CONTENTS

PREFACE		vii
Introduction		3
	PART I	
	An Overview of the Problem	
1	Learning What Society Wants to Teach A Tale of Two Cultures 13 Set Up to Fail 15 Teaching versus Classifying 16 Sex Differences—They Won't Go Away 20	13
2	Normality and the Nature-Nurture Controversy Who Is Normal? 25 Escaping the Nature-Nurture Bind 28 Correlations Are Not Causes 30	24
3	Theories: Promising and Unpromising Unpromising Theories of Learning Disabilities 34 Promising Theories of Learning Disabilities 43	33
	PART II	
	Unraveling the Evidence	
4	Reading: The Ear Determines What the Eye Sees What Is Reading? 57 How the Skills Combine 68	55
5	Sex Differences in Reading-Related Skills Sex and Cognition 71 The Auditory System 76 The Motor Systems 85 Integrating the Senses and Actions 92	71

CONTENTS

PRE	EFACE	vii
Intr	roduction	3
	PART I	
	An Overview of the Problem	
1	Learning What Society Wants to Teach A Tale of Two Cultures 13 Set Up to Fail 15 Teaching versus Classifying 16 Sex Differences—They Won't Go Away 20	13
2	Normality and the Nature-Nurture Controversy Who Is Normal? 25 Escaping the Nature-Nurture Bind 28 Correlations Are Not Causes 30	24
3	Theories: Promising and Unpromising Unpromising Theories of Learning Disabilities 34 Promising Theories of Learning Disabilities 43	33
	PART II	
	Unraveling the Evidence	
4	Reading: The Ear Determines What the Eye Sees What Is Reading? 57 How the Skills Combine 68	55
5	Sex Differences in Reading-Related Skills Sex and Cognition 71 The Auditory System 76 The Motor Systems 85 Integrating the Senses and Actions 92	71

Contents

6	The Biological Basis of Sex Differences in Language and Reading The Brain and Behavior 97 Two Major Brain Systems for Language 99 The Auditory-Motor Systems in Speech 101 Sex Differences in Cortical Organization 106 Genetic Link to Reading Problems 113 Males at Risk 115	97
7	Mathematics: Is Society Picking on Girls? The Mystery of Math 120 A Sudden Onset 124 Attitude or Ability? 131	120
8	Mathematics: Why Males Excel Seeing the World Move When It Isn't 144 Females: Lost in Space? 147 Explaining Sex Differences in Spatial Ability 158 Biases Against Excellence 164	143
9	Hyperactivity: A Diagnosis in Search of a Patient The Seven Fallacies of Hyperactivity 173 Symptom or Syndrome? 178 Diagnostic Scales 185 Hyperactive Children: Bad Boys or "Just Boys"? 190	168
10	Hyperactivity: A Patient in Search of a Diagnosis Activity Levels 196 "Attention Deficit Disorder" 200 Drugs, Labeling, and Academic Performance 224	194
	PART III	
	Three Ounces of Prevention	
11	Schools: Dis-Abling or En-Abling? Historical Trends in Teaching Writing and Reading 236 The Missing Piece of the Puzzle 240 Mathematics: Preventing Math Phobia 249 A Rare Combination of Talents 252 Missing Links 253 Remediation Starts with Teachers 258 Learning to Learn Without Bothering Anyone 262	233
12	A Concerted Voice: A Personal Primer for Parents Avoid Labeling 270 A Five-Step Plan 270	269
NO	DTES	277
	DEX	297
vi		

Contents

6	The Biological Basis of Sex Differences in Language and Reading The Brain and Behavior 97 Two Major Brain Systems for Language 99 The Auditory-Motor Systems in Speech 101 Sex Differences in Cortical Organization 106 Genetic Link to Reading Problems 113	97
7	Males at Risk 115 Mathematics: Is Society Picking on Girls? The Mystery of Math 120 A Sudden Onset 124 Attitude or Ability? 131	120
8	Mathematics: Why Males Excel Seeing the World Move When It Isn't 144 Females: Lost in Space? 147 Explaining Sex Differences in Spatial Ability 158 Biases Against Excellence 164	143
9	Hyperactivity: A Diagnosis in Search of a Patient The Seven Fallacies of Hyperactivity 173 Symptom or Syndrome? 178 Diagnostic Scales 185 Hyperactive Children: Bad Boys or "Just Boys"? 190	168
10	Hyperactivity: A Patient in Search of a Diagnosis Activity Levels 196 "Attention Deficit Disorder" 200 Drugs, Labeling, and Academic Performance 224	194
	PART III	
	Three Ounces of Prevention	
11	Historical Trends in Teaching Writing and Reading 236 The Missing Piece of the Puzzle 240 Mathematics: Preventing Math Phobia 249 A Rare Combination of Talents 252 Missing Links 253 Remediation Starts with Teachers 258	233
	Learning to Learn Without Bothering Anyone 262	
12	A Concerted Voice: A Personal Primer for Parents Avoid Labeling 270 A Five-Step Plan 270	269
N	OTES	277
IN	NDEX	297
vi	i e e e e e e e e e e e e e e e e e e e	