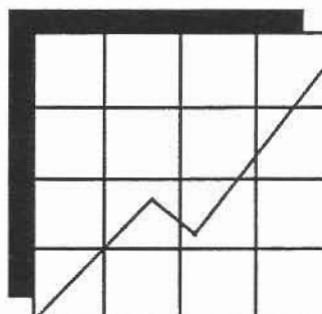


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Synthesis Report 3



Responses to Working Paper 1:

**Conceptual Model of Educational Outcomes
for Children and Youth with Disabilities**

National Center on Educational Outcomes

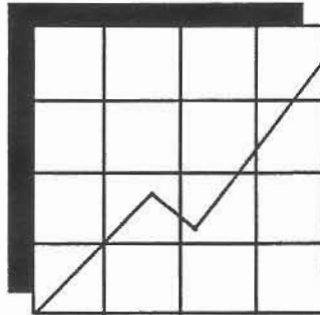
The College of Education
UNIVERSITY OF MINNESOTA

in collaboration with

St. Cloud State University
and

National Association of State Directors of Special Education

Synthesis Report 3



**Responses to Working Paper 1
Conceptual Model of Educational Outcomes
for Children and Youth with Disabilities**

Prepared by:

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

National Center on Educational Outcomes

The College of Education
UNIVERSITY OF MINNESOTA

June, 1992

The National Center on Educational Outcomes (NCEO) was established in October, 1990 to work 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 (H159C00004) with the U.S. Department of Education, Office of Special Education Programs. Opinions or points of view do not necessarily represent those of the U.S. Department of Education or Offices within it.

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A Conceptual Model of Educational Outcomes for Children and Youth with Disabilities:

NCEO Working Paper 1

Overview of Working Paper 1

Working Paper 1, *A Conceptual Model of Educational Outcomes for Children and Youth with Disabilities*, was initially distributed by staff of the National Center on Educational Outcomes in July of 1991 to approximately 175 individuals, requesting their input on the ideas presented therein. At the time of distribution, the paper already reflected the input of more than 25 individuals who had met with Center personnel on one or more occasions to discuss the issues surrounding the development of a model of outcomes and a system of outcome indicators for students with disabilities. Those providing early formative input on the initial draft included NCEO staff and consultants, state directors of special education from Kentucky, Utah, Massachusetts, South Dakota, Minnesota, California and Connecticut, representatives from OSERS, and members of the Mid-South RRC evaluation forum (see attachment 1). This synthesis paper represents the input of over 60 additional respondents.

The conceptual model paper is being revised on the basis of the input that is summarized in this document as well as on the basis of feedback from various groups with a stake or vested interest in the development of a conceptual model of outcomes and indicators who have met with NCEO staff. The revised conceptual model paper will serve as the foundation for the subsequent modification and expansion of a conceptual model and system of indicators, which is one of the major undertakings of the National Center on Educational Outcomes.

An overview of the conceptual model paper (Working Paper 1) is provided here to remind the reader of its structure.

Introduction

Information is provided on the need to examine educational outcomes for students with disabilities. Additional sections discuss the NCEO approach to identifying outcomes.

Definitions of Key Terms

Three key terms (outcomes, indicators, comprehensive system of indicators) are defined, along with the key terms used within the definitions.

Fundamental Assumptions

Seven assumptions that underlie the NCEO approach are identified. One assumption relates to the model of outcomes, three to the outcome indicators, and three to the comprehensive system of indicators.

Preliminary Model of Outcomes

Two alternative models are presented as potential models of outcomes.

Illustrative System of Indicators

A partial listing of possible indicators is provided.

Unresolved Issues

Seven unresolved issues that need to be addressed in conjunction with selecting a model and a system of indicators are listed and briefly discussed.

Summary

This synthesis is based on input from over 60 individuals who were not constrained in any way in giving their responses. Some sent responses to a list of questions, some sent letters, some sent specific comments on the paper itself, and some called in responses. Individuals sometimes focused on different aspects of the paper. Some responded to all or most areas of the working paper; others responded to just one issue or area.

In synthesizing the responses, an attempt was made to best reflect as accurately as possible the range of responses as well as the frequency of responses. In this synthesis we summarize comments related to the Assumptions, Definitions, Models, and Unresolved Issues first, then present some general comments. This document represents a synthesis that includes trends in responses and sample comments from those who addressed particular areas or issues.

The responses contain many statements of positive support for the efforts and current status of NCEO's work to date. The comments reflect both an appreciation of the thoughtfulness and logic reflected in the working paper and of the comprehensive nature and importance of the task that it represents. The responses also contain some very thoughtful and detailed suggestions for revisions that reflect the time and commitment devoted to this process by readers of NCEO's working paper. NCEO staff gratefully acknowledge the input of the individuals who are listed on the following pages.

Individuals Providing Input (Listed alphabetically)

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Introduction

The input on "Working Paper 1" (NCEO, July, 1991) that is synthesized in this report is organized around the broad areas of underlying assumptions, NCEO's conceptual model and indicators, unresolved issues, and general comments/concerns. Each of these sections includes a synthesis of comments that reflect support for a particular position, concerns, suggested alternatives or refinements and sample comments. The comments that are included are presented as representative of the range of comments that were received and are not reported as quotations directly attributable to a particular respondent. While there is value in acknowledging the source of particular perspectives regarding an issue, it was beyond the scope of this report to obtain permission from the respondents to attribute comments to them. In September of 1992, NCEO's revised version of the working paper ("Working Paper 2"), based on feedback from individuals, agencies and work groups as well as on the comments summarized in this report, will be available.

Assumptions. Comments related to the specific assumptions underlying NCEO's efforts to develop a conceptual model of educational outcomes are summarized first. Seven assumptions underlying the NCEO approach were identified in "Working Paper 1." One assumption was about the model of outcomes, three were about the indicators used to measure outcomes and three about the comprehensive system of indicators. A small number of individuals commented on the assumptions in general; more reacted to all or most of the specific assumptions, providing critique and comments on particular issues of concern.

Conceptual Model and Indicators. The section on responses to conceptual models and indicators summarizes preferences for the two outcomes models that were proposed in "Working Paper 1." In addition to reacting to the models as presented, several individuals proposed new models or suggested components of models that could be incorporated into one of the models proposed by NCEO. Of the areas and issues to which readers were to respond, the largest number addressed the issue about the outcomes model(s). Two thirds of those providing feedback to the working paper commented on the outcome models.

Unresolved Issues. The next section summarizes specific responses to unresolved issues that were raised in the working paper. The unresolved issues that were raised included issues about on *intended versus unintended* outcomes, *direct versus indirect* outcomes, using the *same versus different* indicators for those with and without disabilities, using *category specific versus noncategorical* indicators, differentiating by *severity of disability* or by *developmental level* and focusing on *system level versus individual level* indicators. In general, those who responded to one issue addressed each of the seven issues that were raised. Half of those who responded to the working paper responded to the unresolved issues section.

General Comments. Comments and concerns of a more general nature are summarized in the final section of this report. Many respondents addressed the question of whether and how consensus could be achieved in response to a specific question regarding the consensus issue. Many more raised issues and general concerns of interest to them. These general responses, to the extent that they clustered around themes, are synthesized under key areas that include: the overall purpose of the conceptual model and system of indicators, the broader context within which outcomes are nested, the goals of education for those with and without disabilities, the tone and terminology used in the paper and suggestions to address what readers felt were "missing pieces."

Fundamental Assumptions

The fundamental assumptions articulate NCEO's perspective on special education as a capacity-building resource for general education and a support to students and families. Special education is viewed as necessary to prevent impairments from becoming disabilities and for the purpose of compensating for disabilities. While schools today include students with a variety of disabilities, policy makers identifying goals and assessing outcomes for students in America's public schools often fail to consider students with disabilities. The fundamental assumptions or premises that guide NCEO's activities and to which readers needed to respond relate either to the model of outcomes, to the specific outcomes indicators or to the comprehensive system of indicators.

Briefly, the assumptions state that

- the model of outcomes should be comprehensive and apply to *all* students,
- the indicators of outcomes for students with and without disabilities should be related,
- the indicators should respect the diverse characteristics of the school population,
- indicator data may need to be included that is less than optimal by research standards,
- a system of indicators should provide data for state and national policy decisions,
- a system of indicators may include valued indicators even if functional relationships have not been established (as desired) between outcomes indicators and educational inputs, contexts and processes
- a system of indicators needs to be flexible and responsive to change.

Testimony on Fundamental Assumptions

Number Responding with General Comments: 17

Support for Fundamental Assumptions

Of the 17 individuals who responded with general comments concerning the assumptions overall, three quarters of them stated that they felt the assumptions were appropriate and were an important part of the outcomes paper and process, while one suggested either expanding on them or deleting them.

Concerns Regarding General Assumptions

The expressed concerns included the following:

- Making sure the assumptions are inclusive enough such that at a minimum they meet the standards for goal achievement covered in various curriculum guidelines.
- Getting educators to make the necessary decisions to make the assumptions (simultaneously) work.
- Determining how the structures in the models that specify outcome areas materialize in empirical data.

Suggested Alternatives or Refinements

Two of the suggested alternatives were related to the characteristics of students:

- Recognizing that the differing goals students bring to school may affect the "interactions" under outcomes. Acknowledge that the assumption that student goals do not differ is not so. Take motivation and willingness to accept instruction into account.
- Addressing the heterogeneity of the school population and the spillover of effects from other environments that are reflected in educational outcomes. Avoid blaming schools for things they cannot be blamed for.

Another refinement related to getting information in addition to opinions of stakeholders:

- Examining whether a factor analysis of measurements from various outcome areas will produce factor structures that correspond with the conceptual distinctions in the models in order to make a final decision regarding issues.

Sample Comments and Quotations

"That the assumptions on which the models rest are so explicitly pointed out is of especially great merit since they illuminate the value positions underlying the models."

"Making explicit your assumptions is an indicator of the thoughtfulness with which you are going about your work and I applaud you for being so clear about them."

"I thought highly of the fundamental assumptions. Very well done, particularly the view of special education as capacity building."

Patterns in Responses About Outcomes Assumptions

Assumption 1: A Model of outcomes is needed for *all* students, and at the broadest level, should apply to all students regardless of the characteristics of individuals.

Number Responding to Assumption 1: 19

Support

Ten respondents (of the 19 who commented on this assumption) explicitly stated that they supported Assumption 1, that the indicators for students with disabilities should be the same as for those who do not have disabilities, as being sound and appropriate. Supporters of this assumption thought it was consistent with integration ideology, stressing the similarity between students with and without disabilities and emphasizing the belief that *all* students can learn. Several respondents pointed out that at the *broadest* level, persons with disabilities and persons not seen as having disabilities share common goals and outcomes.

Concerns

Concerns focused on the inclusiveness of using the term *all* students and its implications for specific populations of students particularly those with severe disabilities such as those who have blindness, autism or are permanently unconscious. Concerns in this area included:

- Stressing similarity makes one blind to the problems and special needs of students with disabilities. Indicators must attend to the "special" outcomes, such as mobility for those with blindness, communication skills for those who have hearing impairments.
- Examining how realistic it is to relate to the abilities and needs of all populations, given the diversity within the special education population.
- Considering the confusion created by referring to all students, particularly since low SES, disabilities and negative educational outcomes are highly associated with students in special education.
- Attending to the implications this assumption has for the models. Concern with moving to a generic system that has limited relevance to the very audience we are trying to reach (i.e., students with disabilities). Some outcomes, for example, may be unique to subsets of the population.

Other related concerns included:

- Considering the value of obtaining good outcome measurement on different subgroups as a valuable tool in monitoring equity in education as well as effectiveness.
- Linking the model (if indeed it does address *all* students) to existing indicator systems and data bases and other efforts to define and collect data on these variables.

At least one person suggested that the paper should make it explicit that Assumption 1 reflects "special education thinking" that is not necessarily widely held.

Suggested Alternatives or Refinements

Two different approaches to dealing with the issue of having the same outcomes for *all* students were represented. One approach was to think of outcomes as the same but with different indicators (measures) according to student characteristics. Another was to think of outcomes along a continuum of expectations where the goal is to move everyone forward from their starting point. Specific recommendations included:

- Adding an additional assumption that relates outcomes for all students to societal needs for an effective and productive citizenry.
- Suggesting that an outcome is relevant if its attainment would increase opportunities for participating and functioning in various environments. *An outcome still applies even if a disability precludes one from ever attaining the outcome or attempting performance on an indicator of that outcome.*

Sample Comments

"Please do not have a different set of outcomes for students with disabilities than for others; this would set the whole field back. It may be necessary to work toward the outcomes in a different way for some persons with disabilities, but the basic outcomes are not different."

"..exclusions (of special education students from requirements or demands for higher education standards) will consign special education students to the low skill/low pay types of jobs. Our

benevolence will ultimately hurt the students we are trying to protect! The issue is to set appropriately high expectations for each student. Most of the current standards projects...do not even mention special education students anywhere in their concern that all students achieve higher standards."

"I share your first assumption that a single model of outcomes is possible and preferred, rather than assuming that kids with disabilities and their educational programs need to be assessed in some separate way. Different outcomes may have different emphases for different kids. It may also be true that we emphasize a particular outcome just as much for kids with disabilities, but that the categories or measurement for it are expanded."

"You could think of a single continuum of expectations, with "adaptive testing" depending where on the continuum students are performing. We can define the domains on which we want students to advance for all children, but provide depth of measurement at the points in students' proximal zones of development."

Patterns in Testimony on Outcome Indicators Assumptions 2, 3, and 4

Assumption 2: Indicators of outcomes for students receiving special education services should be related, conceptually and statistically, to those identified for students without disabilities.

Assumption 3: Indicators should be unbiased with respect to gender, culture, race, and other characteristics of the diversity of students in today's school population.

Assumption 4: While indicators should meet research standards, those that do not could still be used.

Number Responding with Comments on Outcome Indicators: 18

Support

General support regarding the assumptions underlying indicators used to measure outcomes was expressed in terms of their relatedness to the assumptions underlying the comprehensive system of indicators and the broad approach taken to indicators making outcome areas inclusive for all students. Very few of the 18 respondents who commented on this set of assumptions provided statements of support but many more raised concerns regarding the need for greater clarification. Of the three assumptions, assumption 3 regarding unbiased indicators, produced more than one supportive comment, with three respondents stressing its appropriateness.

Concerns

Some general concerns about these assumptions were raised, but for the most part, respondents commented on specific assumptions. The general comments are included first, followed by concerns raised for each of the three assumptions. General concerns included:

- Needing to be aware of how the distribution of outcomes would look when schools *are* serving all children well. This produces additional assumptions about what will happen to population variance on given measures when this is the case.
- Defining the territory of NCEO's project to avoid and getting off target and focusing on factors thought to be dispositional of desired outcomes, rather than the outcomes themselves.
- Recognizing there is nonequivalence of information and nonequivalence of outcomes when individuals need to attain compensatory skills to reach or demonstrate an outcome.

Regarding Assumption 2:

A few concerns and suggestions were raised about Assumption 2, which suggests the need for conceptual and statistical relationships between indicators of outcomes for students with and without disabilities. These included:

- Considering whether Assumption 2 is really the same or different from Assumption 1 (i.e., a model of outcomes applies to *all* students). Indicators should be the same if the model applies to all students.
- Viewing this assumption as inappropriate if the intent of the assumption is to establish normative parameters to the indicators.
- Seeing the implications of this assumption as inconsistent with previous content in the Working Paper that views special and regular education as part of the same system. This assumption may be misinterpreted as viewing separate systems as okay.

Regarding Assumption 3:

The comments about Assumption 3, the use of indicators that are unbiased and reflect the diversity of students in today's schools, ranged from "who can argue with unbiased?" and the need to clearly specify what "unbiased" means to a concern that given the inequities in our educational system, having "unbiased indicators" may be overstating our capabilities. Comments included:

- Acknowledging that any differences in outcomes for different subpopulations will raise the issue that measures are biased.
- Recognizing that it is good to make an effort to fairly represent the accomplishments of a diverse population coupled with a need to clearly specify what is meant by "unbiased" and a concern as to whether it can be done.

Regarding Assumption 4:

Of the comments that were received about the assumptions underlying the indicators of educational outcomes, most were about Assumption 4, that indicators did not need to meet research standards. This assumption received the most comments (n=8), of those relating to

indicators, in terms of a need for greater clarity of definition such as how research standards relate to validity and reliability. More than one reader suggested that this assumption might raise more problems than it solves, by opening to door to unreliable and invalid measures. Comments included:

- Recognizing the possibility of misconstruing the term "research standards" in such a way that the minimum need for reliable and valid measures and procedures and outcomes is ignored.
- Acknowledging the limitations of existing systems such that much would need to be done to construct a system of indicators that would meet research standards. Few existing data systems assure accuracy and consistency, giving little choice but to use data with accompanying descriptions of shortcomings.
- Recognizing that an unclear definition of "research standards," while the intention underlying the assumption is valid, will result in both false positives and false negatives. Use of indicators that do not meet research standards forces a carefully accounting for the whys and why nots.

Suggested Alternatives or Refinements

The suggestions focused primarily on the need to more clearly define terms, but provided little in terms of actually suggesting how to do so. Terms that needed more clarity, according to respondents included "unbiased" and "research standards."

Sample Comments

"The paper takes up several important principles concerning outcome indicators for special education."

"NCEO should inform not only special education but also general education indicators. It is not useful or cost effective to use indicators that only pick up half of the population."

Patterns in Responses to a Comprehensive System of Indicators Assumptions 5, 6 & 7

Assumption 5: A comprehensive system of indicators should provide data needed to make policy decisions at the state and national levels.

Assumption 6: A comprehensive system of indicators should to the maximum extent possible be based on demonstrated functional relationships between outcome indicators and indicators of educational inputs, contextual characteristics, and processes; however, valued indicators may be included even if functional relationships have not been established.

Assumption 7: A comprehensive system of indicators should be flexible, dynamic and responsive to review and criticism, changing to meet identified needs and future developments in the measurement of inputs, contexts, processes, and outcomes.

Number Responding to the Comprehensive System of Indicators: 20

Support

Respondents shared several positive comments about these indicators, spread across each of the three assumptions that relate to developing a comprehensive system of indicators. Comments of support ranged from "nicely stated" to statements of support that had a qualifier ("yes, but") attached. Those concerns are summarized in the following section.

Concerns

Concerns were addressed primarily to specific assumptions. One suggestion was raised concerning making Assumption 5, having indicators that provide data for state and national policy decisions, and Assumption 6, relating to using indicators that are/are not based on functional relationships between inputs, contexts and processes, simpler and less ambiguous. Specific concerns are included in the following sections.

Regarding Assumption 5

The most frequent suggestion regarding Assumption 5, that a comprehensive system of indicators should provide data needed to make policy decisions at the state and national levels, was to include the local level as well. In fact, of all the suggested refinements and recommendations that were suggested by readers in this area, few did not specifically comment on the importance of indicators at the local level. Comments that related specifically to Assumption 5 included:

- Recognizing that the usefulness of an indicator would seem to be dictated by the relationship that can be established between outcome and intervention.
- Including the local school and classroom levels as well as state and national levels, stressing decisions at the school level as most important.

Regarding Assumption 6

Some readers emphasized the part of this assumption that acknowledges the importance of establishing functional relationships while others commented about the part of this assumption that acknowledges the reality that these relationships often do not exist. Comments focused on the need to be vigilant at trying to identify relationships as well as how limiting it would be to design a system that needed to wait for demonstrated relationships. Readers suggested:

- Following a careful review and determination that indicators make sense if indicators are included for which functional relationships have not been established.
- Considering whether using valued indicators when no functional relationship to education can be established is inconsistent with NCEO's definition of "outcome."

- Being cautious about too great a focus on process-type objectives and inputs if they shift the focus away from outcomes.

Regarding Assumption 7

While there was support for a "flexible, dynamic" comprehensive system of indicators that reflects a continuous rather than a single event process, there was also concern regarding the need to balance flexibility with stability in order to facilitate comparisons over time. For one reader, "flexible" was interpreted as a means by which to emphasize the potential adaptability of the system to involve local input. Comments included:

- Acknowledging the tension of trying to find a balance between flexibility and stability.
- Recognizing that ample stability is essential for cross-time comparisons to measure improvement; changing the data collected each year is not useful.
- Being aware of the need to continue to release information as things evolve and change.

Suggested Alternatives or Refinements

Several respondents raised the issue of including local indicators as well as state and national indicators. The concerns about that issue as well as about other assumptions regarding a comprehensive system of indicators resulted in the following suggestions:

- Making an effort to suggest how SEAs can facilitate LEA efforts and vice versa in order to inform policy development at the local level and to make the comprehensive system of indicators functional and useful on a local level.
- Engaging local educators who are involved in the data collection this system will require by providing meaningful feedback on data collected and reported at the local as well as at state and national levels.
- Adding to Assumption 7 a statement that recognizes a need to make a commitment to stick with some data elements that remain the *same* since data collection that changes year after year is not useful

Sample Comments

Regarding Assumption 5: "All outcome domains in (the) Model have application at the local district and classroom level. I do not note an indicator that district/building level policy/decision makers would not find interesting, relevant, and helpful in evaluating and improving educational experiences for children, youth and adults with disabilities."

Regarding Assumption 6: "I tend to bend over backward to be cautious about process-type objectives and inputs, because I feel they have led us away from facing outcomes. For too long we have been counting noses, e.g., are they in a resource room and regular class part-time?, rather than outcomes--what did they learn? How do they feel about themselves. We have soothed ourselves with data that suggested something was going on, rather than looking at the longer term results."

Regarding Assumption 6: "I am glad to see variables included even if they don't correlate with outcomes so it more fully describes the educational context and is less likely to miss secondary relationships. The correlations can be very misleading. Things difficult to measure, such as parental interest and involvement are often omitted from indicator systems."

Regarding Assumption 7: "Changing what gets measured from year to year means that improvements over time can not be documented. I'm not sure how you balance dynamism/flexibility with stability/comparability, but acknowledge the tension between them."

Testimony on Outcomes Model: Model 1 vs. Model 2

Number Responding with Testimony on Models: 40

Support

Several respondents suggested both models were appropriate and did not state a preference for one model over the other, while two respondents suggested a third alternative. Of the 17 who expressed a preference, approximately twice as many preferred Model 2 (n=11) over Model 1 (n=6). The following comments and concerns are separated by responses to each of those two Models that are presented in figures 1 and 2.

General Comments on Models 1 or 2

There were many reactions to the two Conceptual Models of Outcomes and Indicators that were proposed in the Working Paper. In addition to the preferences for either of the two models or for entirely different conceptualizations altogether, some readers suggested a need for clarification of components within the models. Some asked for clarification of components of particular models, such as the difference between presence and participation, between accomplishment and contribution, others suggested that greater emphasis be given to certain components (e.g., knowledge, skills, attitudes) that are direct outcomes, and that indirect outcomes such as participation, presence, contribution and satisfaction grow out of these.

- Not sure of the differences between the two, but liked the broad outline of input-process-output model as the basis.
- Both models include all of the outcomes that should be included.

Support

Model 1

- It is easier to deal with the outcome areas mentioned separately in model 1 than it is to view them as multiple dimensions of accomplishments as in model 2.
- Model 1 is presented in clear, commonly understood language that lends itself to implementation and monitoring.
- Model 1 makes sense and has an economy and elegance that is powerful.

Model 2

- Model 2 is simpler and easier to understand and operationalize.
- Model 2 is useful in placing the 6 national goals within the larger circle of aspirations we have for the educational system.

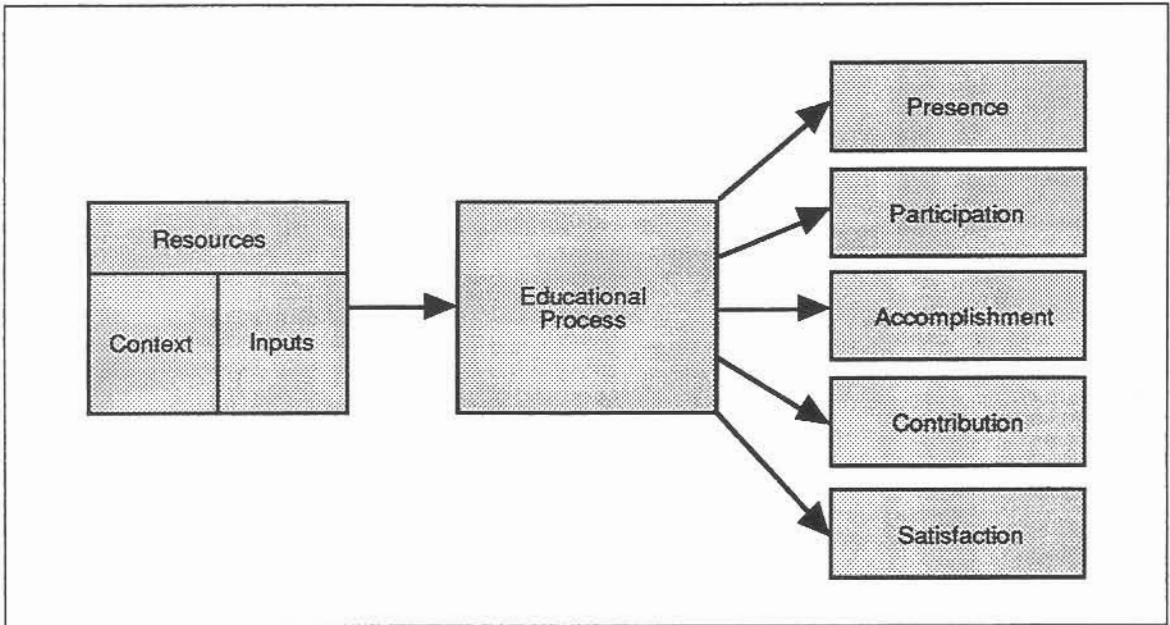


Figure 1. Components of Educational Model 1

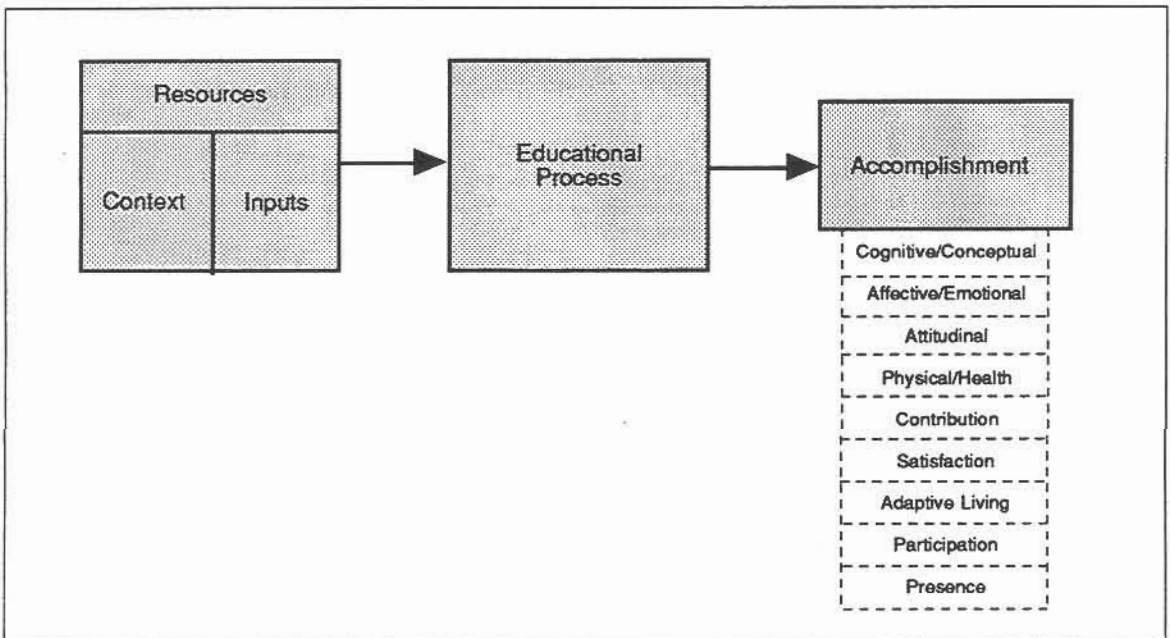


Figure 2. Components of Educational Model 2

- Model 2 presents the most understandable model to the field and is in higher congruence with the America 2000 initiative. The outcomes domains are simple and direct but comprehensive for the purposes stated.
- Model 2 appears to have an increased emphasis on what the public considers as more important outcomes.
- Prefer the intent of Model 2 in that outcomes are viewed as accomplishments and that presence and participation are included.
- The broad strokes (presence, participation, cognitive, attitude) are generally okay.
- Model 2 relates better to the issue of avoiding general education policy with only limited recognition of special education students.

Concerns

General (Model 1 or 2)

The differences between the models were not clear to some respondents. One issue seemed to be the possible perception that Model 1 suggests equal value for all outcomes. This issue was addressed from both points of view, with one respondent suggesting that Model 1 was less desirable because of the suggestion of equal value for all outcomes. Others suggested the importance to boards and state policy makers of considering them as equally important and acknowledged that although some may perceive the implication of "equal importance" in the model by listing separate outcome areas it did not necessarily carry that connotation.

- Concern was raised as to whether the consideration in Model 1 of accomplishments as one outcome as contrasted with Model 2's approach of considering outcomes in nine categories to be sub-categories of accomplishments is a semantic/organizational difference or one that may make a real difference. All items under accomplishments may confuse the other critical educational outcomes with student accomplishments
- Neither addresses student characteristics and family make-up, both of which greatly impact outcomes. There is a need to recognize the influence of support for learning in the family environment and to cover unique skills that are a focus for students with disabilities.
- Need to address social issues that intertwine with and have an impact on educational outcomes.
- Both models are missing the links to inputs; it is a circular policy process.
- Neither makes a specific reference to *motivation* for life long learning as an educational goal.

Other general concerns regarding the models related to more clearly defining the differences in terminology including the difference between presence and participation, and accomplishment and contribution. Consideration of these may need to be made in terms of a continuum, not a static dimension. Some respondents supported inclusion of presence and participation as being associated with student outcomes while others acknowledged their role but questioned their association with outcomes.

Several respondents commented on components included in the Model of Education that was presented as Figure 1 in the working paper, including one who thought it was the (NCEO) model.

General suggestions included:

- Moving staff development under organizational resources or under personnel, not school programs.
- Focusing on resources and processes within and across school, community, and home settings.
- Recognizing the usefulness in differentiating between curriculum (what is planned and available) and instruction (who actually takes courses and what is actually taught).
- Adding information on the relationships/interrelationships among elements in the model. Outcomes can relate to each other in important ways at any single point.
- Considering the influence that child characteristics have on what the school does with a student that go beyond influencing processes to influencing outcomes.

Model 1

- Meaningfulness in participation must be considered rather than the number of community events.
- Need to clarify that presence includes "access" and use *engagement* of the social and academic environment as an indicator of participation.
- Regarding participation, the model needs to address the extent to which all students participate, not just special education students. Model 1 raises concerns about the focus on academic areas only.
- Mixing outcomes with processes is a concern.
- Implies a parallelism between outcome domains that does not exist, that is, implies equal value of presenced participation with accomplishments for example.

Model 2

- Listing "contribution" as a form of accomplishment (as a subordinate, not coordinate relationship) is confusing.
- Stretches the concept of accomplishment beyond the point of usefulness to make it accommodate such domains as attitudes, presence etc.
- Lacks hierarchy and has too many elements, making it more complicated and difficult to specify.
- Model 2 is too generic to be helpful to special educators and too simplistic to communicate to regular educators.

Suggested Alternatives or Refinements.

Several respondents suggested refinements of a "Conceptual Model of Outcome Areas, Domains, Subdomains and Indicators" that was presented as part of Model 1 in working paper 1 (see figure 3). The concerns centered primarily around the need for subdomains under the areas that are included, or the need for combining subdomains such as writing, literacy and language into "communication." Another respondent suggested eliminating the figure since it doesn't add to the working paper and oversimplifies the complex interactions among outcome domains and outcome areas.

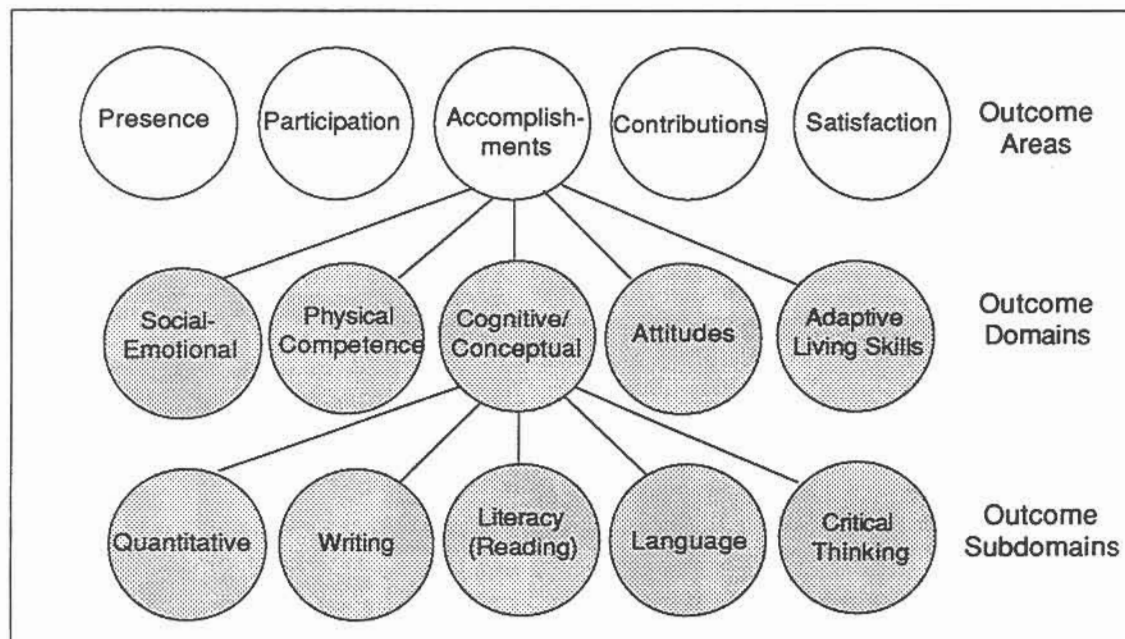


Figure 3. Conceptual Model of Outcome Areas, Domains, Subdomains, and Indicators

A number of the suggestions were linked to post school outcomes, with respondents suggesting that it may be important to make a distinction between outcomes for which the educational system can and cannot be held accountable and that it may be beneficial to start with post school expectations and work back to improve schooling. Still others suggested specific outcome areas that should be included in the model.

Specific suggestions included:

- Focusing more heavily on knowledge, skills and attitudes and treat other things as functionally related to these direct outcomes. Other things are *enhanced* by the knowledge, skills and attitudes that are the focus of the model.
- Examining the inputs, processes and outcomes as well as contextual variables and addressing the bi-directional nature of the relationships among various elements of the model. The process of learning may be as important as the outcome for some students with special needs.
- Reexamining assumptions and procedures in offering students with learning disabilities an education in light of the high drop out and non-completion rates and poor post-secondary involvement.

- Giving more emphasis to measurements of self-concept, social interactions, role-modeling, feelings of isolation. Opportunities for success are perceived as critical to higher rates of post-secondary education and employment for students with severe physical disabilities.
- Recognizing that some things important for students with disabilities might not be important for those without disabilities (presence, participation, unique disability specific outcomes). Considering the unique access and equity/inclusion issues.
- Adding motivation for life long learning rather than having to infer it from presence and participation. The model should reflect high personal expectations for growth and development.
- Considering three general outcomes critical with respect to schooling that are essential for all but can be achieved along a continuum from minimally to very high levels. These include the skills, knowledge and attributes for (1) language literacy, (2) constructive social behavior and (3) social dependence.
- Using an alternative model that includes adding critical alternative outcomes for children and youth with disabilities such as mobility skills, signing and use of adaptive technology.

Sample Comments

"Add a 'how to' emphasis that shows people how to examine their own local situations, primarily at a school level."

"Look first at desired and valued post-school and system outcomes to establish the framework for culminating outcomes."

"Start all outcomes with post-school expectations and work back to improve schooling."

"Consider that the context and ideas about resources will be changing (school effectiveness, instructional effectiveness, families, communities, policies). It is in this context that we should lay out the condition of schools, of home, etc. that seem important and design rating systems for the several components and their interactions."

"Right or wrong, general education looks almost exclusively at accomplishments. A model, with categories such as presence and participation, needs to look less special in order to be palatable to general educators where such goals are often assumed but not reiterated."

Proposed Model 3

Based on preliminary responses to Models 1 and 2 a third alternative was presented as Model 3 (see figure 4) to NCEO's advisory committee in October, 1991. Model 3 (which was not included in NCEO's Working Paper 1) and very limited feedback regarding this model is presented here.

Support

- Model 3 is better from a developmental perspective.
- "Enabling outcomes" are perfect for measuring the contributions of special education.

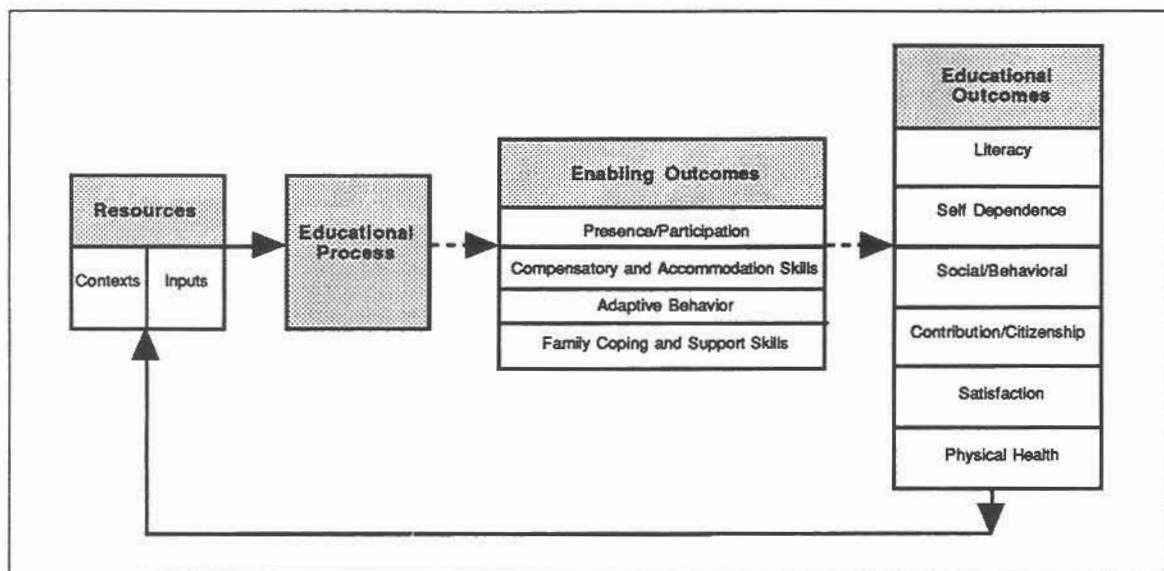


Figure 4. Components of Educational Model 3

General Testimony on Issues

Respondents were asked to address seven issues. A few individuals provided general comments on the issues. These comments supported the need to consider all of the issues but did not assume that all needed to be resolved prior to addressing indicators. One suggestion was made to "lead off" with these issues and focus efforts at developing a process that could be used by schools, LEAs and SEAs attempting to identify process and outcome quality indicators.

Issue 1: Intended vs. Unintended Outcomes

Number Responding to this Issue: 28

Support

Of those who commented on the issue of intended versus unintended outcomes, the responses were split as to whether to focus on intended outcomes or on both intended and unintended outcomes. Of the 10 respondents who favored a focus on intended outcomes, more than half of them emphasized a major or primary focus on intended outcomes, but added that unintended outcomes are important and may warrant a secondary or later focus. Half of those who agreed that unintended outcomes were important commented that both were critical, while the other half strongly emphasized that unintended outcomes were critical. Responses that favored each of these positions are included below:

Intended Outcomes

- The major focus (first priority) should be on the intended outcomes.
- Target intended outcomes. Be alert to unintended outcomes, but don't expend major energy developing systems that define them or collect data about them.
- Inclination is to favor the collection of information on the intended outcomes as a primary objective, while pursuing the collection of information on unintended outcomes on a more limited basis.

- Intended outcomes should be regularly monitored with data periodically collected to identify unintended outcomes.

Unintended Outcomes

- Strong belief that unintended outcomes should be addressed.
- Unintended outcomes, such as the emotional impact of increasing standards, must be a part of the information collecting process.
- Unintended outcomes are essential to evaluate, making the issue of subdomains particularly important.

Intended and Unintended Outcomes

- Like the notion of both intended and unintended outcomes.
- Initial reaction is that information on both need to be collected. Otherwise the risk is of only looking for what we hope/intend to find and miss significant data.
- Public pressure seems to voice a desire to invest in interventions and then know the results. Concentration only on intended outcomes would appear to be manipulative or dishonest.

Concerns

The concerns that were raised included comments on recognizing that unintended outcomes can be negative as well as positive and the difficulty in identifying unintended outcomes and in linking unintended outcomes to the educational process. None of the concerns were about intended outcomes. One respondent suggested it is far too early in the process to make a decision on this issue.

- Unintended outcomes can be either positive or negative but need to be recognized. A process to improve reading may improve attendance or self esteem, for example. Finding things you are not looking for (i.e., unintended) particularly if the effects are negative would be difficult.
- Unintended outcomes, such as the emotional impact of increasing standards, must be a part of the information collecting process. Caution if increasing standards are at the expense of emotional well-being.
- There are so many unintended outcomes of the educational processes that identifying them and drawing cause-and-effect conclusions would be a very difficult task.
- It is hard to link intended outcomes to the input, process and context components. How would unintended outcomes be linked to these?
- There is some difficulty with the definition of intended and unintended.
- Unintended outcomes would be difficult to identify and care must be taken not to assign causality.
- Unintended outcomes would serve little purpose if comparison of data on outcome

Suggested Alternatives or Refinements

- Once various unintended outcomes are conceptualized and defined, indicators to be included might be decided from an estimation of social importance of the outcome and the functional relationship the outcomes show to school variables.
- Unintended outcomes that are consequently identified can be listed as "cautions" and be incorporated into the model at a later date or serve to illuminate the need for open-ended data gathering instrumentation.
- While difficult to include unintended outcomes *a priori* it would be nice to have a model and data collection procedures that are sensitive to unintended outcomes that occur.
- We need to measure in both directions. Positive vs. negative effects is related to the issue of intended vs. unintended. The values business drives much of current practice.
- If an outcome is suspected of being negative, a hypothesis should be developed to determine whether indeed there is a causal relationship.

Sample Comments

"Maintaining some degree of focus on unintended outcomes may lead to a more accurate reflection on analyses stemming from the intended outcomes."

"Initial reaction is that information on both need to be collected. Otherwise the risk is of only looking for what we hope/intend to find and miss significant data that might indicate either the success of a given approach or the need to change direction."

"There are so many external influences on effects of schooling. Schools cannot be blamed for all."

Issue 2: Direct vs. Indirect Outcomes

Number Responding to this Issue: 28

Support

Over half of those who commented on this issue were supportive of collecting indirect outcome data. Only four of those who addressed this issue stressed that only direct outcomes should be considered. Several specified the importance of indirect outcomes for students with disabilities, in particular and listed several indirect outcomes such as unemployment, independent living and post secondary educational opportunities. A few suggested that the focus is a matter of priorities and that regularly monitoring direct outcomes while periodically collecting data to identify indirect outcomes reflects an important emphasis.

Direct Outcomes

- Direct outcomes should be the major focus.
- The primary focus should be on direct outcomes. Direct outcomes, however, should be related to indirect outcomes.

Indirect Outcomes

- Information about indirect outcomes is needed to facilitate our understanding of the effects of integration on academic and social learning.
- Indirect outcomes may in the long run be the most important. Having longer-term outcomes, while difficult to ascribe to programs that occurred earlier, are very important.
- Skill and concept building will often lead to transfer and other developmental opportunities that were unforeseen. Negative aspects need to be monitored as well.

Direct and Indirect Outcomes

- Need to address both direct and indirect outcomes, tracing both interim outcomes and distal outcomes. The core effort must focus on the culminating outcomes for *all* students.
- Particularly for students with disabilities, it is important to consider both direct and indirect outcomes.

Concerns

Several raised concerns about their disagreement with the distinction made between direct and indirect outcomes presented in the working paper. One respondent suggested that the best that can be hoped for is to account for immediate post-school outcomes including links to adult service systems.

- Disagree with the distinction made between direct and indirect. Schools should be responsible for post school events (these are not indirect) but are shared responsibilities of the school with families and society.
- Whether an outcome is direct or indirect may be a false dichotomy, depending on the goals of education.
- The terminology may hinder discussion of the issue. An indirect outcome may be the synthesis and application of the direct outcomes.
- Employment as an example of "indirect" is unfortunate. Happiness or job satisfaction might be better examples.
- When direct outcomes can be measured, spending scarce resources on indirect outcomes may not be warranted.

Suggested Alternatives or Refinements

- Indirect outcomes that should be included should be based on an estimation of their social importance and the functional relationship to other school variables.
- Include outcomes that address whether students are prepared to enter the workforce or for adult life.
- Change the label of "indirect" to "impact" to avoid some unfortunate connotations.

- Perhaps the issue is about the relative location of the outcome on a continuum ranging from rote replication of a skill taught to resolution of a new problem. This issue parallels the current discussions on "authentic testing".

Sample Comments

"The goal of education is to prepare kids for life. Many of those values are indirect outcomes, but we need to recognize them and the impact they have upon life."

"I think schools should be responsible for post school events (employment, attending postsecondary education, experiencing a reasonable quality of life). Agree these responsibilities are shared with others (student, family, society) but this does not release the schools from responsibility nor should these outcomes be considered 'indirect.'

"Because there is so much controversy now on what the goals of education are, we must look at both direct and indirect goals."

"It is the long-term consequences of the direct outcomes which will tell us if the special education system is successful or not. If this is an accountability system, it may be important to avoid this; however, since I assume that this is not the purpose, then such links between direct and indirect outcomes, even if tenuous at best, can be important."

"I see post-school happenings as very relevant and I fear that viewing them as indirect outcomes may lead educators away from the real world."

"I disagree with, but recognize the national climate that considers post-school outcomes such as employment to reflect the results of schooling. The times are such that we have no choice but to report post school outcomes."

Issue 3: Same vs. Different Indicators

Number Responding to this Issue: 26

Support

Almost half of those responding to this issue stated the need for the same indicators, with some of them expressing a qualification that if the same indicators are used, a different emphasis may be necessary for some students with disabilities. Another 20 percent stressed the need for having both same and different indicators, with the result that close to seventy percent of those responding to this issue favored including indicators that were the same for those with and without disabilities.

Same Indicators

- If we intend students in special education to be part of the same world as regular students, indicators would be the same.
- Different indicators leave out students with special needs.

Different Indicators

- General outcomes must be the same, but with different indicators.

- You will have some different indicators for special education, if your model encompasses conditions or predispositional factors.
- Progress indicators are different because students don't start at the same place or with the same condition.

Same and Different Indicators

- To the greatest extent possible, we need the same indicators, but for those with the most severe disabilities there may need to be 'screening' questions that shift the emphasis.
- Having the same indicators is reasonable and a good starting point. Both similar and different indicators will be necessary to assess the performance of certain groups of students with disabilities.
- There is a core of culminating and post-school outcomes for which all of education must be accountable, but at the same time, special education students are different by definition.
- Same and different. Outcome measures can be expanded if the specific experiences for students with disabilities indicate a relevance.

Concerns

Concerns reflected both positions regarding the possible impact of having the same indicators and the impact of having different indicators for students with disabilities. With the ramifications and strategies for developing outcomes that are either a replacement for, an alternative to, or a supplement to general education standards being different, one respondent suggested it was essential to be clear about the purpose from the outset.

- Separate indicators will continue to diffuse the issues. The same indicators are okay even though special education students will do less well.
- Different indicators will serve to promote special education as a separate and unequal educational system.
- A separate assessment system only works to reinforce the separateness and differences persons with disabilities, professionals and families are trying to diminish.
- The practice of using the same indicators for those with severe disabilities as for those in regular education seems very questionable. The current assessment practices in regular education that are inadequate to measure student progress of those with special needs has a negative emotional impact and is often unfair.
- The same categories can be used for all *if* measurement is expanded to include the amount and type of cost and supports needed by people with disabilities.
- Probably need a bit of both. Students with disabilities are different and they learn differently but the concern is their need to live in the same society.

Suggested Alternatives or Refinements

Several of the suggestions focused on how to accommodate the unique needs and characteristics of students with severe disabilities, primarily by adapting the system of indicators even if they are initially held accountable for the same indicators as students in regular education.

- Keep general outcomes the same, but use different indicators that allow for different ways for people to demonstrate the accomplishments.
- Keep indicators the same, but use unique assessment systems and data requirements if necessary.
- Keep indicators the same for those with mild disabilities but recognize that different kinds of data need to be gathered on students with severe disabilities.
- Expand the definitions, but keep the same indicators. Employment outcomes could include supported and day activity employment as well as competitive employment, for example.
- Adopt a principle of adaptive measurement in order to ask different questions of different individuals, but at the end have a comparable score. Attempt to measure the same knowledge, skill and attitude areas for all students, but use different questions or items to reflect a student's status in regular or special education.
- Shift from the notion of same vs. different to conceptualizing overlapping information or a central band of information to be collected with *additional* information to be collected for students at the extremes (with severe disabilities or gifted and talented).
- If a student will not pass any of the same indicators, go to a different set of in-depth questions, particularly for those with severe disabilities.

Sample Comments

"I believe the concept of *different* indicators has the unfortunate effect mentioned as a rationale for establishing your Center. The reform movement has left students with special needs out because they believe the indicators should be different."

"Using the same indicators will encourage us to maintain appropriate expectations for all of our students. However, the emphasis or approach may vary."

"I strongly support the partnership between special and general education. However, I feel that although general education has presented some outcomes for all students (economically and politically driven), we still require a special set of indicators for the severely and multiply handicapped. The set of indicators will compliment the general set."

"We have to know the extent to which our kids are achieving the outcomes that society values. Most importantly, we have to show where our kids stand in relation to the national goals. At the same time, our kids *are* different by definition. We have to know if we are accomplishing the interim outcomes that 'enable each individual with a disability to live as normal a life as possible'."

"The template metaphor doesn't work, specifically the attempt to overlay outcomes on an underlying system that is skewed in favor of 'normal' or 'gifted' children. The existing system is out of alignment. We all have a clear mission grounded in the belief that all children have the right to be educated with dignity and high expectations in a common supportive environment."

"Elements of instruction and curriculum are modified/adapted to meet the needs of students with disabilities. Would it violate this philosophy to modify an assessment system? Some indicators will simply be not applicable for certain students."

"To the extent possible, even students with severe disabilities should be afforded the same opportunities and therefore the same outcomes as peers in regular education. It can only strengthen the system to have it involved with the tremendous accountability movement in regular education. The outcomes specified in the national goals should clearly be reflected in the outcomes selected by NCEO."

Issue 4: Category Specific vs. Noncategorical Indicators

Number Responding to this Issue: 26

Support

Nineteen individuals responded to this issue with comments of support for either categorical or noncategorical indicators. Virtually all of them supported using a noncategorical approach, with three fourths of them strongly supporting only a noncategorical approach, while the others suggested the need to have both types of indicators. One suggested that it was not a "categorical" issue, *per se*, but a question of scale and detail.

- To the maximum extent possible, we must stay noncategorical and keep indicators at the broadest level that applies to all students.
- The use of categories only reinforces separateness and differences; data should not be differentiated across disability.
- As much as possible, use noncategorical. Keep categorical components (outcomes *and* indicators) minimal. They should be defined in the same way that schools are defining goals for all kids.
- Noncategorical indicators are all right as long as they are inclusive and contain all possible characteristics. Indicators that are constructed as category-specific could be facilitative.
- Adoption of noncategorical indicators does not devalue the importance of category-specific indicators.

Concerns

Concerns focused primarily on the impact of categorical approaches on those with multiple disabilities and the usefulness of limiting the focus to data that only apply to all children.

- Collecting categorical data encourages differences and separateness. Within special education, categorical approaches leave out students with various (multiple) special needs.
- There is a dilemma in that if data are limited to those that apply to all categories of children, we have a generic set of data that does not recognize the presenting characteristics of children an youth. We do need data that are useful and help us know what to do after we collect them.

- There are some differences by category (particularly for students who are blind or deaf or have severe-profound disabilities), but otherwise it is only timing and intensity or density differences that exist, not essentially different kinds of instruction or environments.
- Without differentiation by category or level of functioning there is risk of overlooking important educational results achieved through special education. Valid decisions of how differentiated these indicator subdomains need to be requires some empirical test.

Suggested Alternatives or Refinements

- The inclusion of category specific indicators may lead to the accumulation of information with implications for the development of policies designed to meet the educational needs of specific populations. The stance taken will reflect the depth to which NCEO is willing and able to probe the educational performance of all students.
- Use noncategorical indicators, but allow data to be summarized by disability categories in order to discover whether the outcomes are the same across exceptionalities.
- Use category specific indicators for students with moderate to severe disabilities only.
- Think in terms of a central band of overlapping information, in some respects it would be the same, in others different.

Sample Comments and Quotations

"All students should be assessed on a common set of outcome indicators."

"Any distinction across categories or across severity will limit the possibilities for individual students. The differences are on an individual student basis and not on a categorical basis. Some of the outcomes could be achieved by some students with disabilities incidentally, and by other students only with intense effort. Strive to work from noncategorical indicators."

"The use of category specific indicators seems contrary to the fundamental position stated in this paper that "special education is a capacity building resource for general education."

"Categorical indicators leave me asking 'So what?' and wondering if we are programming certain subgroups to be the 'best of the worst'."

Issue 5: Indicators Differentiated by Severity of Disability

Number Responding to this Issue: 27

Support

Of those who commented with statements of support regarding this issue, it was equally divided between those who supported the need for indicators differentiated by level of disability and those who thought the indicators needed to be comprehensive enough to address the needs of all students. Several who wanted to ignore severity of disability as a factor, however, commented that in the area of mental ability, that is for those with severe mental retardation, different outcome indicators might be required.

Differentiated by Severity of Disability

- Severity of disability definitely impacts student progress and in order to truly represent the outcome it should be addressed.
- Indicators would be adjusted to severity of disability since all indicators should begin with the individual as stated in the IEP.
- Different kinds of data need to be gathered on students with severe disabilities. The data must be valid and reliable for each degree of severity.

Not Differentiated by Severity of Disability

- Indicators must be comprehensive enough for all students.
- Keep the same. We want generic outcomes across student populations.
- Discourage the use of severity levels; it is okay if a small percentage of the population is considered on indicators that are simply not applicable.

Both

- Collect the same kind of data for all students while looking at different accomplishments.
- A broad conceptualization that has a set of outcomes for all deaf and hard of hearing students that is similar to those established for students without disabilities is important, however, it might be applicable to have differentiation for severe mental retardation.
- Ignore all references to severity with the exception of mental ability. There are different expected outcomes for those who have profound mental retardation than for those who have mild mental retardation.

Concerns

- What we need to be able to say is that student characteristics will mediate or moderate outcomes and recognize that some students will never achieve certain outcomes.
- Different kinds of data need to be gathered on students with severe disabilities. The degree to which the assessment system will be different must be contingent on the severity of the disability.
- Outcomes for students with very severe disabilities fall mostly into the "critical interim outcome" category rather than in culminating outcomes.
- A fundamental problem is being overlooked, that is, how severity of disability interacts with conclusions about outcomes.

Suggested Alternatives or Refinements

There were few specific suggestions that were stated to address this issue, although in the comments regarding support and concerns, it was clear that refinements are needed with respect to how the outcomes for students with severe disabilities will be addressed.

- Use a strength model to stress rate or progress toward growth and development; indicators should encompass severity rather than differentiate by severity.

Sample Comments and Quotations.

"All students should be assessed on a common set of outcome indicators."

"Any distinction across categories or across severity will limit the possibilities for individual students."

"Think in terms of a central band or overlapping information, some would be the same and some would be different for students with differing abilities."

"Indicators may encompass severity, rather than differentiate by severity. The proportion of children in the 'projected' range rather than the 'expected' range may be the focus."

"If you only measure outcome status, how will you know when deficient performance is due to the severity of the initial disability and when it is due to ineffective educational programs; likewise, how will you tell whether excellent outcomes are due to effective programs or to the misidentification of nonhandicapped children as handicapped?"

Issue 6: Indicators Differentiated by Developmental Level

Number Responding to this Issue: 22

Support

The individuals who responded to this issue primarily stressed that developmental level needs to be addressed and that doing so does not present a problem. Only two individuals indicated that the indicators (at least for those with mild disabilities) should be the same since it is a matter of expectations or standard setting.

- Some are consistent across levels, but there is no question that different kinds of data are collected at different levels and that the outcome expectations vary significantly for primary vs. secondary level students.
- Collect different kinds of data by developmental level, with vastly different indicators.
- Make allowances for developmental stages.

Outcomes in emotional, social and cognitive domains are relevant at all levels, only indicators may differ. Age or developmental outcomes that are specific don't present a problem.

Concerns

- Developmental data for special education students would be chronologically inappropriate and of little value in the field.
- Different kinds of data will need to be collected on students with disabilities.
- Avoid the potential trap of linking severity and developmental levels, thus keeping individuals with disabilities at age inappropriate levels.

- Some strands can be followed from preschool through secondary school (presence, participation) but some cannot.
- The only way to address this issue is that it depends on the outcomes that are established; indicators may or may not vary across developmental level depending on the outcomes addressed.

Suggested Alternatives or Refinements

- Develop indicators consistent with the expectation of the next environment. It may not parallel the notion of indicators differentiated by developmental level, but it seems more fruitful to do so.
- Keep indicators separate by ages (those strands that do follow from preschool to secondary levels) and you'll provide more useful information.
- If different data are gathered at different points (e.g., for infants, at school entrance), then differentiate chronologically, not developmentally.
- Rate of progress toward growth is preferable to "normal" growth as an outcome.
- Making a decision in this area depends on the nature of the data collected and the reason for its importance. Consider whether there is a point in a student's development at which information about particular areas becomes insignificant.

Sample Comments and Quotations

"Different indicators will be needed for the same general accomplishments (if work/employment could not be an accomplishment a more general indicator such as (meaningful day activity) would be appropriate)."

"The importance of process as an outcome is particularly relevant here. A strength model of outcomes would stress *rate* of or *progress toward* growth and development as an individual, rather than 'normal' growth and development as an outcome."

Issue 7: System Level vs. Individual Level Indicators

Number Responding to this Issue: 31

Support

The majority of those responding to this issue (75%) favored collecting both individual and system level indicators. Three individuals stressed concentrating on individual level indicators while two acknowledged the importance of documenting system level effects. For the most part, however, respondents simply indicated both were needed or stressed that system level indicators grow out of an aggregation of individual level outcomes.

- These are not either/or issues. Individual outcomes are of interest, but data on numbers of individuals provides systems with the opportunity for change and improvement.
- Clearly both are needed. Most system-level indicators are aggregations of individual-level ones (drop out rate and percent passing).

- There is an ordering of quality assurance levels that begins with the individual and advances to a systems level
- Outcomes serve different functions. The national agenda needs system indicators; special educators are interested in individual indicators to address the quality of the educational experience for the individual. The issue relates to why outcomes are assessed.
- Both are needed. If you have to favor one, go with the group or system level data as they are where policy decisions reside.

Concerns

- It is doubtful that any system can make individual and system level decisions adequately.
- All systems level indicators must be individually relevant.
- A focus on individual level outcomes sustains the traditional focus on individual deficits.
- Issues relate to the level of reporting as well as to the levels at which to collect information.
- Consider what jurisdictions the indicators will be used to monitor, such as districts, states, full-time placement facilities. Those that serve the broadest populations (i.e., those with more mild disabilities) will score best on indicators.
- Not all people with disabilities within a system will have indicators of progress from the same input.

Suggested Alternatives or Refinements

- Focus on individual outcomes that can be summarized by systems, when desired, considering system and individual levels separately.
- Rethink the concept of "system level" indicators to go beyond examples of "kid stuff" to question whether outcomes should be defined for things such as consumer satisfaction, cost savings and the impact on interagency access. This raises the question of whether we consider the overall effects the educational process and student outcomes have on other parts of the system/society.
- Include indicators at all levels from broad based to specific: national, state, system, school, program, classroom, individual. The data will vary in scope, detail and content dependent on the validity, reliability and usefulness."

Sample Comments

"A focus on system level indicators forces us to reinforce strengths, rather than remediate deficits."

"Go with individual level outcomes. The issue goes back to why outcomes are assessed. If it is to address the quality of the educational experience of the individual with a disability then you need to assess individual level outcomes."

"Clearly both are needed. Most system level indicators are aggregations of individual level ones (drop out rate and percent passing). Truly system level indicators (school climate, race relations, vandalism) are not critical final goals of education."

General Comments and Concerns

General Testimony

Number Responding with General Testimony: 34

Patterns in General Comments to the Working Paper

Of the approximately 47 general concerns that were raised, over half were editorial suggestions to clarify points or to add more detail about specific areas. Such editorial suggestions included adding a focus that places the paper in its historical context, emphasizing the focus of NCEO early in the document, defining and describing what we want schools to do or produce, acknowledging the cost of the effort, simplifying the model and clarifying definitions, such as the definition of indicators and of outcomes.

The responses contained a great number of statements of positive support for the efforts and the current status of NCEO's efforts to date. The comments reflected both an appreciation of the thought-fullness and logic reflected in the working paper and of the comprehensive nature and importance of the task that it represents.

Several of the respondents (about one third of those who responded to the working paper) raised issues related to indicators. One theme within this broad area related to examining the indicators with respect to how they relate and can be linked to school experience. One consideration was to enhance the simplicity of the model by limiting the focus to things that are demonstrably related to school experience. Other respondents expressed concerns about confusion between indicators and outcomes, with some suggesting that the focus should be on the latter. Specific issues that related to indicators included:

- Concern that the identification of "the list of indicators" will force people to line up on both sides of a proposed solution. A *process should* be developed by which a list of indicators can be generated.
- Looking at outcomes as a subset of indicators, not two *different* entities.
- Re-evaluating the examples of outcomes and indicators used to illustrate the system. Some indicators, such as nutritional status, go beyond what school people consider their purview and it is difficult to determine whether they are indicators or outcomes.
- Maintaining emphasis on key *qualitative* variables that do make a difference (e.g., school climate) even though they are hard or impossible to measure and clarifying some confusion (in the examples) about the distinction made between qualitative and quantitative indicators, particularly how qualitative data are treated once aggregated at the systems level. Indicators must reflect those system variables that *do make a difference*.
- Dealing with the limits of assessment and measurement issues related to variance and attaching numbers to things when qualitative indicators could be other than numerical.
- Examining the various actors and determining who can be held accountable for the indicators. For what can students (as opposed to the school system) be held accountable, for example?

- Considering who will look at the indicators, how often, what inferences will be drawn, and what the consequences could/would be in terms of rewards and/or training/assistance.
- Determining and stating up front what purpose the indicators are to fulfill since indicators for accountability are different from indicators for formative assessment or student evaluation.

Other issues that were concerned with areas other than indicators included:

- Dealing with related issues such as cultural variables, backgrounds and environmental structures within which children live and the adaptation skills (compensatory skills) an individual has to make to respond or to demonstrate outcomes.
- Concern with the interface between the prepared system and outcomes for non-special education programs and the ability to move within sets of outcomes (e.g., college prep vs. vocational) if they are different.
- Concern about whether interactions between individuals that may or may not have anything to do with school should be included in the definition of educational outcomes.
- Dealing with the responsibility and appropriateness of various long term outcomes being identified as "outcomes of schooling" that suggest school responsibility in tracking and measuring.
- Examining whether the model itself is too encompassing resulting in a lack of definition or whether the model is too intellectual rather than practical in which case it may be important to shift the focus to a 'working' or 'guiding' rather than a conceptual model.

Sample Comments and Quotations

"(Your work)...has the potential to shape much of the thinking of both special and general education about how kids with disabilities fit (or don't) in the reform efforts that will preoccupy us for the next several years."

"Many calls for higher educational standards purposely exclude special education students from such requirements or demands. Whether for fear of litigation or out of benevolence, such exclusions will consign special education students to the low skill/low wage types of jobs. Our benevolence will ultimately hurt the students we are trying to protect! The issue is to set appropriately high expectations for each student."

Consensus: Summary of comments regarding the possibility of building consensus around the model of outcomes and system of indicators.

Overview of Comments on Consensus-Building

Most of the twenty respondents to the question about consensus building thought consensus was possible (60%). The small proportion who thought consensus would not be attainable (5%) did, however, typically acknowledge its importance. An equal number of those who thought consensus possible suggested processes by which to achieve it. One respondent emphasized that it must be decided in advance how much emphasis to place on achieving this goal (consensus) and what impact it will have on the project if not achieved.

Suggestions for Consensus-Building

Respondents acknowledged that the NCEO current and proposed strategies for building consensus are appropriate including clear communication with stakeholders by asking for input, review, and feedback through typical channels such as phone, mail, articles and electronic mail. Sustaining the consensus building effort was mentioned by several respondents with an emphasis on keeping people informed and updated. An important concern raised was that the group be sufficiently broad and include general educators, chief state school officers, state directors of special education, LEA directors, and university, school board, parent and business community representatives. One respondent suggested that representatives from organizations and individuals be sorted into levels of involvement such as interested parties, Delphi Group, review committee and an NCEO panel.

Ideas for achieving consensus included:

- Making the consensus effort sustained as well as connected through periodic synthesis summits with other major initiatives including the Outcomes Project, Joining Forces and the National Goals Panel.
- Producing a draft for reaction from the field by bringing together a group (e.g., n=30) of stakeholders with a broad representation, maximizing the effort by identifying a committed, knowledgeable group to work through the definitions of the outcomes in an intensive, face-to-face manner.
- Using a "think tank" approach.
- Selecting decision makers who have the respect of their peers to engage in open, wide ranging discussions in all arenas and at all levels about what we are doing and its affect on various groups.
- Implementing a process where everyone can be heard, ideas recognized and subjected to a group decision.
- 1. Establishing structures and a formal plan for input, debate and resolution; 2. communicating that plan; 3. starting debate; 4. obtaining nominations from organizations and individuals and sorting them into levels of involvement; 5. having everyone serve dual roles of contributing and disseminating information; 6. communicating regularly and sharing drafts of materials; 7. using formal field review (Delphi group); 8. giving the NCEO panel policy power to guide the effort and 9. using a small review committee of research experts to validate/review work at critical milestones.

Comments and Concerns Regarding Consensus

- Consensus building is not problem solving. It is possible to achieve consensus on an issue that can lead to poor resolutions. Consensus building is most appropriate when issues are clearly defined pro and con.
- Focus on defining those outcomes upon which we can all agree and not spend too much time debating those where there is extensive disagreement.
- Avoid trying to include everyone, trying for answers to meet all needs/wants, maintaining final decision authority (i.e., you need to give up control as final decision makers) and working on outcomes and indicators at the same time.
- Allow for diversity of goals and implementation by SEAs, LEAs, private schools and extant outcomes. Avoid emotional issues, being realistic and hard headed.

Attachment 1

Individuals Providing Reactions to Previous Drafts of Working Paper 1

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