## Introduction

## 10 TRUTHS BEFORE YOU BEGIN

- There is considerable comorbidity (overlap) in these disorders. A single disorder is truly the exception. In this book, each chapter takes on a disorder for the sake of convenience. Most commonly there are at least two, sometimes three, disorders present at the same time. Students who are oppositional are also highly likely to have attention deficit hyperactivity disorder. Remember, everything in the brain is connected to something else.
- It's likely that all of these disorders are multicausal. Nevertheless, likely causes are listed separately in this book for the sake of clarity. Most of the time, the cause is a combination of genetics and environment, because those two interact in complex ways. Typically, multiple factors—a genetic mutation or susceptibility, childhood neglect, toxins, malnutrition, abuse, and/or prenatal trauma—are implicated. A traumatic life event or prolonged exposure to stress contributes to the problem.
- There are multiple models (and each accurate!) for understanding these disorders. Models come from the fields of psychiatry, pediatric neurology, special education, and cutting-edge neuroscience. For example, some educators treat classroom discipline as a maturity issue or a self-control issue. Others treat it as a social or even medical issue. Just remember that there are many ways to solve the same problems.
- There is no single location in the brain for a disorder. The specific locations identified in this book offer a simple glimpse of some areas that are likely impacted. Nearly every neurological event is system driven in ways that impact many areas of the brain. For example, social skills require more than paying attention; you have to pay attention to the relevant facial and vocal messages, or you'll miss the real meaning. Remember, there are no isolated neurological events; instead, there are regulatory systems with identifiable pathways.

- There is no doubt more to learn about these disorders. Much greater study is needed. Brain-imaging technology is new and amazing, but it should never be the only source of information. We will see the accuracy improve, the functionality increase, and the costs go down. Hand-held brain scanners are already being used. Consider this book as "Here's what we know so far."
- Every learner can learn and improve. The human brain is designed to respond to environmental input: the more targeted, persistent, and relevant the input, the greater the changes. To get the changes you want, first learn about which systems you want to target. It's all a matter of resources (e.g., time, personnel, technology, medication, support). Make the commitment to ensure that all students have a fighting chance.
- Avoid perfectionism; it will rob you of the potential for gratifying rewards. Learn about one disorder at a time, and practice identifying specific learners. This book wasn't written in a day, and you don't need to memorize it in a day in order to receive value from it. One chapter a week, or a month, is all you need. Just keep at it.
- Look for students' strengths. Not every learner can become excellent in everything. There are significant genetic and environmental variations in the human species.
- Attitude and knowledge are equally important. Your belief in the highest possibilities of each learner and your capacity to identify symptoms and activate appropriate responses and resources are the most important variables in learner success. Students will pick up on your positive attitude and find hope within it.
- Take pride in everyday successes, whether large or small. Learners learn much more from who you are than from what you teach. Maybe your biggest gift is caring and doing your best. Never underestimate the power of hope and compassionate relationships or the value of implicit learning and positive role modeling.