun you."

The outcome is that the first boy becomes the grizzly bear's lunch, and the second boy jogs off to safety. There is more to the story; find out what ultimately happens to the second boy at the end of this chapter.

## DEFINING SUCCESSFUL INTELLIGENCE

This obviously fictitious vignette illustrates the concept of successful intelligence and also illustrates how it differs from conventional intelligence.

*Successful intelligence* is the integrated set of abilities needed to attain success in life, however an individual defines it, within his or her sociocultural context. People are successfully intelligent by virtue of recognising their strengths and making the most of them at the same time that they recognise their weaknesses and find ways to correct or compensate for them. Successfully intelligent people adapt to, shape and select environments through a balance in their use of analytical, creative and practical abilities. Figure 1.1 recaps the major elements of this description of successful intelligence.

---

### Description of Successful Intelligence

1. The *set of abilities* needed to attain success in a person's life, however the person defines it.
2. Success is defined only in terms of a *sociocultural context*. It does not occur in the abstract, but rather with respect to standards or expectations either held personally or by others.
3. A person's ability to recognise and make the most of his or her *strengths*. Almost everyone is good at something.
4. A person's ability to recognise and compensate for or correct his or her *weaknesses*. No one is good at everything.
5. A person's ability to *adapt to, shape and select environments* by adjusting thinking or behaviour to fit better into the environment in which the person is functioning or by choosing a new environment.

---

**Figure 1.1**

This lengthy description of successful intelligence can be further examined by referring back to the story of the two boys and the grizzly bear. The first boy, obviously, is conventionally intelligent; the second boy, successfully intelligent. What makes the second boy successfully intelligent?

### SET OF ABILITIES

The set of abilities needed to attain success in an individual's life, however the individual defines success, is the first component of successful intelligence. Intelligence traditionally has been defined in terms of some kind of success. Historically, this success has been primarily scholastic. The grizzly bear vignette points out how it is possible to have the abilities needed to achieve success in school and yet be caught short when it