

# Brief Contents

<b>Preface</b>	<b>xix</b>
<b>Acknowledgments</b>	<b>xxvii</b>
<b>Chapter 1. An Introduction to Language and Learning</b> <i>Sandra Levey</i>	<b>1</b>
<b>Chapter 2. Theories and Explanations of Language Development</b> <i>Sandra Levey</i>	<b>17</b>
<b>Chapter 3. Typical and Atypical Language Development</b> <i>Sandra Levey</i>	<b>37</b>
<b>Chapter 4. Hearing and Listening Skills</b> <i>Rochelle Cherry</i>	<b>59</b>
<b>Chapter 5. The Production of Speech Sounds</b> <i>Stephen A. Cavallo</i>	<b>79</b>
<b>Chapter 6. The Role of the Brain in Speech and Language</b> <i>Sandra Levey and Joyce F. West</i>	<b>101</b>
<b>Chapter 7. Language Development From Birth to Age 3</b> <i>Sandra Levey</i>	<b>115</b>
<b>Chapter 8. Language Development From Ages 3 to 5</b> <i>Deena K. Bernstein</i>	<b>139</b>
<b>Chapter 9. Language Development From Age 6 Through Adolescence</b> <i>Cheryl Smith Gabig</i>	<b>161</b>
<b>Chapter 10. Supporting the Development of Literacy Skills From Infancy Through School Age</b> <i>Sylvia Diehl</i>	<b>185</b>
<b>Chapter 11. Educational Implications of Narrative Discourse</b> <i>Lynn S. Bliss and Allyssa McCabe</i>	<b>209</b>

<b>Chapter 12. African American English in the Classroom</b>	<b>227</b>
<i>Julie A. Washington and Monique T. Mills</i>	
<b>Chapter 13. Bilingual Language Acquisition and Learning</b>	<b>245</b>
<i>Henriette W. Langdon</i>	
<b>Chapter 14. Bilingual Speech Sound Development and Disorders</b>	<b>263</b>
<i>Leah Fabiano-Smith and Brian A. Goldstein</i>	
<b>Chapter 15. Fostering Teacher and Family Partnerships in the Development of Language and Literacy</b>	<b>277</b>
<i>Susan Polirstok and Jo Hoffman</i>	
<b>Glossary</b>	<b>291</b>
<b>References</b>	<b>309</b>
<b>Index</b>	<b>337</b>
<b>About the Editors</b>	<b>349</b>
<b>About the Contributors</b>	<b>351</b>

# Detailed Contents

<b>Preface</b>	<b>xix</b>
<b>Acknowledgments</b>	<b>xxvii</b>

## **1 An Introduction to Language and Learning** **1**

---

<b>Case Study: The Role of Language in the Classroom</b>	<b>1</b>
<b>Introduction</b>	<b>1</b>
New Language Rules	2
Observation and Intervention	2
Chapter Concepts	3
<b>The Components of Communication: Speech and Language</b>	<b>3</b>
Speech	3
Language	4
<b>Language and the Classroom</b>	<b>4</b>
Receptive Language	4
Expressive Language	6
<b>Reading</b>	<b>7</b>
The Foundations of Reading Skills	7
Reading Problems and Solutions	8
<b>Writing</b>	<b>8</b>
The Foundations of Writing Skills	9
<b>Speech and Phonological Skills</b>	<b>9</b>
<b>Social Communication</b>	<b>10</b>
The Supports for Social Communication	10
<b>Cognitive Components: Executive Functions and Critical Thinking</b>	<b>10</b>
Executive Functions	10
Critical Thinking	11
<b>Strategies for the Classroom</b>	<b>11</b>
Language Development Across Grades	11
Reading Skills	12
Listening Skills	12
Connecting Language to Environment	13
<b>Case Study Revisited</b>	<b>13</b>
<b>Summary</b>	<b>14</b>
<b>Key Words</b>	<b>15</b>
<b>Study Questions</b>	<b>15</b>
<b>Projects</b>	<b>15</b>
<b>Suggestions for Further Reading</b>	<b>16</b>

## **2 Theories and Explanations of Language Development**

**17**

### **Case Study: How Children Learn the Names of Things in the World 17**

#### **Introduction 17**

Theories of Language Acquisition 18

### **The Environmental Theories of Language Acquisition 19**

Vygotsky and the Zone of Proximal Development 20

Piaget and Cognitive Development 21

Bates and the Pragmatic Theory 22

### **The Environmental Theories: Strategies for Language Development 25**

Play 25

Pragmatics 26

### **The Innateness Theory 26**

Language Acquisition Device 26

Sentence Production 27

### **The Innateness Theory: Strategies for Language Development 27**

The Classroom 28

Input 28

### **Emergentism: Innate Skills and Environmental Factors 29**

Emergent Effects 29

### **Emergentism: Strategies for Language Development 30**

### **The Theory of Mind 30**

Language 31

Social Cognition 31

The Development of Theory of Mind 31

### **Theory of Mind: Strategies for Language Development 32**

### **Case Study Revisited 33**

### **Summary 34**

### **Key Words 35**

### **Study Questions 35**

### **Projects 35**

### **Suggestions for Further Reading 36**

## **3 Typical and Atypical Language Development**

**37**

### **Case Study: The Use of Language in Social Interaction 37**

#### **Introduction 37**

### **The Components of Language 38**

Form: Phonology, Morphology, and Syntax 38

Content (Semantics) 38

Use (Pragmatics) 38

### **Form 38**

Phonology 38

Morphology 44

Syntax 45

### **Content/Semantics 45**

<b>Use/Pragmatics</b>	<b>47</b>
<b>Cognition</b>	<b>47</b>
Thought Processing	48
Memory	48
Attention	49
Discrimination	50
<b>Language Differences</b>	<b>50</b>
<b>Classroom Strategies to Support Language Development</b>	<b>51</b>
<b>A Survey of Communication Disorders</b>	<b>52</b>
<b>Case Study Revisited</b>	<b>54</b>
<b>Summary</b>	<b>56</b>
<b>Key Words</b>	<b>56</b>
<b>Study Questions</b>	<b>57</b>
<b>Projects</b>	<b>57</b>
<b>Suggestions for Further Reading</b>	<b>58</b>

## **4 Hearing and Listening Skills**

**59**

<b>Case Study: The Effect of Undiagnosed Hearing Loss on Language Abilities</b>	<b>59</b>
<b>Introduction</b>	<b>59</b>
<b>Prevalence</b>	<b>61</b>
<b>The Classification of Hearing Loss in Children</b>	<b>61</b>
<b>Types and Common Causes of Hearing Loss in Children</b>	<b>62</b>
Conductive Hearing Loss	63
Sensorineural Hearing Loss	63
Mixed Hearing Loss	64
Auditory Processing Disorder	64
<b>Speech, Language, and Literacy Problems Associated With Childhood Hearing Loss</b>	<b>65</b>
Vocabulary	65
Grammar (Syntax)	65
Conversational Skills (Pragmatics)	65
Literacy	66
Speech Production	66
<b>Factors That Affect Language Learning in Children With Hearing Loss</b>	<b>66</b>
<b>Strategies to Identify Children With Hearing Impairments</b>	<b>67</b>
Infant Testing	67
Parent Education	67
Hearing Screening Programs	68
Signs of Hearing Loss in the Classroom	68
<b>A Team Approach to Management</b>	<b>69</b>
<b>Educational Considerations</b>	<b>69</b>
<b>Language Instruction for Children With Hearing Impairments:</b>	
<b>Communication Approaches</b>	<b>70</b>
Auditory-Oral Approach	71
Auditory-Verbal Approach	71
Auditory-Visual Approach	71

<b>Auditory Technologies</b>	<b>71</b>
Hearing Aids	71
Cochlear Implants	71
Assistive Listening Devices	72
<b>The Listening Environment</b>	<b>72</b>
<b>Strategies for the Classroom</b>	<b>73</b>
Training	73
Attitude	73
Accommodation	73
Class Participation	74
<b>Case Study Revisited</b>	<b>74</b>
<b>Summary</b>	<b>76</b>
<b>Key Words</b>	<b>76</b>
<b>Study Questions</b>	<b>77</b>
<b>Projects</b>	<b>77</b>
<b>Suggestions for Further Reading</b>	<b>78</b>

## 5 The Production of Speech Sounds

79

<b>Case Study: The Impact of Speech Skills on Communication and Social Interaction</b>	<b>79</b>
<b>Introduction</b>	<b>80</b>
<b>The International Phonetic Alphabet</b>	<b>80</b>
<b>Speech as the Basis of Communication</b>	<b>81</b>
<b>Structure and Function of the Speech Mechanism</b>	<b>81</b>
The Ventilatory System: The Breathing Mechanism	82
The Larynx: The Voice Box	82
The Vocal Tract: Cavities on the Upper Airway	84
<b>The Production of Speech Sounds</b>	<b>84</b>
Vocal Fold Vibration: A Major Speech Sound Source	84
<b>Speech Sounds Produced in the Larynx: Voiced "Periodic" Sounds</b>	<b>86</b>
Vowels	86
Diphthongs	87
Nasal Sounds	87
Approximants	87
<b>Speech Sounds Produced in the Vocal Tract: Unvoiced "Noise" Sounds</b>	<b>89</b>
Stop Sounds	89
Fricative Sounds	91
Affricate Sounds	92
<b>The Contribution of the Voice to Language</b>	<b>92</b>
<b>Speech Production: A Complex Neuromuscular Motor Activity</b>	<b>93</b>
<b>Students With Speech Problems: Common Signs</b>	<b>94</b>
Stuttering	94
Cluttering	94
Articulation Disorders	94
Apraxia	94

Strategies for Classroom Teachers 94  
Case Study Revisited 96  
Summary 97  
Key Words 98  
Study Questions 98  
Projects 99  
Suggestions for Further Reading 99

---

## **6 The Role of the Brain in Speech and Language** **101**

---

Case Study: The Role of the Brain in Language Processing 101  
Introduction 101  
The Brain and Language Development 102  
    The Brain at Birth 103  
    The Brain at 3 to 4 Months 103  
    Innate Abilities 103  
The Brain and the Classroom 104  
    Self-Regulation 104  
    Additional Executive Skills Required for Success in Academic Contexts 104  
    Stimulating Children's Brains 105  
Brain Cells 105  
    Neurons 106  
Areas of the Brain 106  
    The Two Halves of the Brain 107  
The Parts of the Brain 108  
    Frontal Lobe 108  
    Prefrontal Lobe 109  
    Parietal Lobe 109  
    Temporal Lobe 110  
    Occipital Lobe 110  
    Cerebellum and Brainstem 110  
Strategies for the Classroom 110  
Case Study Revisited 111  
Summary 112  
Key Words 113  
Study Questions 113  
Projects 114  
Suggestions for Further Reading 114

---

## **7 Language Development From Birth to Age 3** **115**

---

Case Study: Delay in the Development of Expressive Language 115  
Introduction 115  
Infant and Toddler Development: An Overview 117  
Infant Perception 117

<b>Infant Production and Expression</b>	<b>118</b>
<b>Language Development at 18 to 36 Months of Age</b>	<b>119</b>
<b>Cognition and Language</b>	<b>120</b>
<b>Stages of Cognitive Development</b>	<b>121</b>
Play	121
Symbolic Functions	122
The Relationship Between Cognition and Language	123
<b>Phonological Development</b>	<b>123</b>
Phonological Processes	124
<b>Morphosyntactic Development</b>	<b>124</b>
<b>Semantic Development</b>	<b>125</b>
<b>Pragmatic Development</b>	<b>128</b>
Speech Acts	130
Narratives	130
<b>Language Differences</b>	<b>131</b>
African American English	131
Hispanic and Latino Children	132
<b>Infants and Toddlers at Risk for Language Development</b>	<b>132</b>
Strategies for Teachers and Parents	135
<b>Case Study Revisited</b>	<b>135</b>
<b>Summary</b>	<b>136</b>
<b>Key Words</b>	<b>136</b>
<b>Study Questions</b>	<b>137</b>
<b>Projects</b>	<b>137</b>
<b>Suggestions for Further Reading</b>	<b>138</b>

## **8 Language Development From Ages 3 to 5**

**139**

<b>Case Study: Limits on Speech Sound Production</b>	<b>139</b>
<b>Introduction</b>	<b>139</b>
<b>Preschool Language Development: An Overview</b>	<b>140</b>
<b>Cognition, Language, and Play</b>	<b>142</b>
<b>Phonological Development</b>	<b>142</b>
Phonological Processes	143
<b>Morphosyntactic Development</b>	<b>144</b>
<b>Semantics: The Development of Meaning</b>	<b>145</b>
Lexical Acquisition: Vocabulary Growth	146
Relational Meanings	146
Concepts	146
Vocabulary Differences	147
<b>Pragmatic Development</b>	<b>148</b>
Conversational Skills	148
Development of Narrative	150
<b>Emergent Literacy</b>	<b>151</b>
Print Awareness	152
Metalinguistic Awareness	152



Phonological Awareness	152
Children at Risk for Literacy Challenges	153
Book Reading Strategies for Teachers and Parents	154
Suggestions for Classroom Teachers	154
<b>Language Dialects and Differences</b>	<b>156</b>
African American English	156
Hispanic and Latino Children	157
<b>Case Study Revisited</b>	<b>158</b>
<b>Summary</b>	<b>158</b>
<b>Key Words</b>	<b>159</b>
<b>Study Questions</b>	<b>159</b>
<b>Projects</b>	<b>160</b>
<b>Suggestions for Further Reading</b>	<b>160</b>

---

## 9 Language Development From Age 6 Through Adolescence 161

---

<b>Case Study: The Importance of Understanding Complex Concepts</b>	<b>161</b>
<b>Introduction</b>	<b>161</b>
Primary Language Development	162
Secondary Language Development	162
<b>Early School-Age Language Development</b>	<b>162</b>
<b>Sources of Language Learning in Late Childhood and Adolescence</b>	<b>164</b>
Source of Complex Language Input	165
Changes in Cognitive Processing	165
Growth in Social Experience and Pragmatic Knowledge	166
<b>Growth in Language Form: The Use of Complex Syntax and Derivational Morphology</b>	<b>166</b>
The Development of Complex Sentence Structure	167
Putting Words Together: Simple and Compound Sentences	167
Expanding and Embedding Meaning: Complex and Compound-Complex Sentences	168
<b>Quantitative Measures of Syntactic Growth in Later Childhood and Adolescence</b>	<b>169</b>
Average Sentence Length	169
Communicative Units (C-Units)	170
<b>Derivational Morphemes</b>	<b>170</b>
The Development of Derivational Morphemes	170
<b>The Relationship of Derivational Morphemes to Accuracy in Spelling</b>	<b>171</b>
Latin and Greek Roots	172
<b>Growth in Language Content: Vocabulary</b>	<b>172</b>
Development of New Vocabulary	172
The Influence of Reading on Vocabulary	173
<b>Growth in Language Content: Figurative Language</b>	<b>173</b>
Types of Figurative Language	173
Figurative Language in the Classroom	174
Development of Figurative Language	174
The Later Development and Use of Idioms and Proverbs	175
Factors Influencing the Understanding of Idioms	175
The Role of Culture in Understanding Proverbs	175

<b>The Role of Cognitive Development in Understanding Figurative Language</b>	<b>176</b>
<b>Growth in Pragmatic Language Use: Social and Communicative Competence</b>	<b>176</b>
Social Competence	177
<b>Interpersonal Negotiation Strategies</b>	<b>177</b>
<b>Nonverbal Communicative Behaviors in Adolescents</b>	<b>179</b>
<b>Strategies for the Classroom</b>	<b>179</b>
Listening	179
Speaking	180
Reading	180
Writing	180
<b>Case Study Revisited</b>	<b>181</b>
<b>Summary</b>	<b>182</b>
<b>Key Words</b>	<b>183</b>
<b>Study Questions</b>	<b>183</b>
<b>Projects</b>	<b>183</b>
<b>Suggestions for Further Reading</b>	<b>184</b>

## **10 Supporting the Development of Literacy Skills From Infancy Through School Age** **185**

---

<b>Case Study: Literacy and Spelling Development</b>	<b>185</b>
<b>Introduction</b>	<b>185</b>
<b>The Development of Literacy</b>	<b>186</b>
Emergent Literacy	186
<b>Literacy in the Preschool Years</b>	<b>186</b>
<b>Strategies to Support Language and Literacy in the Preschool Years</b>	<b>188</b>
Creating an Optimal Environment for Literacy Acquisition	188
Vocabulary and Language Supported by Thematic Units	189
Dialogic Book Sharing	191
Play	192
Phonological Awareness	192
Prewriting	193
<b>Literacy in the Elementary School Years</b>	<b>193</b>
Phonological Awareness	193
Vocabulary and Reading Comprehension	196
Spelling	196
Reading Fluency	198
Writing	198
<b>Strategies to Support Language and Literacy in the Elementary School Years</b>	<b>199</b>
Phonological Awareness	199
Fluency	200
Vocabulary	201
Reading Comprehension	201
Writing	202

Literacy in the Adolescent Years	204
Strategies to Support Language and Literacy in Adolescence	205
Case Study Revisited	206
Summary	207
Key Words	207
Study Questions	207
Projects	208
Suggestions for Further Reading	208

## **11 Educational Implications of Narrative Discourse** **209**

---

Case Study: The Ability to Describe Events and Stories in Narratives	209
Introduction	209
Personal Narrative Prompt	210
Fictional Story Prompt	210
The Importance of Narrative Discourse	211
Decontextualized Narratives	212
The Structure of Narrative Discourse	212
Cultural Variations of Narrative Discourse	214
Differentiating Impaired Versus Culturally Different	
Narrative Discourse Patterns	218
Examples of Narratives From Selected Language Disorders	219
Attention-Deficit Hyperactivity Disorder	219
Learning Disabilities	220
Asperger Syndrome	221
Educational Implications for Fostering Coherent Narratives in the Classroom	222
Case Study Revisited	223
Summary	224
Key Words	225
Study Questions	225
Projects	225
Suggestions for Further Reading	226

## **12 African American English in the Classroom** **227**

---

Case Study: Understanding African American English	227
Introduction	227
African American English	228
The Social Perception of African American English	229
African American English and the Academic Context	230
The Achievement Gap	232
Source of the Achievement Gap	232
Education and Dialect	232
Reading and Writing	233

<b>Oral Narratives</b>	<b>234</b>
African American Oral Tradition	234
Narratives	234
Topic-Associating and Topic-Centered Narratives	234
Performative Narratives	237
Education and Oral Narration	237
Narrative Style Variation	238
<b>Strategies for the Classroom Teacher: Narrative Development</b>	<b>238</b>
<b>Strategies for the Classroom Teacher: Dialect Use</b>	<b>239</b>
<b>Case Study Revisited</b>	<b>240</b>
<b>Summary</b>	<b>241</b>
<b>Key Words</b>	<b>242</b>
<b>Study Questions</b>	<b>242</b>
<b>Projects</b>	<b>242</b>
<b>Suggestions for Further Reading</b>	<b>243</b>

---

## 13 Bilingual Language Acquisition and Learning 245

<b>Case Study: Learning English as a Second Language</b>	<b>245</b>
<b>Introduction</b>	<b>245</b>
<b>Definitions of Bilingualism and Related Terms</b>	<b>246</b>
<b>Stages of Second-Language Learning</b>	<b>247</b>
Stage I: The Silent/Receptive or Preproduction Stage	248
Stage II: The Early Production Stage	248
Stage III: The Speech Emergence Stage	248
Stage IV: The Intermediate Language Proficiency Stage	248
Stage V: The Advanced Language Proficiency Stage	248
<b>A Framework of Communicative Proficiency</b>	<b>248</b>
<b>Bilingual Programs</b>	<b>249</b>
<b>Assessing Second-Language Development</b>	<b>251</b>
<b>Response to Intervention</b>	<b>251</b>
Tier 1: High-Quality Instructional and Behavioral Supports for All Students in General Education	252
Tier 2: Targeted Supplemental Services for Students Whose Performance and Rate of Progress Are Below What Is Expected for Their Grade and Educational Setting	252
Tier 3: Intensive, Individualized Intervention That Has Been Designed Based on Comprehensive Evaluation Data From Multiple Sources	252
<b>Application of the RTI Model to Language Intervention</b>	<b>252</b>
<b>Principles for Promoting Positive Second-Language Learning</b>	<b>253</b>
Increase Comprehensibility	254
Increase Interaction	254
Increase Thinking/Study Skills	254
Use Student's Native Language to Increase Comprehensibility	254
Total Physical Response	254
Language Experience Approach	254
Dialogue Journals	255

<b>Specific Strategies for Teaching Content Material</b>	<b>255</b>
Use of a Thematic Approach	256
Explicit Teaching of Learning Strategies	256
Utilization of Media	256
Incorporation of Student's Experience in the Learning Process	257
Vocabulary Building	257
<b>Teacher Discourse and Teaching Style</b>	<b>257</b>
<b>Scaffolding</b>	<b>258</b>
<b>Structuring the Classroom</b>	<b>258</b>
<b>Language Proficiency Tests</b>	<b>258</b>
<b>Case Study Revisited</b>	<b>259</b>
<b>Summary</b>	<b>260</b>
<b>Key Words</b>	<b>261</b>
<b>Study Questions</b>	<b>261</b>
<b>Projects</b>	<b>262</b>
<b>Suggestions for Further Reading</b>	<b>262</b>

---

## **14 Bilingual Speech Sound Development and Disorders 263**

<b>Case Studies: Speech Sound Development in Children Learning English as a Second Language</b>	<b>263</b>
Case Study 1	263
Case Study 2	263
<b>Introduction</b>	<b>264</b>
<b>Bilingualism</b>	<b>264</b>
<b>Bilingualism and Two Speech Sound Systems</b>	<b>265</b>
<b>Typical Speech Development in Bilingual Children</b>	<b>266</b>
Deceleration	267
Acceleration	267
<b>Implications for the Classroom</b>	<b>269</b>
<b>Strategies to Identify Bilingual Children With Speech Disorders</b>	<b>269</b>
Language Proficiency	269
<b>Characteristics of Bilingual Children With Speech Disorders</b>	<b>270</b>
Delayed Speech Sound Development	270
Frequency of Error Patterns	271
Uncommon Error Patterns	271
<b>Language Proficiency</b>	<b>272</b>
<b>Strategies Teachers Can Use to Help Bilingual Children With Speech Disorders</b>	<b>272</b>
<b>Strategies Teachers Can Use to Support Bilingual Development</b>	<b>272</b>
<b>Case Studies Revisited</b>	<b>273</b>
Case Study 1	273
Case Study 2	273
<b>Summary</b>	<b>275</b>
<b>Key Words</b>	<b>275</b>
<b>Study Questions</b>	<b>275</b>
<b>Projects</b>	<b>276</b>
<b>Suggestions for Further Reading</b>	<b>276</b>

# **15** **Fostering Teacher and Family Partnerships in the Development of Language and Literacy** **277**

---

<b>Case Study: Parents and Their Impact on Language Development</b>	<b>277</b>
<b>Introduction</b>	<b>277</b>
<b>The Role of the Teacher in Language and Literacy Development</b>	<b>278</b>
<b>The Role of the Family in Early Language and Academic Development</b>	<b>278</b>
Oral Language	278
Interaction and Play	279
Listening to Good Language Models	279
Reading	280
<b>The Role of the Teacher in Engaging Parents in Their Children's Language Development</b>	<b>280</b>
<b>Working With Families Whose Native Language Is Not English</b>	<b>282</b>
<b>The Teacher as Parent Trainer</b>	<b>282</b>
Models of Parent and Family Training	283
<b>Strategies for Supporting Language and Literacy Development in the Home</b>	<b>284</b>
Home-Based Literacy Activities Involving Print and Digital Materials for Older Students	285
Web-Based Activities and Factors	285
<b>Strategies to Engage Parents of Adolescents in Home-Based Literacy Activities</b>	<b>286</b>
<b>Case Study Revisited</b>	<b>287</b>
<b>Summary</b>	<b>288</b>
<b>Key Words</b>	<b>289</b>
<b>Study Questions</b>	<b>289</b>
<b>Projects</b>	<b>289</b>
<b>Suggestions for Further Reading</b>	<b>290</b>

<b>Glossary</b>	<b>291</b>
<b>References</b>	<b>309</b>
<b>Index</b>	<b>337</b>
<b>About the Editors</b>	<b>349</b>
<b>About the Contributors</b>	<b>351</b>