# Introduction

So much of what we do as teachers is intuitive, based on our own unique communication style and a lifetime of experiences. Although our teaching may be successful, sharing and explaining why it works is often difficult. This is especially so with the subtle techniques that we use nonconsciously. I found this out early in my career—I knew what succeeded but didn't really understand why.

In 1995, I became principal of Te Puna School in New Zealand, and as a staff, we began the journey that I had personally committed to a few years before: a journey of brain-compatible learning. Put simply, this meant investigating the best learning research from behaviorists, neuroscientists, and cognitive (learning/thinking) researchers and then putting what worked best into a holistic school program. It not only provided a "why" for much of our current practice, it also extended our teaching, often in subtle yet powerful ways.

Through this understanding, the staff was able to discuss what they did and why it worked with other educationalists, parents, and most important, with students. The approach saw substantial gains in achievement and a radical improvement in behavior.

I believe that a brain-compatible approach is needed in our schools. We are all faced with continual rapid change. For a variety of reasons, the learners with whom we work today are different. They are encountering and working through many issues, including changes in the family and the influence of technology through all facets of life. The expectations for teachers and how they are viewed by society has also changed, whether we like them or not.

In many cases, traditional methods—referred to by some educators as the "factory model"—are no longer working as effectively as they used to. If we want success for learners, we need to understand people rather than content, emotions rather than test results, learning rather than teaching. In short, we need a broader range of skills and an understanding of how our brain, mind, and body function in the learning situation.

That's why I wrote this book. It is a compilation of many of the braincompatible techniques that we read about at our school and found so successful. Whether you are new to this style of learning or an old hand, I'm sure that you will find these tools useful. Remember to modify them as necessary for your own unique environment.

#### SUGGESTIONS FOR USING THIS BOOK

The ideas in this book are based upon practical classroom ideas. Although I have included research or theoretical references for most ideas, space dictated that elaboration of this research was not possible. There are many other books that are excellent sources in this regard. I have included an extensive bibliography for those who wish to read further.

The book is designed so that the classroom teacher can practice a series of practical tips every week of the year. The book is set out in four parts, each divided into ten chapters presenting ten tools. They are all practical tips and have been tried and tested in classrooms spanning a variety of ages and cultural groups.

I have begun with an emphasis on that all-important issue: relationships. These are followed by issues of memory and concentration, because these are so important to help us achieve understanding. The third part helps students find out how they learn so that they can begin to take ownership of their own life and learning. I have left it until this time so that the teacher will feel more confident in their ability to "let go" and also because by this stage of the year, the students should feel more secure in their ability to take learning risks. The final part deals with specific teaching techniques. More experienced teachers may want to read Part IV earlier.

Once introduced, the tools are designed to be used continually and in a variety of ways according to your needs and experience. For the beginner, I recommend that you introduce them sequentially, one tool per week; with experience, they may be selected as needed. As you progress, you may want to introduce more than one tool at a time in a parallel process.

The overview on the following pages shows how the brain-compatible philosophy developed at Te Puna School. The "I care" philosophy is the umbrella under which we operate. The factors included under the "I care" umbrella make up our own unique model. For your school community to succeed, you will need to develop your own philosophy that is unique to your own needs. If you have not already done this, it is an important place to begin. It may develop as you read this book, but it must work for you.

I believe that any philosophy must be based around people. The idea that technology will save the world and education is, in my view, false. It is people using technology and moving through the issues that it creates that will make the difference. Understanding people is where education is. Understanding yourself is where it all begins.

#### MODEL

I hope that reading this book will be part of your personal journey and will inspire you to explore what you think about and stand for as an educator. It is only through the process of constant questioning and reflection that we move forward. Finally, think about your school—what is your philosophy? What is your school's philosophy? Our school's philosophy for brain-compatible learning represents the big picture of how brain-compatible learning developed at Te Puna School.

### One School's Model of Brain-Compatible Learning

## **I CARE PHILOSOPHY** Based on understanding of uniqueness and need for security Interwoven through THEMES Incorporating SHARED VALUES HIGH LEVEL THINKING EQ **PROBLEM SOLVING** Developing dependence to independence to interdependence Units of work become the vehicle to teach and learn in a brain-compatible manner Delivered through Processed and reinforced using **LEARNING STYLES QUALITY PRACTICE** Learning demonstrated and assessed via **MULTIPLE INTELLIGENCES**

Rein TEACHER MODELING	nforced through and	SENSORY EXPERIENCES
Retained in lo REGULAR USAGE	ong-term memor and	y through REVIEW and REFLECTION
Tra SERVICE TO COMMUNITY	ansferred using and	REAL LIFE APPLICATION
DEVELOPING UNDERSTANDING	Leading to and	SKILLS TO MANAGE SELF
	and	
Contributing to the world.		

- The "I care" philosophy is the umbrella for the culture of the school. It has four statements. "I care for myself, I care for others, I care for property, and I care for the environment." These statements became the core guide when dealing with students over any issue.
- Themes are the abstract ideas that bind the teaching program together. They are big-picture issues on which to base units of work.
- Higher-level thinking skills, emotional intelligence (EQ) factors, and issues relating to moral intelligence—empathy, conscience, self-control, respect, kindness, tolerance, and fairness—are woven into the themes as life skills.
- Teaching units are then delivered, taking into account learning styles. Here, choice and variety are paramount.
- The processing occurs through the five memory pathways: semantic, episodic, procedural, conditioned response, and emotional.
- Learning can be presented, demonstrated, and assessed through different forms of intelligence.
- Learning is reinforced through the senses, both consciously and nonconsciously. The teacher needs to be aware of the hidden curriculum, especially cultural and gender biases. Reinforcement occurs through modeling, displays of posters and completed work, affirming messages, and through a variety of sensory experiences.
- Finally, if it is worth learning, it is worth retaining. This is done by having a real-life application for the learning, as well as regular usage. The brain works on a "use it or lose it" principle, so if it is not given regular practical application the learning is lost. This process is known as review.

The forty tools show how this model is put into practice.