

National Expert Validation of COACH: Congruence with Exemplary Practice and Suggestions for Improvement

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The content and social validity of an educational planning tool named COACH (Choosing Options and Accommodations for Children) were explored through two studies. Study 1 presents questionnaire feedback from six groups of experts (N = 78) in the field of deaf-blindness and multiple disabilities regarding the purpose, philosophy, content, process, and presentation of COACH. Study 2 presents social validation feedback from parents whose children are deaf-blind and have multiple disabilities regarding a set of valued life outcomes included in COACH. The combined results of these studies provide initial validation that COACH is congruent with exemplary practice and offer consumer-based suggestions for its potential improvement.

DESCRIPTORS: COACH, deaf-blind, inclusive education, multiple disabilities, planning, social validation

The purpose of the two studies presented in this article was to establish initial content and social validation for COACH (*Choosing Options and Accommodations for Children: A Guide to Planning Inclusive Education*) (Giangreco, Cloninger, & Iverson, 1993). COACH is a tool used to determine learning outcomes and supports for students with disabilities based on a family-centered and team perspective. Because COACH is a planning process, not a standardized assessment, traditional measures of reliability (e.g., test-retest) are not appropriate. Expert and consumer feedback offers potential users of COACH perceptions of its strengths and suggestions for future improvement. This is particularly relevant considering that the history of COACH includes seven major revisions over the last

10 years and the tool itself encourages individual user adaptation.

COACH

COACH is an assessment and planning tool designed to identify the content of a student's educational program for implementation in general education settings and activities and to enhance certain aspects of a student's life. COACH is based on six major assumptions:

1. Pursuing valued life outcomes (e.g., accessing a variety of places and engaging in meaningful activities, having a social network of personally meaningful relationships, being safe and healthy) should be an important aspect of education.
2. The family is the cornerstone of educational planning.
3. Collaborative teamwork is essential to quality education.
4. Coordinated planning is dependent upon shared, "discipline-free" goals.
5. Using problem-solving methods improves the effectiveness of educational planning.
6. Special education is a service not a place.

COACH is organized into three major parts that are interdependent. *Part 1* (Family Prioritization Interview) is used to identify family-centered priorities for the student. *Part 2* (Defining the Educational Program Components) is used to develop annual goals and short-term objectives based on family-centered priorities, to identify other learning outcomes beyond the family-centered priorities that should be targeted for instruction (Breadth of Curriculum), and to determine general supports, consisting of things that need to be done to or for the students to enable them to participate in their educational programs. *Part 3* (Addressing Educational Program Components in Integrated Settings) is used to explore options for addressing students' educational program components in general education class settings through the use of a scheduling matrix and a set of team planning guidelines. The COACH manual illustrates the parts using three student examples: a third-grader with multiple disabilities, a kindergarten student with

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dual sensory impairment, and a high school student with moderate disabilities. COACH also includes a self-monitoring and peer coaching guide for team members to assist each other to use COACH more proficiently. Although COACH has been adopted for use based on its inclusionary orientation, the tool's use and effectiveness currently lack research support.

Study 1

The purpose of Study 1 was to obtain expert feedback regarding the congruence of the content of COACH with a set of exemplary educational practices.

Method

The methodology for this study was based, in part, on a national validation of program quality indicators in educational services for students with severe disabilities (Meyer, Eichinger, & Park-Lee, 1987). As in Meyer et al. (1987), this study used six respondent groups to validate a set of exemplary practices. The current study, using a set of practices different from those used by Meyer et al. (1987), extended the validation process by having respondents indicate whether the practices were addressed in COACH. This is important for potential consumers because COACH purports to operationalize exemplary practices through a collaborative planning process among educational team members, including family members and professionals.

Subjects

The subjects of this study were 78 experts in the area of deaf-blindness and multiple disabilities from two major respondent categories. Thirty-seven were *national and state experts* including university faculty, state or multistate coordinators for deaf-blind services, and national technical assistance personnel. Forty-one were *field-based experts* including parents, special educators and related service providers, and general educators. A minimum quota of 10 respondents in each of the six subcategories (e.g., university faculty, parents, general educators) was set.

Selection criteria for national and state experts. *University faculty* were eligible if they were involved in a federally funded personnel preparation program, model demonstration, or research grant pertaining to the education of students with deaf-blindness and multiple disabilities or had published at least two pieces of professional literature (e.g., journal article, book chapter, book, manual) between 1987 and 1992 pertaining to the education of students with deaf-blindness in general education settings. State or multistate *coordinators for deaf-blind services* were eligible if they were nominated by participating university faculty, coordinators for deaf-blind services, or U.S. Department of Education personnel as individuals knowledgeable about educating students with deaf-blindness and multiple disabilities in general education settings. *National technical*

assistance personnel were eligible if they had at least three years of experience providing technical assistance, training, or other supports to staff who work with students who have deaf-blindness and multiple disabilities in general education settings and worked for TRACES, the Helen Keller National Center for Deaf-Blind Youth and Adults, or the American Foundation for the Blind Deaf-Blind Project.

Selection criteria for field-based experts. National and state experts were asked to nominate potential field-based respondents they believed to be knowledgeable about educating students with deaf-blindness and multiple disabilities in general education settings. All field-based experts had at least 1 year of experience with a child with deaf-blindness and multiple disabilities who was educated in a general education school or classroom and had daily interactions with students of the same age without disabilities in typical school environments. *Parents* who participated had a child with deaf-blindness and multiple disabilities who was educated in a general education setting. *Special educators and related service providers* included professionals such as special educators, integration facilitators, occupational therapists, physical therapists, vision specialists, and hearing specialists who had at least 3 years of experience supporting the educational needs of students with deaf-blindness and multiple disabilities in general education settings. *General educators* included teachers who had students with deaf-blindness and multiple disabilities in their typical classes on a daily basis.

As individual respondents were identified, the first author contacted each person by phone. Potential respondents were first informed of the caller's identity and affiliation. After the purpose of the study was described, the respondent was asked if she or he would be willing to read COACH and respond to a questionnaire about its congruence with exemplary practices. If the person said "Yes," assurances of confidentiality were made and the person's criteria for eligibility were verified. Two potential respondents, both university faculty, declined participation, citing an overextended workload as their rationale for not participating in the study.

As indicated in Table 1, subjects averaged over 6 years of experience supporting the education of students with deaf-blindness in general education settings. Nearly 72% reported working in general education classrooms at least part of the time while nearly 60% worked in special classes in general schools. Slightly less than half the respondents had used or observed previous versions of COACH.

Design

From November 1991 through April 1992 the sample of voluntary respondents was sent a study packet that included: a cover letter with instructions, a brochure about the federal grant funding the research, the pre-

Table 1
Characteristics of Expert Respondents

1. Relationship of respondents to students who are deaf-blind				
	Group	n	Surveys sent	Response rate %
a.	Parents	11	14	78.57
b.	Special educators and related service providers	20	26	76.92
c.	General educators	10	14	71.43
d.	University faculty	13	20	65.00
e.	State C-622 coordinators	12	13	92.30
f.	National technical assistance personnel (TRACES, AFB, HKNC)	12	13	92.30
Total		78	100	78.00
2. Primary state where respondent is involved with students who are deaf-blind (Note: 18 respondents reported working in 18 other states as well)				
	State	n	State	n
	AL	1	IL	4
	AZ	2	IN	1
	CA	2	KS	11
	DC	1	MA	3
	DE	1	MD	2
	GA	1	MI	1
	HI	1	MO	1
	IA	4	MS	2
	ID	1	ND	1
			NJ	1
			NV	1
			NY	3
			OH	2
			OR	4
			SD	2
			TN	1
			VT	22
			WA	2
Total 78				
	n	%	M	SD
3. Gender of respondents				
Female	65	83.3		
Male	13	16.7		
Total	78	100.00		
4. Respondent's highest level of education				
High school	6	7.7		
Bachelor's	11	14.1		
Master's	40	51.3		
CAS or equivalent	3	3.8		
PhD	18	23.1		
Total	78	100.0		
5. Respondent's years of experience with students who are deaf-blind in general education schools or classes				
	78		6.69	5.81
6. Locations where respondents work with students who are deaf-blind (Some respondents work in more than one location)				
General class	56	71.8		
Special class	45	57.7		
Community environment	25	32.1		
7. Respondents who used or observed previous versions of COACH				
	37	48.1		
Note: 35 used or observed version 6.0				
2 used or observed version 5.0				
8. Respondents who included written comments				
	63	80.8		
(26 pages of typed single-spaced text were collected)				

publication version of COACH, a 27-item questionnaire, and a self-addressed stamped envelope. All of the national and state experts were also sent a form to nominate field-based experts along with a separate self-addressed stamped envelope.

Questionnaire Development and Instrumentation

Recognizing that "exemplary practices" are rooted in values consistent with normalization (Wolfensberger, 1970) and other inclusionary precepts (Peck, 1991), the research team, consisting of the four authors, selected two exemplary practice lists from which to build a questionnaire. *Characteristics of Family-Centered Practitioners* (Capone, Ross-Allen, DiVernere, & Abernathy, 1991) was selected because of its family-centered values orientation. *Best Practice Guidelines for Meeting the Needs of All Students in Local Schools* (Fox & Williams, 1991) was selected because of its inclusionary values orientation, comprehensiveness, and the fact that it has been continually updated based on feedback from field-based practitioners over several years. An earlier version was validated by 212 practitioners (Williams, Fox, Thousand, & Fox, 1990).

COACH does not purport to address all of the major areas in the *Best Practice Guidelines* (Fox & Williams, 1991) or all of the items listed within selected areas. Therefore, only items prominently featured in COACH were included in the questionnaire, based on consensus decision making among the four authors. The final questionnaire included items from the following areas of the *Best Practice Guidelines* (Fox & Williams, 1991): (a) collaborative planning (2 items), (b) social responsibility (3 items), (c) curriculum planning (2 items), (d) individualized instruction (4 items), and (e) family-school collaboration (1 item). Although COACH may have an indirect impact on the other exemplary practice areas (i.e., school climate and structure, delivery of instructional support services, transition planning, planning for continued best practice improvement), no items from these areas were included in the questionnaire. Eight of 17 items from the *Characteristics of Family-Centered Practitioners* were similarly selected for inclusion in the questionnaire.

The questionnaire began with seven demographic questions reported in Table 1. Next, each of the 20 exemplary practice indicators was accompanied by two Likert-style scales in which 0 was anchored with "Disagree" and 5 was anchored with "Agree." On the first scale respondents indicated if they considered the practice exemplary. On the second scale they indicated if the practice (whether or not considered exemplary) was addressed in COACH. The questionnaire concluded with a section for comments.

Data Analysis Procedures

Frequencies, percentages, means, and standard deviations were calculated using the *SAS Application System*,

Version 6.07 (SAS Institute, 1992). One-way analysis of variance was conducted using the Scheffé post hoc procedure with the alpha level set at .01 to compare the response of the six respondent groups (e.g., university faculty, general education teachers, parents). No significant differences were identified between any of the respondent groups; therefore, all data are presented in an aggregate fashion. All written comments were analyzed using categorical coding (Bogdan & Biklen, 1982). *HyperQual* (Padilla, 1991), a text-sorting computer application, was used to tag and sort the text data and generate 30 code-specific reports to assist in organizing respondent themes.

Results and Discussion

All respondents, as required by subject criteria, were knowledgeable and experienced about the education of students with deaf-blindness and multiple disabilities in general education settings. Respondents' written comments indicated varying philosophical perspectives regarding full inclusion. Because of their experiences in general education settings, this population of respondents may be expected to be different from a population of respondents who work exclusively in settings such as separate and residential schools, where students with deaf-blindness and multiple disabilities historically have been educated. All of the respondents were provided with a full copy of COACH. Approximately 52% had never used or observed COACH; therefore, their responses were limited to document review.

Respondents had a high level of agreement that the *characteristics of family-centered practitioners* as shown by Capone et al. (1991) were reflective of exemplary practice, with means ranging from 4.71 to 4.92 on a 5-point scale and with correspondingly small standard deviations. Respondents also indicated a high level of agreement that the listed practices were addressed in COACH with slightly lower mean scores, ranging from 4.14 to 4.88, and slightly larger standard deviations. These results are detailed in Table 2.

Respondents also considered the selected items from the *Best Practice Guidelines* (Fox & Williams, 1991) to be exemplary, with means ranging from 4.74 to 4.96. They also indicated high agreement that these practices were addressed in COACH, with means ranging from 4.01 to 4.97. Respondents indicated that COACH addressed the areas of family school collaboration, collaborative planning, and curriculum planning somewhat more than social responsibility and individualized instruction. This finding is consistent with the stated function of COACH being a family-centered team approach to planning an educational program for a student with disabilities. These results are detailed in Table 3.

Although responses on the Likert-style scale provided a standardized method to verify and compare expert

opinion regarding the congruence of COACH with exemplary practices, the wealth of written comments offered by respondents provided COACH-specific feedback regarding positive features and potential improvements of the tool. Table 4 lists positive features of COACH based on the analysis of respondents' written comments. These positive features are arranged into five general categories: (a) purpose, (b) philosophical basis, (c) content, (d) process, and (e) presentation.

Respondents often supported their high Likert scores with comments such as:

I think the most valuable aspect of this tool is that it moves from assessment to program implementation without stopping. Too many assessments don't consider that their final purpose should be to develop a program that assists the child to learn meaningful skills. This one does!

COACH is a comprehensive and sensitive approach to providing quality education for all students with disabilities. The utilization of the family-centered approach is key in the development and implementation of programming which effectively meets the needs of the student and the family. So often, professional disciplines fail to recognize the family as not only a viable but necessary member of the collaborative planning team. COACH certainly balances the professional and consumer input allowing both an equal share in the planning process.

As a related service provider (physical therapist) trying to support students in an inclusive environment, my biggest stumbling block has been lack of curriculum to support. COACH seems to provide the means to relate regular curriculum to the special needs of a student, and have everyone involved understand.

This tool is what I've been waiting for! I'm pushing for the opportunity to integrate my son into a regular education setting. I found the biggest resistance to be because the team "did not know how" and therefore were afraid the child would fail. This is a great step towards providing us with the guidance we need in approaching the very intimidating task of eliciting collaboration between school district, home, and support staff to the very intensive needs of a complex student in severe time constraints.

Table 5 lists the potential improvements in purpose, content, process, and presentation suggested by the experts to enhance COACH. Most notably the experts expressed a desire to: (a) adapt COACH to be useful to a wider population of people with disabilities; (b) develop guidelines for enhancing participation of students in their own planning; (c) develop guidelines for use

Table 2
Expert Respondents' Perceptions about "Characteristics of Family-Centered Practitioners"^{a,b}

	This is an exemplary practice			COACH addresses this practice		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
1. Family-centered practitioners create opportunities for the family to share concerns, priorities, and resources on an ongoing basis.	78	4.91	0.43	77	4.78	0.50
2. Family-centered practitioners provide opportunities for families to acquire new knowledge, skills, and confidence.	78	4.83	0.44	78	4.14	0.95
3. Family-centered practitioners recognize and build on family identified strengths and abilities.	78	4.85	0.43	76	4.36	0.90
4. Family-centered practitioners communicate with families in a culturally competent manner.	78	4.91	0.33	75	4.19	0.95
5. Family-centered practitioners gather information from families in a way that is comfortable for the family members (e.g., use a variety of informal/formal interview methods).	76	4.89	0.35	77	4.56	0.66
6. Family-centered practitioners include families in all planning and decision-making activities at whatever level families choose to participate.	78	4.83	0.52	77	4.61	0.65
7. Family-centered practitioners create opportunities for families to increase the competence of others who interact with their child.	78	4.71	0.58	78	4.18	0.96
8. Family-centered practitioners act on the feedback provided to them by the families they work with.	78	4.92	0.27	78	4.88	0.32

^a Partial list from Capone, Ross-Allen, DiVenere, and Abernathy, 1991.

^b Likert-style scale used: 0 = disagree; 5 = agree.

with families from diverse cultural backgrounds; and (d) continue to make adjustments to the content, process, and presentation based on field-testing.

Study 2

The purpose of the second study was to extend our understanding of the valued life outcomes included in COACH. These valued life outcomes were originally developed based on interviews with 28 families whose children had deaf-blindness and multiple disabilities. The current study presented the valued life outcomes to a wider audience of parents for their reaction, clarification, and expansion.

Methods

Subjects

Respondents in this study included 44 parents who had a school-aged child identified with deaf-blindness and multiple disabilities living in their home. The children ranged in age from 5 to 20 years ($M = 10.86$, $SD = 3.7$). All but four of the families had other children without disabilities living in their home. Forty-one of

the parents (93%) indicated their child with deaf-blindness had other disabilities, including a wide range of cognitive, orthopedic, and health impairments such as mental retardation, cerebral palsy, hydrocephalus, and seizure disorders. Nearly 91% of the children received some type of related services. Approximately 60% to 70% of the students received communication services (e.g., speech/language therapy), physical therapy, and occupational therapy. Only 13 of the 44 students (29.54%) reportedly received vision support services. None of the parents reported the provision of any specialized hearing support services. Table 6 provides background information about responding parents. None of the parents in this study participated in Study 1.

Selection criteria for parents. The state coordinators for deaf-blind services from four states (Arizona, Kansas, Ohio, and Vermont) participating in a federally-funded research grant were contacted to determine the number of questionnaires to be distributed in the respective states. This number was determined by taking the number of students currently on the state census for deaf-blindness and subtracting (a) the number of

Table 3
Expert Respondents' Perceptions about "Best Practice Guidelines for Meeting the Needs of All Students in Local Schools" ^{a,b}

	This is an exemplary practice			COACH addresses this practice		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
<i>Collaborative planning</i>						
9. For students with intensive needs in basic skill and/or social skill areas or who are challenged by their gifts and talents, individual student planning teams are convened that are responsible for the development and implementation of all aspects of the student's educational program (e.g., student goals, student schedules, procedures to address learning/behavior/management issues, transition plans, strategies to support the student and his/her teachers and family).	78	4.86	0.45	78	4.72	0.58
10. Individual student planning teams consist of the student, family members, the student's general class teacher(s), and other appropriate persons based on the student's needs (e.g., principal, chapter 1 teacher, music teacher, physical therapist, one or two of the student's peers, teaching assistant, special educator, social worker, representatives of community agencies, family advocates).	77	4.86	0.42	77	4.79	0.44
<i>Social responsibility</i>						
11. The school's curriculum provides structured opportunities for students to develop appropriate social skills (e.g., making friends, cooperating with others, sharing, listening, avoiding fighting), which include frequent practice during school, home, and community activities.	78	4.90	0.31	78	4.58	0.73
12. The school provides opportunities for all students to participate in age-appropriate school sponsored extra-curricular activities (e.g., field trips, sports teams, clubs, dances, assemblies, student government).	78	4.83	0.49	78	4.28	0.80
13. For students with intensive needs in the social skill area, an individual program for increasing social skills is developed that includes: (a) assessment of current skills in identified home, school, and community settings; (b) identification of adaptations and support needed to function in those settings; (c) procedures for working with school staff and families to incorporate social skill training and/or practice into school and family routines.	78	4.87	0.41	77	4.38	0.74

infants and toddlers not in school-based programs; (b) those students who did not live at home with a family (e.g., residential school); and (c) those in special education schools. To maintain confidentiality, packets for each identified student including a cover letter with instructions, the questionnaire, and a self-addressed stamped envelope were sent to the coordinator for deaf-blind services in each of the four states. In Vermont, Arizona, and Kansas the coordinators addressed the envelopes and mailed them to the families directly. In

Ohio the envelopes were sent to the parents via the school; this was necessary because the parents' addresses were not available to the Ohio coordinator.

Design

From March through May, 1992, a 25-item questionnaire was distributed by mail to the identified sample of parents in Vermont ($n = 18$), Kansas ($n = 35$), Arizona ($n = 20$), and Ohio ($n = 23$).

Table 3
Continued

	This is an exemplary practice			COACH addresses this practice		
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>
<i>Curriculum planning</i>						
14. The process for identifying curriculum content for an individual student with intensive needs in basic skill and/or social areas includes an analysis of the student's skills and interests and of the age-appropriate activities, skills, and adaptations needed for the student to function in specific home, school, work, recreation, and other community settings.	78	4.91	0.33	78	4.56	0.71
15. Objectives for students with intensive needs in basic skill and/or social areas specify criteria that include performance in the student's home, school, and other age-appropriate community settings.	78	4.82	0.50	77	4.73	0.53
<i>Individualized instruction</i>						
16. The school provides all students with opportunities to set personal goals and to plan, with parents and teachers, how their goals will be addressed during the school year.	78	4.74	0.67	77	4.48	0.95
17. The school provides opportunities for all staff to become proficient at teaching several different goals from the same curriculum area through a single group activity (e.g., during a group math activity some students may be learning addition while others are learning counting or one-to-one correspondence).	78	4.85	0.63	78	4.13	1.18
18. The school provides opportunities for all staff to become proficient at teaching goals from different curriculum areas through the same group activity (e.g., during a group social studies activity some students may have a primary goal of learning the social studies content while others have primary goals of learning language, communication; or social skills).	77	4.81	0.54	78	4.10	1.16
19. A current schedule of daily student activities that describes what is being done, when, and with whom, is available and readily accessible.	78	4.81	0.43	78	4.76	0.63
<i>Family-school collaboration</i>						
20. Families are included in the decision-making process to determine the high priority educational needs of their children, and how and where (school, home, or community settings) their children will be taught.	78	4.96	0.25	78	4.97	0.23

^a Partial list from Fox and Williams (1991).

^b Likert-style scale used: 0 = disagree; 5 = agree.

Questionnaire Development and Instrumentation

The questionnaire began with a series of demographic questions. Next, five "quality of life" indicators were accompanied by a list of three to six examples in an effort to clarify their meaning. These indicators are those now referred to in COACH (Giangreco, Cloninger, & Iverson, 1993) as "Valued Life Outcomes." Four

of the five outcomes were developed based on interviews with parents whose children were deaf-blind and had multiple disabilities (Giangreco, Cloninger, Mueller, Yuan, & Ashworth, 1991): (a) having a safe, stable home in which to live, (b) going to a variety of places

Table 4
Positive Features in COACH Identified by Expert Respondents

Purpose
Assists in developing individualized education plans and setting priorities
Moves from assessment to program planning without stopping
Facilitates access to general education settings and activities
May assist with transition of students into integrated settings
Limits IEP goals to a reasonable number

Philosophical basis
Emphasis on full inclusion
Family-centered
Based on actual use in general education settings
Emphasis on valued life outcomes

Content
Up-to-date; representative of current exemplary practices
Thorough; complete; comprehensive
Curricular areas and activity lists are succinct yet complete
Activity lists are functional and age-appropriate
Builds on existing general education curriculum rather than replacing it

Process
Provides ample opportunity for family input
Facilitates collaborative teamwork; balances professional and consumer input
Practical; common sense approach
Systematic; linear, yet flexible
Sensitive; informal, participatory tone
Stresses involvement with the general education program and staff
Moves quickly through the sections
Use of problem-solving strategies embedded in COACH
Guidelines for developing goals, objectives, breadth of curriculum, and general supports
Self-monitoring and peer coaching enhances proficiency
Uses staff time efficiently; streamlines assessment and planning

Presentation
In-depth description and explanation
Clear; easy to understand; readable
Well organized; logically ordered
Program-at-a-glance effective for keeping the team focused
Scheduling provides concrete way to show what is being worked on in integrated settings

and engaging in meaningful activities, (c) having a social network of personally meaningful relationships, and (d) being safe and healthy. The fifth valued life outcome, *having personal choice and control and independence that matches one's age*, was added to COACH based on feedback from consumers and a review of the literature (Dennis, Williams, Giangreco, & Cloninger, in press).

Respondents were asked to circle a number (0 to 5) to indicate their own opinion regarding whether or not "This is an important indicator of a good life for my child," using a Likert-style scale where 0 was anchored with "Disagree" and 5 was anchored with "Agree." Space to write one's own quality of life indicators and a comments section completed the questionnaire.

Table 5
Potential Improvements in COACH Suggested by Expert Respondents

Purpose
Adapt existing version or develop others to be useful with a wider population of people with disabilities (e.g., early childhood, adults, mild disabilities, sensory impairments)

Content
Continue to adjust content and order of valued life outcomes
Determine student's likes and dislikes
Continue to validate and adjust lists of curricular activities (e.g., vocational, communication, socialization)
Include more information on adapting lessons and materials
Develop a section on evaluation of the student's educational program matching the rest of COACH (e.g., valued life outcomes) and continuous quality improvement
Include anecdotes from general education teachers describing successes

Process
Clarify team membership, possibly identify core and extended members
Continue to refine process steps based on field-testing
Develop guidelines for training consumers on the use of COACH (e.g., video)
Develop strategies for including the student in his/her own planning
Develop guidelines for use with families from more diverse cultural backgrounds and/or those who use English as a second language
Develop guidelines for what to do when families decline the invitation to participate in COACH

Presentation
Continue to edit language so it is increasingly "user-friendly"
Possibly reorder sequence to have underlying assumptions follow basic information about COACH (e.g., purpose, population, time)
Explore ways to streamline process and make forms more visually appealing
Consider development of a software application of COACH

Data Analysis

Frequencies, percentages, means and standard deviations were calculated using the *SAS Application System, Version 6.07* (SAS Institute, 1992). All written comments were analyzed using categorical coding (Bogdan & Biklen, 1982). *HyperQual* (Padilla, 1991), a text-sorting software application, was used to tag and sort the text data and generate code-specific reports to assist in organizing respondent themes.

Results and Discussion

The results of this study should be considered in light of the limited response rate of 45.83%. Due to the indirect method of getting questionnaires to families in order to maintain confidentiality, the reported response rate of 45.83% represents the most conservative estimate. Although distribution in Ohio and Arizona was, in part, to solicit responses from families of cultural

Table 6
Parent Respondents' Perceptions about "Valued Life Outcomes"

	<i>n</i>	<i>%</i>
<i>Relationship of parents to children who are deaf-blind</i>		
Mothers	28	63.6
Fathers	16	36.4
Total	44	100.0
<i>State where the families live</i>		
Kansas	22	50.0
Vermont	9	20.4
Arizona	8	18.2
Ohio	5	11.4
Total	44	100.0
<i>Cultural background of parents</i>		
Caucasian	40	91.0
African-American	2	4.5
Hispanic/Latino	2	4.5
Total	44	100.0
<i>Age of parents</i>		
26-30	4	9.1
31-45	37	84.1
46-50	0	0.0
51 and over	3	6.8
Total	44	100.0
<i>Highest level of education</i>		
Did not complete high school	2	4.5
High school	30	68.2
Associate's degree	8	18.2
Bachelor's degree	4	9.1
Total	44	100.0
<i>Locations where parents' children attend school</i>		
General Class	14	31.8
Special Class in General School	30	68.2
Total	44	100.0

minorities, only four of the 44 parents were of non-Caucasian descent.

As shown in Table 7, four of the five valued life outcomes had mean scores from 4.23 to 4.91 on the 5-point scale, indicating a high level of agreement among parents that these outcomes are part of what constitutes a good life for their child with deaf-blindness and multiple disabilities. Some parents volunteered comments indicating they favored all five valued life outcomes for their children without disabilities as well. As one mother wrote, "If I was [*sic*] to fill it out (the questionnaire) based on my other two (nondisabled) children I would circle all 5's." All four of these outcomes (having a safe and stable home in which to live, going to a variety of places and engaging in meaningful activities, having a social network of personally meaningful relationships, and being safe and healthy) were originally included in COACH based on interviews with parents whose children had dual sensory impairment (Giangreco et al., 1991). The only outcome with a mean score below 4.00 was "having personal choice, control and independence that matches one's age." Its mean score of 3.91 and standard deviation of 1.34, the largest of any of the

Table 7
Parent Respondents' Perceptions about "Valued Life Outcomes"^a

	<i>N</i>	<i>M</i>	<i>SD</i>
Indicators of a quality life for my child include:			
Having a safe, stable home in which to live now and in the future.	44	4.89	0.39
Going to a variety of places and engaging in meaningful activities.	44	4.23	1.10
Having a social network of personally meaningful relationships.	44	4.32	0.98
Having personal choice, control, and independence that matches one's age.	44	3.91	1.34
Being safe and healthy.	44	4.91	0.36

^a Likert-style scale: 0 = disagree; 5 = agree.

outcomes, show less agreement about the outcome. Written comments of parents provided some illumination to this finding. Whereas this item was added to COACH based on consumer feedback and literature regarding self-advocacy rather than parental wishes, it seemed clear that those parents who did not rate this outcome high on the scale wrote comments indicating they either did not value this outcome as much as the others, or they considered their child's disabilities too severe to have a realistic outcome. For example, one parent wrote, "Since my child is on a low functioning level his safety and health is a lot more important than personal choice for him." Another indicated, "I know my child's personal choices and independence will always be somewhat limited because of his abilities, but those are important areas that can be adapted to each individual." The lower score for the item of personal choice and control may be an indication that what parents want for their children and what children, particularly young adults, want for themselves may be different. Parents' comments about the severe health problems experienced by their children were consistent with the earlier parent interview study (Giangreco et al., 1991) which indicated that parents of children with deaf-blindness and multiple disabilities are gravely concerned about the possibility that their children will not live to adulthood.

When given the opportunity to suggest additional indicators of a good life for their child, parents in this study offered three areas not explicitly listed in the existing outcomes. First, parents identified *access to resources to meet basic needs* (e.g., medical services, insurance, staff, money) as a common need. Second, parents broadened the category about having a network of personally meaningful relationships by writing about *belonging and acceptance* (e.g., being accepted by oth-

ers, loved, cared about by others). Last, parents identified the importance of *personal growth* (e.g., self-esteem, creative outlets, spiritual development) as a third potential addition.

General Discussion and Implications for the Field

The combined data from these two investigations support initial validation of COACH as an educational tool that is congruent with several exemplary educational practices. Respondents indicated that COACH strongly emphasizes a family-centered approach and promotes family-school collaboration. In conjunction with the quantitative expert and social validation data, the positive written comments of the respondents provide valuable information to potential users of COACH. Such information can inform consumers and assist them in determining if COACH is consistent with their school's philosophy, mission, and educational direction.

As in any educational innovation, COACH requires individualization and is continuously in need of improvement and modification. The numerous versions of COACH that have been available over the years are reflective of the fact that exemplary practices are always evolving and our tools must evolve correspondingly. As individuals who have used COACH extensively, the authors agree with the suggestions to adapt COACH to be more widely applicable to a broader range of students. This can be accomplished best by continuing to refine the process in generic ways and to individualize the listings of curricular content considered for particular students based on age and needs. One way to operationalize this idea would be to develop a more extensive set of curricular activity lists from which families would select. Some of these might be part of COACH if they include curricular content not typically addressed in public schools such as early communication, social, or personal management skills. Others may include preschool or general education curricula to be considered within the context of the COACH process.

Another major concern raised by respondents is the need to include students themselves in the COACH process. Such participation is consistent with the underlying assumptions of COACH and its existing valued life outcomes. Given the heterogeneous characteristics of students and an emerging recognition of the importance of including students in the development of their own educational experiences, it is suggested that we open ourselves to a wide variety of possibilities for facilitating meaningful student participation. Exploring and describing variations that have been used successfully for student involvement in COACH may assist us in developing general guidelines and considerations for their participation. Review of other consumer-referenced program planning tools and adaptations would

also be beneficial (Dennis et al., in press). Similarly, more extensive field-testing of COACH with families who represent cultural minorities could generate additional considerations for including families in ways that are culturally sensitive. Only one respondent identified herself as a member of a cultural minority and commented on COACH from a cultural perspective. She wrote, "Being Lakota, from the Rosebud Sioux Tribe, I find COACH culturally sensitive. I would not hesitate to use it with Lakota families." Although such a comment is encouraging, it is insufficient to assume the cultural generalizability of COACH in its current form.

The final major suggestion from respondents recommended that adjustments to the content, process, and presentation of COACH continue. Data from both Study 1 and Study 2 direct us to reexamine continually the valued life outcomes included in COACH. These valued life outcomes form the foundation of COACH and give direction to all subsequent parts of COACH.

Gaining and using information about valued life outcomes present both philosophical and technical issues and require constant rethinking and openness to new ideas. COACH may be enriched and made more culturally inclusive by continued exploration of valued life outcomes from different perspectives.

Parents' concerns about their children's health and physical well-being suggest a potential reordering of the existing valued life outcomes. In the current version of COACH, the outcome pertaining to health and safety is the last one discussed with the family; perhaps it should be first. Even though this outcome may be a priority for families, valued life outcomes of persons with disabilities cannot be assumed to be the same as those outcomes valued by their parents. Value is subjective. Although parents know their children better than others know them, they do not experience the world in the same ways as their children.

As COACH is reevaluated for potential revision, some existing conceptualizations pertaining to valued life outcomes and human needs can be combined with the data collected in these studies to assist in developing new ways of planning with and/or for people with disabilities. For example, Maslow's (1970) "Hierarchy of Needs" is a theory that may contribute to our understanding of valued life outcomes. Maslow's hierarchy is arranged as a pyramid where the base is established by *physiological* and *safety* needs. In a modern society this base may include some of the "basic resources" that parents would add to the list of valued life outcomes. The intermediate levels of *belonging-love* and *self-esteem* (e.g., achievement, mastery, recognition) lead to the top of the pyramid, *self-actualization* (e.g., pursuit of inner ability, fulfillment, creativity). Self-actualization shares some common ground with the parents' suggestion to consider adding "personal growth" (e.g., self-esteem, creativity, spiritual growth) to the list of

valued life outcomes. Maslow's hierarchy and some other models present sequential and linear stages or phases through which individuals pass before pursuing higher levels. In his work on the importance of belonging, Kunc (1992) explains how some children are disenfranchised from the school community when schools operate by reordering Maslow's "Hierarchy of Needs." Kunc theorizes that schools violate Maslow's hierarchy by requiring children to earn the right to belong and be accepted by achieving an acceptable level as defined by the schools. This concept of belonging and acceptance was also mentioned by the parents as a possible expansion of the existing outcome pertaining to the development of a social network of personally meaningful relationships.

Although theories like Maslow's have certain logical appeal, they may pose potential limitations when applied to persons with developmental disabilities (Dennis et al., in press). Some theories tend to minimize the fact that human beings often function in more subjective, more complex, and less linear ways. People can operate on many levels at the same time without "prerequisite" hierarchical needs being met. For example, Viktor Frankl's (1959) accounts of his experiences as a survivor of the infamous Nazi death camp at Auschwitz include aspects of what Maslow described as self-actualization. Yet Frankl and other prisoners were subjected to some of the most horrific challenges to their basic physiological and safety needs, Maslow's two most foundational levels. Burton Blatt (1987) described the abstract, subjective, and temporal nature of valued life outcomes that defy more rational, linear explanations when he wrote, "There will necessarily be empty places, as it is equally certain that there will be times when there seems to be too much. . . . The brimming cup has little to do with the size of the cup or the temporary nature of contents. . . . It is all in the mind, and for sure in the soul" (p. 358).

Alternative views of valued life outcomes that are not linear and sequential frequently emanate from cultural rather than psychological perspectives. Examples of such views are offered by the native American Indian's "Circle of Courage" (Brendtro, Brokenleg, & Van Bockern, 1990) and "Optimal Theory," which is rooted in traditional African culture (Speight, Myers, Cox, & Highlen, 1991). In American Indian culture, the circle is a symbol of life. Historically, in native American culture, ". . . the central purpose of life was the education and empowerment of children" (Brendtro et al., 1990, p. 35). The Circle of Courage consists of four primary elements that represent a core of shared values: (a) belonging, (b) mastery, (c) independence, and (d) generosity. Because elements are continually interdependent, they are conceptualized as a circle.

Optimal theory reflects a traditional African, holistic world view of health and well-being that provides a

balance between the values of individual uniqueness and our common interdependence with others. Optimal theory has been depicted by Speight et al. (1991) as three overlapping circles of values and needs. Optimal theory purports that individuals find meaning in the area of overlap between the three spheres of (a) unique individual values and needs, (b) culturally specific values and needs, and (c) common human values and needs. Speight et al. (1991) suggest that in order to address adequately an individual's values and needs, all three spheres must be considered.

The additional valued life outcomes offered by parents in Study 2 are also supported in the literature that addresses quality of life issues for persons with disabilities (Blatt, 1987; Bradley & Knoll, in press; Devereaux, 1988; Schalock, 1990a, 1990b). The three areas identified by the parents responding to the Study 2 questionnaire included: (a) access to resources to meet basic needs (e.g., medical services, insurance, staff, money); (b) belonging and acceptance (e.g., being accepted by others, loved, cared about by others); and (c) the importance of personal growth (e.g., self-esteem, opportunities to contribute to one's own development and the community, spiritual development). The rich literature addressing theories of valued life outcomes should be drawn upon to develop and expand continually Part 1 of COACH (*Family Prioritization Interview*). Because valued life outcomes are foundational to all aspects of COACH, continued development and expansion of this section may have implications for changes in the *General Supports* part of COACH, which addresses supports provided to or for the student. Changes may serve to shift the nature of an educational program to achieve a better balance between emphasis on a student's skill attainment and receiving the supports required to pursue valued life outcomes. Many traditional educational models presume that improved functioning levels or student skill achievement is a vehicle to pursue valued life outcomes (Giangreco, Cloninger, Edelman, & Dennis, 1992). Fabian (1991) notes that there is no empirical evidence to support the assumption that there is a relationship between levels of functioning and the subjective well-being of an individual. Format, content, and presentation of COACH should reflect our expanding knowledge and research regarding these foundational valued life outcomes.

If COACH is to remain a viable tool, it will never be final and complete; rather, it will be in a state of constant change and improvement. Initial validation of COACH, or any tool, offers only temporal information that assists us in making decisions that will impact on the children with whom we work and their families. We must remain mindful of including families and students in the evaluation and improvement of our approaches and practices. This can be accomplished, in part, by continually challenging our current assumptions and

approaches in ways that allow us to expand our thinking, clarify our values, and refine our practices so that they reflect our beliefs. This alternating shift between divergent and convergent analysis is consistent with problem-solving methods that create opportunities for new ideas to be generated and implemented. These studies have provided initial social validation of COACH; future research must explore its real impact on students and families.

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