This guide presents a model for evaluation of educational outcomes appropriate for use with all students (with and without disabilities). It addresses specific post-school outcomes, associated indicators, and possible sources of data for the indicators. The model identifies seven measurable outcome domains and three to five outcomes per domain. The seven domains are as follows, with sample outcomes in parentheses: (1) presence and participation (individual is employed); (2) physical health (individual makes healthy lifestyle choices); (3) responsibility and independence (individual functions independently); (4) contribution and citizenship (individual votes and pays taxes); (5) academic and functional literacy (individual demonstrates competence in communication); (6) personal and social adjustment (individual gets along with other people); and (7) satisfaction (individual reports satisfaction with current status). For each of the outcomes, one to seven possible indicators are then identified (for example, percent of individuals in the workforce). Finally, steps toward identifying sources of data for indicators are suggested, with such examples as informed respondent interviews, individual surveys, observation records, parent reports, and supervisor ratings. (DB)
Educational Outcomes and Indicators for Individuals at the Post-School Level

The College of Education
UNIVERSITY OF MINNESOTA
May, 1993

Prepared by James E. Ysseldyke, Martha L. Thurlow, and Cheri J. Gilman

Additional copies may be ordered for $8.00.
Please write:

Publications Office
NCEO
350 Elliott Hall
75 East River Road
University of Minnesota
Minneapolis, MN 55455

The National Center on Educational Outcomes (NCEO), established in 1990, works with state departments of education, national policy-making groups, and others to facilitate and enrich the development and use of indicators of educational outcomes for students with disabilities. It is believed that responsible use of such indicators will enable students with disabilities to achieve better results from their educational experiences. The Center represents a collaborative effort of the University of Minnesota, the National Association of State Directors of Special Education, and St. Cloud State University.

The Center is supported through a Cooperative Agreement with the U.S. Department of Education, Office of Special Education Programs (H159C00004). Opinions or points of view do not necessarily represent those of the U.S. Department of Education or Offices within it.

NCEO Core Staff:
Robert H. Bruininks
Cheri J. Gilman
Kevin S. McGrew
Dorene L. Scott
James G. Shriner
Gail E. Spande
Martha L. Thurlow, assistant director
James E. Ysseldyke, director

Acknowledgments
In addition to numerous stakeholders and other contributors, many individuals helped to develop the concept of a model of outcomes and indicators of the outcomes. While all involved are too numerous to mention, the following individuals deserve special acknowledgment:

OSEP Project Officer
Lou Danielson

NASDSE Staff
Eileen Ahearn
Edward McCaul

All NCEO staff read, reviewed, and contributed to this document in various ways. Contributions beyond those were made by the following NCEO support staff:
Trish Grafstrom
Sheila Hower
Michael Vanderwood

Graphic Design
University of Minnesota
Printing Services
Table of Contents

Educational Outcomes and Indicators for Individuals at the Post-School Level .......................................................... 1

Conceptual Model of Domains and Outcomes ........................................... 2

Possible Indicators for Post-School Outcomes ........................................ 7

Presence and Participation .................................................................. 8
Accommodation and Adaptation ......................................................... 9
Physical Health .............................................................................. 10
Responsibility and Independence .................................................... 11
Contribution and Citizenship .......................................................... 12
Academic and Functional Literacy .................................................. 13
Personal and Social Adjustment ...................................................... 14
Satisfaction .................................................................................. 15

Steps Toward Identifying Sources of Data for Indicators ..................... 17

Identifying and Defining the Important Outcomes of Education ........ 19

Contributors to the Development of Post-School Outcomes .............. 21

Supporting Documents ................................................................... 25
Educational Outcomes and Indicators for Individuals at the Post-School Level

The current emphasis on educational reform and accountability reflects the public's desire to know the results of education for all of America's students. There is great interest in identifying the important outcomes of education and the best indicators of those outcomes.

The National Center on Educational Outcomes (NCEO) is working with federal and state agencies to facilitate and enhance the collection and use of data on educational outcomes for students with disabilities. In doing so, it has taken an inclusive approach, identifying a conceptual model of outcomes that applies to all students, not just to students with disabilities. Hundreds of educators, administrators, policymakers, and parents have participated in a consensus building process using this model as a framework to identify key indicators of important educational outcomes for all students.

The purpose of this document is to present the model of post-school outcomes and the indicators of these outcomes for all individuals who have left today's schools. Post-school can be defined in a number of appropriate ways, including one year after completing school, five years after completing school, and so on. In the pages that follow, you will find:

- A conceptual model of domains and outcomes
- Possible indicators for each outcome
- Steps toward identifying sources of data for indicators

We at the National Center on Educational Outcomes are indebted to many groups and individuals who provided feedback to us (see Contributors listed at the end of this document). We believe that the model and indicators for post-school outcomes presented here will serve as a point from which to extend discussion as policymakers, states, and local school districts identify the important outcomes of education.
Conceptual Model of Domains and Outcomes

The conceptual model depicted below shows the complete educational model, with Educational Resources (Inputs and Contexts) influencing Educational Opportunity and Process. These, in turn, influence the Outcome Domains (the shaded areas), which have a return influence on both the resources and opportunity/process.

One of the shaded domains, Presence and Participation, is placed next to Educational Opportunity and Process. This placement reflects the continued controversy about whether this is a true outcome, part of the process of education, or some type of mediating variable. Yet, generally there is consensus that Presence and Participation needs to be measured.

At the Post-School level, outcomes in the Accommodation and Adaptation domain were viewed by stakeholders as integrated within all other domains. The indicates that this domain is not measured separately at the Post-School level.

Throughout this document, all domains (indicated by ◆) will be treated equally as outcome domains.
The conceptual model is extended by identifying outcomes, indicators of the outcomes, and finally, sources of data for the indicators. Outcomes are the results of interactions between students and the educational system. Indicators are numbers or other symbolic representations that can be used to determine whether desired outcomes are achieved. The relationships among these components are shown below for the Presence and Participation domain.

Throughout this document outcome domains are represented by shaded diamonds, outcomes are represented by shaded circles and indicators are represented by shaded triangles. Sources of data, represented below as small dots, are not fully developed for the domains in this document.

Outcomes for the domains are presented on pages 4 and 5. Indicators are listed for each outcome within outcome domains on pages 8-15. Sample sources of data for the Responsibility and Independence outcome domain are presented on page 17.

Within this document, outcome domains, outcomes, and indicators are assigned letters and numbers to help in referencing them. These letters and numbers do not imply a hierarchical order of any kind.

<table>
<thead>
<tr>
<th>OUTCOME DOMAIN</th>
<th>OUTCOME</th>
<th>INDICATOR</th>
<th>SOURCE OF DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence and Participation</td>
<td>A1</td>
<td>a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>c</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>d</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>e</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A2</td>
<td>a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>c</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>d</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>e</td>
<td></td>
</tr>
</tbody>
</table>
OUTCOME DOMAINS

A Presence and Participation

B Accommodation and Adaptation

C Physical Health

D Responsibility and Independence

E Contribution and Citizenship

OUTCOME

A1 Is in community
A2 Participates in community
A3 Is employed

Stakeholders indicated that it is not important to measure outcomes in this domain at the post-school level. The domain is listed here to show consistency across developmental levels.

C1 Makes healthy lifestyle choices
C2 Is aware of basic safety, fitness, and health care needs
C3 Is physically fit

D1 Gets about in the environment
D2 Is responsible for self
D3 Functions independently

E1 Complies with community rules
E2 Votes
E3 Volunteers
E4 Pays taxes
<table>
<thead>
<tr>
<th>OUTCOME DOMAIN</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>F Academic and Functional Literacy</td>
<td>F1 Demonstrates competence in communication</td>
</tr>
<tr>
<td>G Personal and Social Adjustment</td>
<td>G1 Copes effectively with personal challenges, frustrations, and stressors</td>
</tr>
<tr>
<td>H Satisfaction</td>
<td>H1 Individual's satisfaction with current status</td>
</tr>
<tr>
<td></td>
<td>H2 Parent/guardian satisfaction with current status of individual</td>
</tr>
<tr>
<td></td>
<td>H3 Community satisfaction with current status of individual</td>
</tr>
<tr>
<td></td>
<td>F2 Demonstrates competence in problem-solving strategies and critical thinking skills</td>
</tr>
<tr>
<td></td>
<td>F3 Demonstrates competence in math, reading and writing skills used in daily life</td>
</tr>
<tr>
<td></td>
<td>F4 Demonstrates competence in other academic and nonacademic skills</td>
</tr>
<tr>
<td></td>
<td>F5 Demonstrates competence in using technology</td>
</tr>
<tr>
<td></td>
<td>G2 Has a good self image</td>
</tr>
<tr>
<td></td>
<td>G3 Respects cultural and individual differences</td>
</tr>
<tr>
<td></td>
<td>G4 Gets along with other people</td>
</tr>
</tbody>
</table>
Possible Indicators for Post-School Outcomes

Indicators are numbers or other symbolic representations of outcomes. They can be viewed over time to gather information on trends. At the national and state levels, indicators usually are presented as percentages or rates.

State and local district personnel who are interested in specific students can easily translate the indicators presented here into individually-based indicators. A guide to these translations is included in the supporting document entitled State and School District Development of Educational Outcomes and Indicators: A Guide for Self Study (see p. 25).

Lists of possible indicators for the post-school outcomes, which were identified through the consensus-building process, are presented on the next eight pages, one outcome domain per page. It is important to think of these as a framework within which outcomes, indicators, and sources of data can be generated.
POST-SCHOOL LEVEL

A OUTCOME

= INDICATOR

Presence and Participation

A1 Is in community

Percent of individuals living in regular community settings (differentiated by type -- living with parents/family of origin, semi-independent residence, independently)

A2 Particpates in community

Percent of individuals regularly participating in community-based activities, groups, and organizations

A3 Is employed

Percent of individuals in the workforce (differentiated by full-time, part-time, homemaker)

Percent of individuals whose employment is partially subsidized by non-employer funds
Outcomes and indicators in this domain were considered during the consensus-building process. Participants recommended that no separate outcomes be identified in this domain at the Post-School level. Rather, outcomes and indicators reflecting accommodation and adaptation should be incorporated within other domains.

This domain was considered very important at earlier developmental levels. For example, at the School Completion level stakeholders identified two important outcomes in this domain:

- Makes adaptations, accommodations, or compensations necessary to achieve outcomes in each of the major domains
- Demonstrates family support and coping skills

Readers should refer to the document entitled *Educational Outcomes and Indicators for Students Completing School* to see the kinds of indicators stakeholders identified in this domain.
POST-SCHOOL LEVEL

NCEO

= OUTCOME

C1 Makes healthy lifestyle choices

C2 Is aware of basic safety, fitness, and health care needs

C3 Is physically fit

= INDICATOR

Physical Health

Percent of individuals who make good nutritional choices

Percent of individuals who have abused alcohol or drugs in the past year

Percent of individuals who indicate they have had unprotected sex in the past year

Percent of individuals who regularly participate in sports, recreational, exercise and/or leisure activities

Percent of individuals who are aware of basic safety precautions and procedures

Percent of individuals who are aware of basic fitness needs

Percent of individuals who are aware of basic health care needs

Percent of individuals who know when, where, and how to access health care

Percent of individuals who are aware of first aid and emergency health care procedures

Percent of individuals who are physically fit
Responsibility and Independence

D1  Gets about in the environment

a  Percent of individuals who can get to and from a variety of destinations

b  Percent of individuals who know how to access community services (e.g., rehabilitation, counseling, employment, health, etc.)

c  Percent of individuals who complete transactions (shopping, banking, drycleaning, etc.) in the community

D2  Is responsible for self

a  Percent of individuals who can prioritize and set goals and persevere toward them

b  Percent of individuals who manage personal care and safety

c  Percent of individuals who effectively advocate for themselves

D3  Functions independently

a  Percent of individuals who make their own choices or exercise self-determination

b  Percent of individuals who obtain basic life necessities (e.g., housing, food, work, social relationships)

c  Percent of individuals who are engaged in productive daily activities (e.g., hold job, perform community service)
Contribution and Citizenship

E1 Complies with community rules

E2 Votes

E3 Volunteers

E4 Pays taxes

Percent of individuals convicted in the criminal justice system or courts

Percent of individuals who vote

Percent of individuals who volunteer time to help others and improve community resources through school, civic, community, or nonprofit activities

Percent of individuals who pay taxes
## Academic and Functional Literacy

| F1 | Demonstrates competence in communication | Percent of individuals who use and comprehend language that effectively accomplishes the purpose of the communication |
| F2 | Demonstrates competence in problem-solving strategies and critical thinking skills | Percent of individuals who demonstrate problem-solving and critical thinking skills |
| F3 | Demonstrates competence in math, reading and writing skills used in daily life | Percent of individuals who demonstrate competence in math necessary to function in their current home, school, work, and community environments |
| | | Percent of individuals who demonstrate competence in reading necessary to function in their current home, school, work, and community environments |
| | | Percent of individuals who demonstrate competence in writing necessary to function in their current home, school, work, and community environments |
| | | Percent of individuals who read the newspaper |
| F4 | Demonstrates competence in other academic and nonacademic skills | Percent of individuals who demonstrate home management skills |
| | | Percent of individuals who demonstrate money management skills |
| | | Percent of individuals who demonstrate employability skills |
| | | Percent of individuals who demonstrate ability to deal with community agencies |
| | | Percent of individuals who identify, organize, and allocate non-monetary resources effectively (e.g., time, materials, space, human resources) |
| F5 | Demonstrates competence in using technology | Percent of individuals who currently apply technology to enhance functioning in home, school, work, and community environments |
Personal and Social Adjustment

**G1** Copes effectively with personal challenges, frustrations, and stressors

- Percent of individuals who cope effectively with personal challenges, frustrations, and stressors

- Percent of individuals whose behavior reflects acceptance of the consequences for behavior (e.g., makes restitution)

- Percent of individuals who exercise self-control

**G2** Has a good image

- Percent of individuals who perceive themselves as worthwhile

- Percent of individuals who perceive themselves as competent

**G3** Respects cultural and individual differences

- Percent of individuals whose behavior demonstrates acceptance of diversity

- Percent of individuals who have friends and are a part of a social network

- Percent of individuals who demonstrate skill in interacting in social situations

**G4** Gets along with other people

- Percent of individuals who engage in productive group work in home, school, work, and community environments

- Percent of individuals who relate effectively to authority figures

- Percent of individuals who relate effectively to peers

- Percent of individuals who interact with parents or other family members on a regular basis

- Percent of individuals who demonstrate skill in managing interpersonal conflict
= OUTCOME

= INDICATOR

Satisfaction

H1 Individual’s satisfaction with current status

a. Percent of individuals who are satisfied with their current status and life experiences (e.g., general well being)
b. Percent of individuals who are satisfied with what was provided in postsecondary school experiences
c. Percent of individuals who are satisfied with their current employment experience
d. Percent of individuals who are satisfied with their current living arrangements
e. Percent of individuals who are satisfied with their social network
f. Percent of individuals who are satisfied with community services available
g. Percent of individuals who are satisfied with their level of involvement in leisure activities

H2 Parent/guardian satisfaction with current status of individual

a. Percent of parents/guardians who are satisfied with individual’s current status (e.g., general well being)

H3 Community satisfaction with current status of individual

a. Percent of community (employers, general public, service agency personnel, and policymakers) who are satisfied with the individual’s current status
Steps Toward Identifying Sources of Data for Indicators

NCEO staff and advisors are currently in the process of identifying possible sources of data for each of the indicators that has been identified through the consensus building process. Examples of possible sources of data for six of the nine indicators within the Responsibility and Independence domain are provided on this page. These were generated by NCEO staff. Before listing the possible sources of data for all outcome indicators in the NCEO model, experts will be asked to provide their ideas about the best data sources.

### Responsibility and Independence

<table>
<thead>
<tr>
<th>OUTCOME</th>
<th>INDICATOR</th>
<th>POSSIBLE SOURCE OF DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Gets about in the environment</td>
<td>a. Percent of individuals who can get to and from a variety of destinations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Percent of individuals who know how to access community services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Percent of individuals who complete transactions in the community</td>
</tr>
<tr>
<td>D2</td>
<td>Is responsible for self</td>
<td>a. Percent of individuals who can prioritize and set goals and persevere toward them</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Percent of individuals who manage personal care and safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Percent of individuals who effectively advocate for themselves</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Identifying and Defining the Important Outcomes of Education

The model and lists of domains, outcomes, and indicators that have been presented in this document are viewed as providing a framework and examples. From these examples, states, districts, and schools can begin to identify and define the important outcomes of education for all of their students. This document is a summary of the results of consensus-building exercises focused on the time of post school only. NCEO is using the same consensus building process to identify outcomes and indicators for the developmental levels indicated in the figure below. These will be available in the same format as the Post-School outcomes and indicators.

<table>
<thead>
<tr>
<th>OUTCOME DOMAIN</th>
<th>3 Years</th>
<th>6 Years</th>
<th>Grade 4</th>
<th>Grade 8</th>
<th>School Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Presence and Participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B Accommodation and Adaptation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Physical Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D Responsibility and Independence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E Contribution and Citizenship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Academic and Functional Literacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G Personal and Social Adjustment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Contributors to the Development of Post-School Outcomes

Many individuals contributed to the development of the conceptual model, outcomes, and indicators presented here. Stakeholders participated in an intensive process of consensus building using a computerized multiattribute analysis procedure. Other contributors, including NCEO’s Advisory Committee members, read and reacted to various working papers, model prototypes, and questionnaires. With extreme gratitude we recognize and thank these contributors.

STAKEHOLDERS

Peter Behuniak  
Bureau Chief  
Connecticut Department of Education  
Middletown, CT

Karen Brazeau  
Associate Superintendent  
Special Education & Student Services Division  
Oregon Department of Education  
Salem, OR

Lizanne DeStefano  
University of Illinois  
Champaign, IL

Tom Grayson  
Transition Research Institute  
University of Illinois  
Champaign, IL

Richard Green  
Parent, Assistant Director of Special Education  
Intermediate School District 917  
Rosemount, MN

Bill Halloran  
Secondary & Transition Services Program  
U.S. Department of Education  
Washington, DC

Andrew Halpern  
Professor  
University of Oregon  
Eugene, OR

Harvey Harkness  
Curriculum Supervisor  
New Hampshire Department of Education  
Concord, NH

Susan Hasazi  
Department of Special Education  
University of Vermont  
Burlington, VT

David R. Johnson  
Institute on Community Integration  
University of Minnesota  
Minneapolis, MN

Robert Kennedy  
State Director of Special Education  
New Hampshire Department of Education  
Concord, NH

Robin Kimbrough  
American Public Welfare Association  
Washington, DC

Marie Knowlton  
Associate Professor  
Educational Psychology  
University of Minnesota  
Minneapolis, MN

Stevan Kukic  
State Director of Special Education  
Utah Department of Education  
Salt Lake City, UT

Nancy Larson  
Teacher, Mounds View Public Schools  
Mounds View, MN

Kim Martinson  
Coordinator, Special Education  
Apple Valley Public Schools  
Apple Valley, MN

Ed McCaul  
NASDSE  
Arlington, VA

Ken Olsen  
Mid-South Regional Resource Center  
University of Kentucky  
Lexington, KY

Martin Orland  
National Education Goals Panel  
Washington, DC

Jeffrey Osowski  
State Director of Special Education  
New Jersey Department of Education  
Trenton, NJ
STAKEHOLDERS (continued)

Al Phelps
Center on Education & Work
University of Wisconsin-Madison
Madison, WI

Pat Sitlington
University of Northern Iowa
Cedar Falls, IA

Kathleen Steffens
Associate Professor
Bemidji State University
Bemidji, MN

Richard Steinke
State Director
Maryland Department of Education
Baltimore, MD

Bob Stoddern
Department of Special Education
University of Hawaii
Honolulu, HI

Nancy Thabet
State Director of Special Education
West Virginia Department of Education
Charleston, WV

Kyla Wahlstrom
Associate Director
Center for Applied Research and
Educational Improvement
University of Minnesota
Minneapolis, MN

Mary Wagner
SRI
National Longitudinal Transition Study
Menlo Park, CA

Michael Ward
Secondary & Transition Services Program
U.S. Department of Education
Washington, DC

Paul Wehman
Professor
Virginia Commonwealth University
Richmond, VA

Jennifer York
Assistant Professor
Educational Psychology
University of Minnesota
Minneapolis, MN

Martha Ziegler
Technical Assistance to Parents
Boston, MA

CONTRIBUTORS

Bob Algozzine
Professor
Department of Teaching Specialties
University of North Carolina-Charlotte
Charlotte, NC

Joseph Ballard
Government Relations
Council for Exceptional Children
Reston, VA

Kenneth Bird
Superintendent
Westside Community Schools
Omaha, NE

Asbjorn Birkemo
Institute for Educational Research
University of Oslo
Oslo, Norway

Jim Boreng
Educational Program Consultant
Wyoming Department of Education
Cheyenne, WY

Martha Brooks
State Supervisor
Delaware Department of Education
Dover, DE

Pat Brown
Special Education
Washington Department of Education
Olympia, WA

Lyndall Bullock
University of North Texas
Denton, TX

Sandra Christenson
Associate Professor
Educational Psychology
University of Minnesota
Minneapolis, MN

Oona Cheung
Council of Chief State School Officers
Washington, DC

John Clark
Public Information & Publications
Nebraska Department of Education
Lincoln, NE

Mary Cohen
Government Relations
Council for Exceptional Children
Reston, VA

Jane Cromie
Parent
Burnsville, MN

Shirley Curl
Gary County Unified School District
Junction City, KS

Mark Davison
Professor and Chair
Educational Psychology
University of Minnesota
Minneapolis, MN

Lawrence Dennis
Liaison Education Consultant
Ohio Department of Education
Columbus, OH

Christine Espin
Assistant Professor
Educational Psychology
University of Minnesota
Minneapolis, MN

David Ford
Alberta Department of Education
Alberta, Canada
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization/Position</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marge Goldberg</td>
<td>Co-Director, PACER Center</td>
<td>Minneapolis, MN</td>
</tr>
<tr>
<td>JoAnn Gordini</td>
<td>Co-Chair, Best Practices, Oklahoma Department of Education</td>
<td>Oklahoma City, OK</td>
</tr>
<tr>
<td>Martin Gould</td>
<td>Towson State University, Co-Chair</td>
<td>Towson, MD</td>
</tr>
<tr>
<td>Janet Graden</td>
<td>Professor of School Psychology, University of Cincinnati</td>
<td>Cincinnati, OH</td>
</tr>
<tr>
<td>John Haigh</td>
<td>Director of Special Education, Ohio Department of Education</td>
<td>Baltimore, MD</td>
</tr>
<tr>
<td>John Herner</td>
<td>Ohio Department of Education, Columbus, OH</td>
<td></td>
</tr>
<tr>
<td>Gene Hoffman</td>
<td>National Council of State Legislators</td>
<td>Oak Brook, IL</td>
</tr>
<tr>
<td>Barbara Huff</td>
<td>Federation of Families for Children's Mental Health</td>
<td>Alexandria, VA</td>
</tr>
<tr>
<td>James Kauffman</td>
<td>Professor, Department of Curriculum, Instruction, and Special Education, University of Virginia</td>
<td>Charlottesville, VA</td>
</tr>
<tr>
<td>Marianne Kirner</td>
<td>Special Education Resource Center</td>
<td>Middletown, CT</td>
</tr>
<tr>
<td>Howard Knoff</td>
<td>Professor, School Psychology, University of South Florida</td>
<td>Tampa, FL</td>
</tr>
<tr>
<td>Sherry Kolbe</td>
<td>National Association of Private Schools for Exceptional Children, Washington, DC</td>
<td></td>
</tr>
<tr>
<td>Nancy LaCount</td>
<td>Kentucky Department of Education, Frankfort, KY</td>
<td></td>
</tr>
<tr>
<td>Sheryl Larson</td>
<td>Institute on Community Integration, University of Minnesota</td>
<td>Minneapolis, MN</td>
</tr>
<tr>
<td>Sue Lerner</td>
<td>South Central School District 406, Seattle, WA</td>
<td></td>
</tr>
<tr>
<td>Larry Magliocca</td>
<td>Great Lakes Area Regional Resource Center, The Ohio State University, Columbus, OH</td>
<td></td>
</tr>
<tr>
<td>Edwin Martin</td>
<td>President and Chief Executive Officer, National Center for Disability Services, Albertson, NY</td>
<td></td>
</tr>
<tr>
<td>Carol Massanari</td>
<td>Mid-South Regional Resource Center, Lexington, KY</td>
<td></td>
</tr>
<tr>
<td>Jean McDonald</td>
<td>National Governors' Association, Washington, DC</td>
<td></td>
</tr>
<tr>
<td>Margaret Meaney</td>
<td>North Carolina Department of Education, Raleigh, NC</td>
<td></td>
</tr>
<tr>
<td>Mary Moore</td>
<td>Center for Policy Options in Special Education, Mathematica Policy Research, Washington, DC</td>
<td></td>
</tr>
<tr>
<td>Monty Neill</td>
<td>National Center for Fair &amp; Open Testing, Cambridge, MA</td>
<td></td>
</tr>
<tr>
<td>Alba Ortiz</td>
<td>President, Council for Exceptional Children, Reston, VA</td>
<td></td>
</tr>
<tr>
<td>Susan Peters</td>
<td>Professor, Special Education, Michigan State University</td>
<td>East Lansing, MI</td>
</tr>
<tr>
<td>Lynda Price</td>
<td>Office for Students with Disabilities, University of Minnesota</td>
<td>Minneapolis, MN</td>
</tr>
<tr>
<td>Maynard Reynolds</td>
<td>Professor Emeritus, Department of Educational Psychology, University of Minnesota, Minneapolis, MN</td>
<td></td>
</tr>
<tr>
<td>Robert Robertson</td>
<td>State Director of Special Education, Indiana Department of Education, Indianapolis, IN</td>
<td></td>
</tr>
<tr>
<td>Virginia Roach</td>
<td>National Association of State Boards of Education, Alexandria, VA</td>
<td></td>
</tr>
<tr>
<td>Edward Roeber</td>
<td>State Education Assessment Center, Council of Chief State School Officers, Washington, DC</td>
<td></td>
</tr>
<tr>
<td>Robert Rueda</td>
<td>Assistant Professor, Counseling and Educational Psychology, University of Southern California, Los Angeles, CA</td>
<td></td>
</tr>
<tr>
<td>Frank Rusch</td>
<td>Professor, Special Education, National Transition Institute, University of Illinois, Champaign, IL</td>
<td></td>
</tr>
<tr>
<td>Muriel Saunders</td>
<td>Bureau of Child Research, Kansas University, Lawrence, KS</td>
<td></td>
</tr>
<tr>
<td>Lorrie Shepard</td>
<td>Professor, School of Education, University of Colorado at Boulder, Boulder, CO</td>
<td></td>
</tr>
</tbody>
</table>
CONTRIBUTORS (continued)

Robert Slavin
Professor
Center for Research on Effective Schooling
The Johns Hopkins University
Baltimore, MD

Fred Smokoski
State Director of Special Education
Colorado Department of Education
Denver, CO

David Stewart
Associate Professor
Counseling, Educational Psychology, and Special Education
Michigan State University
East Lansing, MI

Jo Thomanson
Council of Administrators of Special Education
Council for Exceptional Children
Albuquerque, NM

Walter Thompson
Nebraska Department of Education
Lincoln, NE

Gerald Tindal
Professor
Special Education
University of Oregon
Eugene, OR

James Tucker
State Director of Special Education
Pennsylvania Department of Education
Harrisburg, PA

Fred Smokoski
State Director of Special Education
Colorado Department of Education
Denver, CO

David Stewart
Associate Professor
Counseling, Educational Psychology, and Special Education
Michigan State University
East Lansing, MI

Jo Thomanson
Council of Administrators of Special Education
Council for Exceptional Children
Albuquerque, NM

Walter Thompson
Nebraska Department of Education
Lincoln, NE

Gerald Tindal
Professor
Special Education
University of Oregon
Eugene, OR

James Tucker
State Director of Special Education
Pennsylvania Department of Education
Harrisburg, PA

Hill Walker
Associate Dean
College of Education
University of Oregon
Eugene, OR

Colleen Wieck
Director
Governor's Planning Council on Developmental Disabilities
St. Paul, MN

Michael Winaker
Middletown High School
Middletown, MD

NCEO NATIONAL ADVISORY COMMITTEE

Mike Cohen
National Alliance for Restructuring Education
Washington, DC

Lizanne DeStefano
University of Illinois
Champaign, IL

Ingrid Draper
Detroit Public Schools
Detroit, MI

Wayne Erickson
Minnesota Department of Education
St. Paul, MN

Mary Beth Falard
Massachusetts Department of Education
Quincy, MA

Marge Goldberg
PACER Center
Minneapolis, MN

David Hornbeck
Co-Director
National Alliance for Restructuring Education
Senior Policy Advisor
Business Roundtable
Baltimore, MD

Susan Lehr
Schools Are For Everyone
Tully, NY

Martin Orland
National Education Goals Panel
Washington, DC

Alba Ortiz
Council for Exceptional Children
Reston, VA

Susan Peters
Michigan State University
East Lansing, MI

Ramsay Selden
Council of Chief State School Officers
Washington, DC

Robert Williams
United Cerebral Palsy
Washington, DC
Supporting Documents

The following documents are available for the reader who is interested in additional information on the model and its underlying assumptions, the process through which the current model and indicators were developed, or how states and school districts apply the model to meet their needs.


This paper discusses terminology and assumptions underlying the development of a model of outcomes for children and youth with disabilities. It presents alternative models, identifies unresolved issues, and represents a preliminary statement of models and issues.


This paper is a synthesis of the responses from a large number of individuals who were invited to react to the educational outcomes model and the assumptions, definitions, and unresolved issues presented in Working Paper 1. Patterns in responses to specific issues including support, concerns, suggested refinements, and sample comments are included.


This paper is an extension of Working Paper 1, with revised definitions and assumptions, and an updated model of educational and enabling outcomes for students with disabilities. An initial list of indicators of each outcome domain is included.

Steps and Activities in the Development of a Conceptual Model of Educational Outcomes and Indicators (June, 1993).

This paper summarizes the steps and processes used in developing NCEO's conceptual model, indicators, and sources of data.


This paper details the consensus process used by NCEO and the results of a final consensus meeting on outcomes and indicators at the time of school completion.


This guide provides state and district personnel with information on how to use NCEO's model in developing a set of outcomes and indicators.

Information on these materials can be obtained by calling NCEO Publications (612-626-1530) or by writing:

NCEO Publications
350 Elliott Hall
75 East River Road
Minneapolis, MN 55455
NCEO works in collaboration with
St. Cloud State University and
National Association of State Directors of Special Education

Printed on recycled paper with 10% post-consumer waste