

FOUNDATIONS OF **Special Education**

**PAUL
CHURTON
ROSSELLI-KOSTORYZ
MORSE
MARFO
LAVELY
THOMAS**

Foundations of Special Education

BASIC KNOWLEDGE INFORMING RESEARCH AND PRACTICE IN SPECIAL EDUCATION

JAMES L. PAUL

MICHAEL CHURTON

HILDA ROSSELLI-KOSTORYZ

WILLIAM C. MORSE

KOFI MARFO

CAROLYN LAVELY

DAPHNE THOMAS

University of South Florida



Brooks/Cole Publishing Company

I(T)P® An International Thomson Publishing Company

Pacific Grove • Albany • Belmont • Bonn • Boston • Cincinnati • Detroit • Johannesburg • London
Madrid • Melbourne • Mexico City • New York • Paris • Singapore • Tokyo • Toronto • Washington

Sponsoring Editor: *Vicki Knight*
Marketing Team: *Jean Thompson and Deborah Petit*
Editorial Assistant: *Jana Garnett*
Production Coordinator: *Fiorella Ljunggren*
Production: *Scratchgravel Publishing Services*
Manuscript Editor: *Susan Pendleton*
Permissions: *Carline Haga*

Interior Design: *Anne and Greg Draus,*
Scratchgravel Publishing Services
Cover Design: *Lisa Thompson*
Indexer: *James Minkin*
Typesetting: *Scratchgravel Publishing Services*
Cover Printing: *Lehigh Press*
Printing and Binding: *Quebecor Printing, Fairfield*

COPYRIGHT © 1997 by Brooks/Cole Publishing Company
A Division of International Thomson Publishing Inc.
ITP The ITP logo is a trademark under license.

For more information, contact:

BROOKS/COLE PUBLISHING COMPANY
511 Forest Lodge Road
Pacific Grove, CA 93950
USA

International Thomson Publishing Europe
Berkshire House 168-173
High Holborn
London WC1V 7AA
England

Thomas Nelson Australia
102 Dodds Street
South Melbourne, 3205
Victoria, Australia

Nelson Canada
1120 Birchmount Road
Scarborough, Ontario
Canada M1K 5G4

International Thomson Editores
Seneca 53
Col. Polanco
11560 México, D. F., México

International Thomson Publishing GmbH
Königswinterer Strasse 418
53227 Bonn
Germany

International Thomson Publishing Asia
221 Henderson Road
#05-10 Henderson Building
Singapore 0315

International Thomson Publishing Japan
Hirakawacho Kyowa Building, 3F
2-2-1 Hirakawacho
Chiyoda-ku, Tokyo 102
Japan

All rights reserved. No part of this work may be reproduced, stored in a retrieval system, or transcribed, in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the prior written permission of the publisher, Brooks/Cole Publishing Company, Pacific Grove, California 93950.

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

Library of Congress Cataloging-in-Publication Data

Foundations of special education : basic knowledge informing research
and practice in special education / edited by James L. Paul . . . [et
al.].

p. cm.

Includes bibliographical references and index.

ISBN 0-534-34202-7 (alk. paper)

1. Special education. I. Paul, James L.

LC3965.F68 1997

371.9—dc21

96-39237
CIP



P R E F A C E

This book was written as part of an intellectual experiment to define the knowledge foundations of special education in neuropsychology, cognitive psychology, developmental psychology, ecological psychology, philosophy, and ethics. In it, leading social scientists, neuroscientists, philosophers, and ethicists describe the current status of some of the knowledge considered relevant to understanding and providing services for children with disabilities and their families. The book also describes developmental, systems, and behavioral knowledge (drawn primarily from subdisciplines in psychology) that has shaped research, policy, and practice in the education of children with disabilities. The last chapter provides a postmodern critique of the essentially modern knowledge base of special education.

Foundations of Special Education is part of a project consisting of two volumes—one on foundational knowledge (this one) and the other on applied knowledge in special education. The goal of the present volume is to provide the knowledge foundation for the development of the applied-knowledge text, *Special Education Practice*. That text (1997, by Paul et al.), which is being published concurrently with this volume, integrates foundational knowledge with the practical input from policymakers, practitioners, parents, university faculty, and administrators in the field of special education.

The purpose of the project was to contribute to the integration of theory and practice across disciplinary lines, as well as to a substantive interdisciplinary discourse about special education. Among the basic assumptions on which this project rests, three are mentioned here. The first is that foundational knowledge can be distinguished from applied knowledge. Although this distinction is problematic in postmodern philosophy, as discussed in the

last chapter of the book, it does seem appropriate in examining the knowledge base in special education, which is decidedly modern. The second assumption is that the applied research supporting special education policy and practice has become separated from the foundational discipline from which it grew—that is, psychology. There are various reasons for this separation, and they are discussed in the text. The third assumption is that special education research and practice, lacking the philosophical grounding of a discipline, will benefit from examining current perspectives and understandings of selected areas of knowledge in psychology and other relevant disciplines.

This project could not have been completed without an active and intensive collaboration involving several agencies and a large number of individuals who believed in our work. The leadership and staff of the Bureau of Student Services and Exceptional Education (BSSEE) in the Florida State Department of Education, which provided most of the funding, and the State Advisory Committee for Exceptional Student Education provided strong support for the project. Bettye Weir, Bureau Chief, believed in the value of the project and its potential contribution to the development of a more integrated knowledge base to support inclusion. She helped us shape the focus of the work and coordinate our efforts with policymakers and special education administrators in Florida. She also helped us relate our efforts to other states through state directors of special education. Doris Nabi, a senior staff member of the Bureau, and members of the Hillsborough County and Gulf Coast Florida Diagnostic and Learning Resources Systems provided invaluable assistance in planning and implementing the Vision 2000 Conference, which was instrumental in the development of this book and its companion volume.

Financial support for the Vision 2000 Conference was also provided by the Culverhouse Foundation at the Sarasota Campus of the University of South Florida. These funds were made available by Dean David Schenck, who supported the collaborative interdisciplinary agenda of the project and its goal of renewing the linkage of foundational and applied knowledge in special education. Faculty members, doctoral students, and support staff in the Department of Special Education at the University of South Florida made significant contributions to different phases of this project. Many of them served as facilitators of the dialogue sessions at the Vision Conference.

We are grateful for the strong support and patient guidance we received from all these individuals and agencies. From the very beginning it was clear

that this project required the collective wisdom and energy of many people. We believed that the potential for making a substantial contribution to the field of special education depended on our ability to hear and learn from one another as we fashioned the plan for our work. The extent to which we have been able to identify and describe critical foundations of special education practice, policy, and research is a measure of our success in learning from all of our colleagues who participated in the project.

James L. Paul

BRIEF CONTENTS

Preface	xvii
INTRODUCTION Foundational Knowledge and Special Education	1
<i>James L. Paul and Kofi Marfo</i>	
1 The Role of Basic Knowledge and the Future of Special Education	11
<i>William M. Morse, James L. Paul, and Hilda Rosselli-Kostoryz</i>	
PART I Intellectual and Social Contexts of Special Education Policy	23
2 Philosophy: Traditional to Postmodern	27
<i>Lynda Stone</i>	
3 Ecology of the Family as a Context for Human Development: Research Perspectives	49
<i>Urie Bronfenbrenner</i>	
PART II Learning, Development, and Intervention	85
4 Neuropsychology and Special Education: Foundations, Applications, and Future Contributions	92
<i>Stephen R. Hooper</i>	
5 Theories of Intelligence and Critiques	122
<i>Julie Viens, Jie-Qi Chen, Howard Gardner</i>	
6 The Promise of Early Intervention to Enhance the Life Outcomes of Children in Poverty	142
<i>Edward Zigler</i>	

7	Problems and Potentials of Youth Development: A Developmental Contextual Model for Research and Outreach Promoting Positive Youth Development <i>Richard M. Lerner</i>	157
PART III Care and Special Education: A Cultural Project		181
8	Diversity: What Do Teachers Need to Know? <i>Sonia Nieto</i>	187
9	Gender in the Classroom <i>Nel Noddings</i>	202
10	Liberalism, Ethics, and Special Education <i>Kenneth R. Howe</i>	215
PART IV The Future of Special Education		229
11	Future Research in Special Education: A Systems Perspective <i>Albert J. Duchnowski and Krista Kutash</i>	236
12	The Behavioral Sciences and Special Education Research: Some Promising Directions and Challenging Legacies <i>Kofi Marfo and Louise H. Boothby</i>	247
13	Behavior Analysis and Its Relevance to Special Education <i>Glen Dunlap and Lee Kern</i>	279
14	Postmodernism, Narrative, and Hope in Special Education <i>Scot Danforth</i>	291
	Name Index	305
	Subject Index	314

CONTENTS

Preface	xvii
INTRODUCTION	
Foundational Knowledge and Special Education	1
<i>James L. Paul and Kofi Marfo</i>	
Reflections on Foundational Knowledge in Special Education	3
Ethics and Special Education as a Cultural Project	5
Perspective Informing This Text	7
References	10
1 The Role of Basic Knowledge and the Future of Special Education	11
<i>William C. Morse, James L. Paul, and Hilda Rosselli-Kostoryz</i>	
A Deeper Reform	11
Knowledge to Practice	14
Embracing a Context of Change	14
<i>Challenges of New Philosophical and Ethical Understandings</i>	16
<i>Recognizing the Implications of Fundamental Changes in Major Institutions</i>	17
<i>Appreciating the Impact of Newly Emerging Ideological Concepts</i>	18
<i>The Quest for New Methods of Resolving Differences</i>	20
Conclusion	21
References	21

PART I

**Intellectual and Social Contexts
of Special Education Policy 23**

2 *Philosophy: Traditional to Postmodern* 27

Lynda Stone

Introduction 27

Traditional Philosophy 29

Traditional Themes 30

Premodernity 30

Modernity 32

Science and Social Science 34

Science 34

Social Science 36

Postmodernism 37

New Historicism 38

The Linguistic Turn 38

Feminism 39

Critical Theory and Cultural Studies 40

Pragmatism 42

Conclusion 43

References 44

**3 *Ecology of the Family as a Context for Human
Development: Research Perspectives* 49**

Urie Bronfenbrenner

Paradigm Parameters 49

External Systems Affecting the Family 49

Family Processes in Context 50

Mesosystem Models 53

Ecology of Family Genetics 53

Genetics–Environment Interaction in Family Processes 53

The Family and the Hospital 54

The Family and Day Care 55

The Family and the Peer Group 55

Family and School 56

Exosystem Models 57

Family and Work 57

<i>Parental Employment and Family Life</i>	57
<i>Maternal Employment and the Family</i>	60
<i>Parental Support Networks</i>	60
<i>The Family and the Community</i>	63
Chronosystem Models	64
Research Gaps and Opportunities	68
<i>Ecological Variations in the Expression of Genotypes</i>	68
<i>Relations Between the Family and Other Child Settings</i>	69
<i>Relations Between Family Processes and Parental Participation in Other Settings of Adult Life</i>	71
<i>Families in Broader Social Contexts</i>	71
References	75

PART II **Learning, Development, and Intervention** 85

4 ***Neuropsychology and Special Education: Foundations, Applications, and Future Contributions*** 92

Stephen R. Hooper

Introduction 92

Basic Brain-Behavior Relationships 93

Theoretical Foundations 93

Selected Advances in Brain-Behavior Relationships 98

Historical Trends in Child Neuropsychology 98

The First Stage in the Development of Child Neuropsychology 99

The Second Stage in the Development of Child Neuropsychology 99

The Third Stage in the Development of Child Neuropsychology 100

The Fourth Stage in the Development of Child Neuropsychology 101

Summary of the Historical Trends in Child Neuropsychology 101

Neuropsychological Assessment Approaches 102

Fixed-Battery Approaches 102

Eclectic Test Batteries 102

Qualitative Approaches 103

Process-Oriented Approaches 103

Summary of Neuropsychological Assessment Approaches 104

Educational Contributions and Clinical Applications 104

Neuropsychological Contributions to Education 105

Clinical Applications 106

Implications and Directions	110
<i>Assessment</i>	110
<i>Assessment-Treatment Linkages</i>	112
<i>Training in Special Education</i>	112
<i>Technology</i>	113
<i>Public Policy</i>	113
Conclusions	114
References	115

5 *Theories of Intelligence and Critiques* 122

Julie Viens, Jie-Qi Chen, and Howard Gardner

Introduction	122
Psychometric Intelligence	123
<i>Background</i>	123
<i>What Is "Mental Ability"?</i>	124
<i>Critique of Psychometric Theories</i>	125
Piaget's Theory of Intellectual Development	127
<i>Intellectual Development</i>	127
<i>Critique of Piaget's Theory</i>	128
After Piaget	129
<i>Information-Processing Theories</i>	129
<i>Neo-Piagetians</i>	130
Recent Integrative Theories of Intelligence	131
<i>Sternberg's Triarchic Theory</i>	131
<i>Ceci's Bioecological Approach</i>	132
<i>Gardner's Theory of Multiple Intelligences</i>	133
<i>Critique of Multiple Intelligences Theory</i>	137
Conclusion	138
References	139

6 *The Promise of Early Intervention to Enhance the Life Outcomes of Children in Poverty* 142

Edward Zigler

Factors That Shaped the Expectations Placed on Early Intervention	143
<i>Deficit Model</i>	143
<i>Focus on Raising Intelligence</i>	144

What Can Early Intervention Accomplish? 146

School Adjustment 146

Prosocial Behavior 147

Perspectives on the Methods and Mission

of Effective Intervention 150

Comprehensive Programming 150

Dovetailed Programming 151

Ecological Approach 153

References 154

7 Problems and Potentials of Youth Development: A Developmental Contextual Model for Research and Outreach Promoting Positive Youth Development 157

Richard M. Lerner

Illustrations of the Risk Behaviors Engaged in

by American's Youth 158

*Temporal Trends in the Risk Behaviors Engaged in
by Youth* 160

Youth Poverty 160

Addressing the Crisis of America's Children Through
an Integrative Theory of Human Development 163

An Overview of Developmental Contextualism 165

Children's Influences on Their Own Development 166

Development as a Life-Span Phenomenon 166

Development in Its Ecological Context 167

*Levels of Embeddedness in the Ecology
of Human Development* 168

Conclusions 169

Using Developmental Contextualism as a Framework
for Preventive and Enhancement Interventions 170

Key Principles for the Design of Successful Prevention Programs 170

The Development-in-Context Evaluation (DICE) Model 172

A Template for Creating Collaborative Communities 172

Conclusion 174

References 174

PART III

**Care and Special Education:
A Cultural Project 181**

8 *Diversity: What Do Teachers Need to Know?* 187

Sonia Nieto

Defining Diversity 188

Defining Multicultural Education:

A Personal, Collective, and Institutional Odyssey 189

School Policies and Practices and Implications
for Teacher Education 191

Institutional Racism and Other Forms of Discrimination 191

Expectations of Student Achievement 192

Curriculum 193

Pedagogy 195

Tracking and Ability Grouping 196

Testing 197

Student, Teacher, and Parent Involvement 198

Conclusion 199

References 199

9 *Gender in the Classroom* 202

Nel Noddings

Historical Background 202

Women's Intellectual and Moral Patterns 205

Research on Gender and Education 207

Problems in Today's Classrooms 209

Including Women's Traditions in the Curriculum 210

Conclusion 212

References 212

10 *Liberalism, Ethics, and Special Education* 215

Kenneth R. Howe

Three Predominant Philosophic Theories in
the Liberal-Democratic Tradition 216

Utilitarianism 216

<i>Libertarianism</i>	217
<i>Liberal-Egalitarianism</i>	218

Current Challenges to the Liberal-Democratic Tradition	220
Liberal Responses	223
The Ethics of Special Education	224
Conclusion	226
References	227

PART IV The Future of Special Education 229

11 *Future Research in Special Education: A Systems Perspective* 236

<i>Albert J. Duchnowski and Krista Kutash</i>	
Special Education Research and Practice: Current Status	237
Systems-Oriented Research: A Linear Alternative	238
<i>Service Reform: Creating a System</i>	239
<i>Challenges in Researching System Reform Efforts</i>	241
Fitting the Pieces Together for Special Education	241
<i>Research Teams</i>	241
<i>Comprehensive Focus</i>	242
<i>Organizational Capacity</i>	242
<i>A Neighborhood Focus</i>	243
<i>Family and Teacher Involvement</i>	243
Improving the System of Care for Children Who Have Serious Emotional Disabilities: Building the Research Base	243
Conclusion	244
References	244

12 *The Behavioral Sciences and Special Education Research: Some Promising Directions and Challenging Legacies* 247

<i>Kofi Marfo and Louise H. Boothby</i>	
Introduction	247
<i>Paradigm Wars and Transport Models of Knowledge Production: An Orientational Caveat</i>	248

Promising Directions from the Behavioral Sciences	249
<i>Capitalizing on the Benefits of Ecological, Transactionalist, and Contextualist Frameworks</i>	250
<i>Learning from Research on Resilience and Protective Factors</i>	254
<i>Relating Advances in Cognition and Learning to Assessment and Instruction</i>	256
Problematic Legacies from the Behavioral Sciences	261
<i>The Culture Gap in the Developmental Science Knowledge Base</i>	261
<i>The Tradition of Inferring Deficit from Difference</i>	264
Special Education's Own Challenging Legacies:	
Social Policy, Advocacy, and Intervention Research	265
<i>The Politicization of Inquiry</i>	265
<i>Ethical Challenges to the Interventionist Culture</i>	268
Conclusion	270
References	272

13 Behavior Analysis and Its Relevance to Special Education 279

Glen Dunlap and Lee Kern

Introduction	279
Principles and Features of Applied Behavior Analysis	280
<i>Scientific Foundation</i>	280
<i>A Conceptual Basis in Operant Psychology</i>	280
<i>Methodological Characteristics</i>	281
<i>Dynamic Characteristics</i>	282
Some Issues of Relevance	282
<i>Emphasis on Individualization</i>	282
<i>The Importance of Empiricism</i>	283
<i>Development of Replicable Instructional Practices</i>	283
<i>Focus on Function over Form</i>	284
Issues and Directions for Applied Behavioral Research	285
<i>The Changing Contexts of Special Education: Social Demographics, Educational Reform, and Inclusion</i>	285
<i>Research on Utilization</i>	286
<i>Measurement of Broader Dependent Variables and Meaningful Outcomes</i>	287
Conclusion	289
References	289

14	<i>Postmodernism, Narrative, and Hope in Special Education</i>	291
	<i>Scot Danforth</i>	
	Stories and Hope in Special Education	291
	The Trouble with Truth	292
	Every Person an Educator	294
	Disability Stories	295
	Untrue Stories: Rushdie's Postmodernism	297
	<i>Pluralistic Conversation as Democratic Dialogue</i>	297
	<i>Laminations and the Thing-in-Itself</i>	298
	<i>Stories and Solidarity</i>	300
	<i>A Special Education Future: Local Stories and Solidarity</i>	301
	<i>Recommendations? Two Postmodern Examples</i>	302
	References	304
	 <i>Name Index</i>	 305
	 <i>Subject Index</i>	 314