

# Impact of Planning for Support Services on Students Who Are Deaf-Blind

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**Abstract:** This article presents a study of the use of the Vermont Interdependent Services Team Approach (VISTA) by seven individual student planning teams and its impact on the students with deaf-blindness they educated in general education classes with individually determined support services.

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Although collaborative teamwork practices are widely acknowledged to be important and desirable characteristics of effective education for students with disabilities (Rainforth, York, & Macdonald, 1992; Thousand & Villa, 1992), it can be challenging to determine what, if any, impact such practices have on students' learning and ultimately on valued life outcomes. Even when collaborative teamwork strategies are used effectively, they are only one component among a constellation of indicators of quality that are necessary to pursue an appropriate Individualized Education Program (IEP) for a student with multiple disabilities, such as deaf-blindness (Fox & Williams, 1991; Meyer & Eichinger, 1994).

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The study presented here sought to explore potential relationships between the use of the Vermont Interdependent Services Team Approach (VISTA) (Giangreco, 1996), a collaborative teamwork approach for making decisions on support services, and outcomes for students.

## VISTA

### DESCRIPTION

VISTA includes four major activities: 1) general preparation (forming a team, learning about team members' skills, getting to know the student, and learning the VISTA process), 2) getting ready for the VISTA meeting (determining the components of the student's educational program), 3) conducting the VISTA meeting (considering potential support services as a team, evaluating suggestions based on criteria, and reaching a consensus on educationally necessary services), and 4) follow-up steps after the VISTA meeting (refined planning by subgroups, implementing the team's decisions, and evaluating the impact of support services).

Members of VISTA teams include parents, general education teachers (hereafter

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general educators), special educators, and related service providers who work with the students. The teams work to develop a shared framework, in part, by determining the components of students' IEPs, such as goals. Unlike many educational programs in which team members each develop a set of goals that coincide with their respective disciplines, VISTA teams develop learning outcomes that are "discipline-free"; that is, they are based on the educational needs of the students, rather than on specific areas representing the orientations of members' various disciplines. In the context of VISTA, educational needs are operationalized in an educational program with three interrelated components: 1) a small set of family-selected, discipline-free, high-priority learning outcomes to be restated as annual goals; 2) a broader set of additional learning outcomes that are based on parts of the general education curriculum that are appropriate for the student; and 3) a set of general supports for the student's sensory, physical, and personal needs, so the student can gain access to and participate in educational experiences designed to attain the learning outcomes. The educational program, determined before the VISTA meeting, is the focal point for the team members' discussions of and decisions on the needed support services.

During the VISTA meeting, a designated team member leads a guided discussion about each component of the educational program by asking the group members a series of questions pertaining to the proposed support services. The VISTA process provides the team with opportunities to consider the potential interrelationships among the various members' recommendations; actively explore the gaps, overlaps,

and contradictions in the recommendations; and consider the educational relevance and necessity of the proposed services. Using VISTA, the team determines what support services are needed, the mode and frequency of the services, where the services should be provided, and when their decisions should be reevaluated. In doing so, the team recommends services that are only as special as necessary, in part, by considering natural supports (such as classroom teacher, guidance counselor) before assigning specialists to provide support.

#### PREVIOUS RESEARCH

Four studies pertaining to VISTA were conducted before the one described in this article. The first was a pilot study of members of six individual student planning teams serving students with severe disabilities (Giangreco, 1994). This quasi-experimental, pretest-posttest study, based on an earlier version of VISTA, reported that VISTA did what it purported to do: increased intrateam agreement about support services; eliminated unnecessary gaps and overlaps in services, contradictory recommendations, and conflicts among team members; increased satisfaction with decision making; and resulted in recommendations for support services that were nearly 48 percent different from those made before VISTA was used.

An updated version of VISTA was reviewed by a panel of experts representing 11 national disability organizations representing various disciplines (Giangreco, Edelman, Luiselli, & MacFarland, 1996a). Among other findings, this study reported that the respondents considered VISTA to be relevant, logical, consistent with exemplary practices, and an important area of

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training and technical assistance for their members.

In addition, a more methodologically detailed, pretest-posttest study, based on the published version of VISTA, replicated and extended the findings of the pilot study (Giangreco, Edelman, Luiselli, & MacFarland, 1996b). It demonstrated, in part, that the use of VISTA 1) provided team members with an identifiable process for making decisions about support services, 2) increased the involvement of parents and general educators in decision making about support services, 3) tended to shift the provision of support services to the use of indirect services, 4) narrowed the focus of the involvement of support services, and 5) highlighted the need to clarify the use of special educators as providers of support services in general education classrooms.

The fourth study, based on extensive observations and interviews, described the qualitative aspects of the use of VISTA, including team problems that existed before VISTA was used, whether VISTA did what it purported to do, VISTA's impact on team members' practices and interactions, and consumer-based perspectives on the limitations of VISTA and suggestions for improvements (Giangreco, Edelman, Luiselli, & MacFarland, in press). The findings on consumer-based perspectives addressed a variety of logistical, communicative, interactional, and procedural issues that were used to create an updated supplement to the VISTA manual.

### **Research questions**

The aforementioned studies on VISTA addressed the experiences of team members

in using the VISTA process to make decisions about support services. The current study extended those earlier investigations by collecting data on the implementation of the decisions the teams made using VISTA. Therefore, the following research questions were posed:

1. To what extent do teams that use VISTA to make decisions about support services implement their decisions throughout the school year?
2. What impact does the use of VISTA have on the attainment of learning outcomes and valued life outcomes for students?
3. To what extent were disciplines (such as speech-language therapy and physical therapy) that were designated to provide services based on VISTA perceived as responsible for contributing to positive changes in the students' learning outcomes or valued life outcomes?

It is important to identify potential relationships among team planning practices, progress on learning outcomes, and valued life outcomes for students with disabilities. By exploring these relationships, researchers can identify more effective approaches for determining, implementing, and evaluating educationally necessary support services.

### **Method**

In spring 1996, data for the 1995-96 school year were collected from personnel in seven public schools in four states (Connecticut, Massachusetts, Utah, and Vermont) where students with disabilities who needed multiple support services were educated in general education classrooms

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(kindergarten and grades 1, 2, 4, and 7). The four male and three female students aged 5–13 were deaf-blind and were reported to have significant cognitive delays and additional impairments, such as orthopedic, health, and behavioral impairments.

#### **PARTICIPANTS**

The participants were 21 members of educational teams (19 women and 2 men): 7 classroom teachers, 7 special educators, and 7 parents (6 mothers and 1 father). Each triad of teacher, special educator, and parent corresponded to one of the seven students with disabilities described in the previous section. Data collection was directed to this subset of team members because they were most likely to be knowledgeable about the information pertaining to the research questions. The qualitative aspects of the study included information from the aforementioned and additional team members (speech-language therapists, occupational therapists, physical therapists, deaf-blind specialists, hearing specialists, vision specialists, orientation and mobility (O&M) specialists, classroom assistants, and administrators).

#### **DESIGN, DATA COLLECTION, AND DATA ANALYSIS**

The design of this descriptive study included both qualitative and quantitative components. For the qualitative component, the participants completed the Evaluation of Impact Process for Learning Outcomes (EIP) form (Giangreco, Cloninger & Iverson, 1998) for each learning outcome the team had identified as a priority after the student's VISTA planning had been in place for nearly one school year. The participants completed a total of

35 EIP forms, with an average of 5 outcomes per student (range: 3–7). To clarify the use of the term *valued life outcomes* in the EIP form, the authors gave the participants a list of valued life outcomes from *Choosing Outcomes and Accommodations for Children* (Giangreco, Cloninger, & Iverson, 1998), such as having meaningful relationships, being safe and healthy, having choice and control, and participating in meaningful places and activities. In two cases, the EIP forms were completed by the team member who served as the case manager. The other five sets of forms were completed collectively by four or more members per team. The EIP's seven queries were as follows:

1. What learning outcome was discussed?
2. Which valued life outcome or outcomes are facilitated through the learning outcome?
3. When was the last time this learning outcome was discussed by the team?
4. What has been done to teach the student this learning outcome since it was last discussed?
5. What progress has the student made on the learning outcome?
6. What changes, if any, has the student experienced on the corresponding valued life outcome?
7. What changes, if any, need to be made in the educational program to enhance the student's progress or facilitate the corresponding valued life outcome or outcomes?

The participants were asked to write responses to two additional questions: 1) "What other student progress has been observed?" and 2) "Please describe the

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impact, if any, that VISTA has had on the student's progress this year either directly or indirectly (e.g., through changes in attitudes or practices of team members)." The EIP documents and responses to the additional questions were analyzed inductively using categorical coding (Bogdan & Biklen, 1992) and a text-sorting program called *HyperQual2* (Padilla, 1992).

After the researchers received a team's EIP forms but before the analysis, each member of each triad completed a quantitative, follow-up questionnaire. In the first part of the questionnaire, the participants responded to two statements by circling a number from 1 to 10 on a Likert-type scale (from 1 = "strongly disagree" to 10 = "strongly agree"); they could also choose the option "don't know." The two statements were "Overall, I would characterize the student's progress on IEP goals and other learning outcomes during the 1995-96 school year as adequate or better" and "During the 1995-96 school year, our team implemented the educational and support service plans that were developed using VISTA (in spring 1995)."

In the second part of the questionnaire, the participants were given the following instructions: "For each of the school staff who were part of the student's educational team, please indicate the extent to which you believe that the discipline was responsible for positive changes in the student's learning outcomes and valued life outcomes (where 1 = 'not responsible for positive changes' and 10 = 'major responsibility for positive changes')." The school staff they considered were the classroom teacher (general educator), special educator, instructional assistant, speech-language therapist, physical therapist, occupa-

tional therapist, school nurse, hearing specialist, vision specialist, O&M specialist, deaf-blind specialist, and administrator. The participants circled NA (not applicable) if the discipline was not represented on the team. They were again given a list of valued life outcomes. An open-comments space was provided for explanations of responses. The data were statistically analyzed using the SAS system (SAS Institute, 1996). To facilitate some aspects of analysis, the 10-point scale was divided into three categories: 1-3 = low, 4-7 = medium, and 8-10 = high.

## Results

The qualitative and quantitative data are presented together for four topics: the student's progress; use of VISTA; impact of VISTA; and interrelationships among progress, use, and impact.

### STUDENT'S PROGRESS

The use of VISTA resulted in the development of educational programs, each of which included a set of learning outcomes that were priorities. It is not surprising that 16 of the 35 priorities selected were communication learning outcomes (see Table 1). In addition, 8 were personal management learning outcomes, and the remaining 7 were distributed across the areas of academics, socialization, leisure, and school. All the learning outcomes were purported to address one or more of three valued life outcomes: having choice and control that matches one's age and culture, participating in meaningful places and activities, and having meaningful relationships.

The mean score for the query, "Overall, I would characterize the student's progress

**Table 1**  
**Learning outcomes of students, by curriculum area (N = 35).**

Curriculum area	Number	Examples of learning outcomes
Communication	16	Makes choices, makes requests, greets others
Personal management	8	Mobility, self-feeding, dressing
Academics	4	Tracks, scans, differentiates, writes
Socialization	3	Engages in socially acceptable behavior
Leisure	2	Engages in active leisure activities with others
School	2	Participates in groups and class activities

on IEP goals and other learning outcomes during the 1995-96 school year as adequate or better" was 6.19 ( $n = 21$ ;  $SD = 2.92$ ) on the 10-point scale. A closer examination of the distribution of scores showed that 17 of the 21 participants rated the students' progress as medium (9 participants) or high (8 participants). These positive ratings of progress were substantiated by responses to the EIP questions. In addition to progress specific to the learning outcomes, the participants also reported general progress. For example, in reference to a first-grade student, the response was, "He can wear his hearing aids up to 20 minutes." With regard to other students, the comments were "Less frustration overall, calms quicker after being upset" and "Progress is slow but steady. With some more work he should be able to reach his goals."

The four low ratings were limited to two students. In these two cases, equipment problems (with an FM unit), resulting in the lack of access to communication, and frequent absences from school because of illness and increased seizure activity were considered significant factors in the respective students' lack of progress. With individual learning outcomes for which progress was characterized by such words and phrases as *variable*, *not consistent*, and *very little*, the participants frequently noted

that the learning outcome had not been discussed in a long time.

There was a fairly high level of intrateam agreement about the students' progress. In two cases, there was 100 percent agreement within the triad (1 triad = medium, and 1 triad = high). In the remaining five cases, there were minor differences, evidenced by combinations of adjacent scores (2 triads: 2 medium and 1 high, 2 triads: 2 low and 1 medium, and 1 triad: 2 high and 1 medium).

In response to the EIP question, "What changes, if any, has the student experienced on the corresponding valued life outcome?" responses were noted in three general categories. A number of participants did not answer this question or indicated that no change had occurred, particularly in cases for which little or no progress was reported. In cases for which some progress was reported and the question was answered, several responses were related to learning outcomes, such as toilet training, computer usage, or the ability to use language or to play, rather than to valued life outcomes. In the small number of cases in which the participants' answers were related to valued life outcomes, the responses were in two general categories: changes in the student's increased choice, control, and independence as result of learning new skills (like communication) and greater opportunities

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for the student to participate in activities with peers who did not have disabilities.

#### USE OF VISTA

In response to the query, "During the 1995-96 school year, our team implemented the educational and support service plans that were developed using VISTA (in spring 1995)," the mean score was 6.52 ( $n = 21$ ;  $SD = 2.71$ ) on the 10-point scale. A closer examination of the distribution of scores showed that 19 of the 21 participants rated the extent of their VISTA use as medium (10 participants) or high (9 participants).

There were lower levels of intrateam agreement about the extent of VISTA use than about the students' progress. In only one case was there 100 percent agreement within the triad (medium). There were four instances of minor differences, evidenced by adjacent scores (3 triads: 1 medium and 2 high, 1 triad: 1 high and 2 medium). In two cases, there was no agreement among the triads; one member each had scores in the low, medium, and high ranges.

#### IMPACT OF VISTA

In response to the query, "Please describe the impact, if any, that VISTA has had on the student's progress this year either directly or indirectly (through changes in attitudes or practices of team members)," the participants indicated that VISTA had made a positive contribution to their efforts. As one team wrote, "We knew our roles better, fewer people [were] involved, [and there] was less confusion and overlap." Other responses indicated that VISTA had helped the team to clarify the parents' goals for the year and had prompted the team to meet once a week. One team summarized their responses by stating, "VISTA has

forced us to look at Doug's day as a whole. The collaborative process of VISTA facilitates our communication as a team and keeps us all on the same page."

In response to the query, "For each of the school staff who were part of the student's educational team, please indicate the extent to which you believe that the discipline was responsible for positive changes in the student's learning outcomes and valued life outcomes," both similarities and differences were identified among the responses of general education teachers, parents, and special educators. All three groups indicated that the involvement of personnel with specialized knowledge and skills pertaining to deaf-blindness was responsible for positive changes in the student's learning outcomes, as evidenced by the high scores attributed to O&M specialists and deaf-blind specialists. All three groups also rated the impact of special educators, instructional assistants, and speech-language therapists as positive (above 5.5 on the 10-point scale). Each of these three disciplines were classroom or school based.

The responses of parents, special educators, and general educators also presented some interesting differences that may illuminate the dynamics of team functioning. For example, the mean scores of the parents were above 5.5 for the involvement of 11 of the 12 listed disciplines, whereas the mean scores of the special educators were above 5.5 for 9 of the 12 disciplines and those of the general educators were above 5.5 for only 6 of the 12 disciplines (see Table 2). In addition, only the parents and the special educators, not the general educators, had mean scores of above 5.5 for physical therapists, occupational therapists, general educators, and school nurses. Although the

physical and occupational therapists in the study were itinerant staff, the nurses were school based, and the general educators were classroom based. Even when the scores for physical therapists, occupational therapists, general educators, and school nurses were in the positive range, 68 percent of the responses were between 5.57 and 6.86 with fairly wide standard deviations, suggesting a modest and varied impact.

It is interesting that as a group, the general educators rated themselves lower ( $M = 4.86$ ,  $SD = 3.44$ ) than did the parents or special educators. A team-by-team examination of the scores indicated that only two of the seven teams rated the general educators' contributions above 5.5. And only the mean scores of the parents were in the positive range for school administrators, hearing specialists, and vision specialists (ranging from 6.40 to 1.00), suggesting that these 3 disciplines had the most limited positive impact of the 12 in the study.

#### **INTERRELATIONSHIPS AMONG PROGRESS, USE, AND IMPACT**

In the only two cases in which both the students' progress and the use of VISTA were rated high or medium by all three members of the triad, the impact of the general educators was rated 10 or 9 by all of them. These two situations were marked by relatively high levels of intrateam agreement and were the only two in which the perceived impact of the general educators was rated so highly. In the remaining five cases in which the student's progress was rated medium (four cases) or low (one case), there was less intrateam agreement and the scores for the perceived positive impact of the general educators ranged

from 7 to 1, with 73 percent of those scores falling in the negative half of the 10-point scale (below 5.5). In four of these five cases, the use of VISTA was also rated medium. In one case, the student's progress was rated low even though the use of VISTA was rated high. As was stated earlier, the participants stated that the student's low progress was due to equipment problems that interfered with access to communication.

#### **Discussion**

The findings of this study suggest that 1) the use of VISTA was a positive contributing factor in the educational progress of some students in this study; 2) the greater implementation of decisions made using VISTA increased the likelihood of positive student outcomes; 3) disciplines that were perceived as having the most positive impact on a student's progress were those that either had highly specialized skills to offer (such as the deaf-blind specialist) or were school- or classroom based (such as special educators, speech-language therapists, and instructional assistants), rather than itinerant; and 4) a student's progress was rated most highly when the contributions of the general educator were rated most highly.

Although these findings offer potentially valuable information on the impact of collaborative team functioning on students' outcomes, caution should be used in generalizing them, partly because of the small number of participants and the highly specific nature of the research sites (general education classrooms in which students who are deaf-blind receive multiple support services). In the two cases in which the case



**Table 2**  
Positive impact of various disciplines.

Discipline	Parents			Discipline
	<i>n</i>	<i>M</i>	<i>SD</i>	
O&M instructor	2	9.50	0.71	Deaf-blind specialist
Deaf-blind specialist	4	9.00	0.82	O&M instructor
Special educator	7	8.00	1.91	Instructional assistant
Physical therapist	6	7.50	0.84	Physical therapist
Instructional assistant	7	6.88	3.18	Occupational therapist
Occupational therapist	4	6.50	3.70	Hearing specialist
Vision specialist	5	6.40	2.70	General educator
School administrator	5	6.40	3.78	Speech-language therapist
General educator	7	6.00	3.37	Special educator
School nurse	3	5.67	4.04	School nurse
Speech-language therapist	7	5.57	3.95	School administrator
Hearing specialist	3	4.67	3.51	Vision specialist

managers-special educators completed the EIP forms, it is unknown whether their responses reflected those of the general educators and parents. In addition, responses to questionnaires are always subject to idiosyncratic interpretation.

A finding of concern in this study was that team members do not necessarily implement the decisions they have made as a team using VISTA. This concern may be related to the fact that only in the two cases in which all members of the triad considered the general educators to be significant contributors to the students' progress were both the students' progress and the use of VISTA rated highly. When general educators are less involved in teaching the students with disabilities who are in their classes, they are less likely to have expectations of and responsibility for the students' progress. This finding is of concern because the results suggest that there is a positive relationship between a student's progress and the involvement of the classroom teacher. Furthermore, it is consistent with the findings of earlier research (Giangreco, Edelman, Luiselli, & MacFarland, in press), which indicated that general educators are not sufficiently involved in decision

making about the use of support services even though they spend the most time with students in the classroom. When general educators play a substantive role in planning for support services, they seem to be more likely to implement the team's decisions and are subsequently perceived as contributing substantially to students' progress.

Historically, decisions about support services have been made autocratically by specialists, with perfunctory agreement by the rest of the team (Giangreco, 1990; Giangreco, Edelman, & Dennis, 1991). If the VISTA process is used inappropriately, this pattern of decision making for support services will be maintained. Therefore, it is incumbent on teams to ensure that all appropriate members, including general educators and parents, are continuously involved in decision making.

The perceived contributions of various disciplines also present some interesting implications. First, that the parents rated 11 of the 12 disciplines positively lends support to the findings of previous studies that families may advocate for a "more is better" approach to the provision of services (Giangreco, Edelman, MacFarland, &

Special educators			Discipline	General educators		
<i>n</i>	<i>M</i>	<i>SD</i>		<i>n</i>	<i>M</i>	<i>SD</i>
5	8.20	1.30	O&M instructor	1	9.00	—
2	8.00	1.41	Special educator	6	6.83	2.64
7	7.29	2.29	Instructional assistant	7	6.57	2.76
6	7.00	2.19	Speech-language therapist	6	6.33	2.94
4	6.25	3.86	Deaf-blind specialist	5	6.20	2.95
2	6.00	0.00	School nurse	5	5.80	2.86
7	5.86	3.02	Physical therapist	7	5.43	2.37
7	5.71	2.36	Occupational therapist	4	5.25	1.71
6	5.67	2.50	General educator	7	4.86	3.44
5	4.80	3.42	School administrator	6	4.67	3.01
7	4.57	3.41	Vision specialist	4	3.75	3.40
4	4.00	1.83	Hearing specialist	2	1.00	0.00

Luiselli, 1997; Giangreco, Edelman, Luiselli, & MacFarland, in press) even though such an approach confuses quantity with value (Giangreco, 1996). Second, that the general educators rated only 6 of the 12 disciplines positively suggests a potential area of conflict between parents and teachers and the absence of a shared framework. Third, the general educators' responses reflect a model that relies heavily on the provision of regular, ongoing support services (such as by special educators, instructional assistants, and speech-language therapists) and the need to draw on those with special expertise either to provide specific services that a particular child needs or to build the capacity of core team members.

In this study, the respondents indicated that O&M specialists and deaf-blind specialists had a positive impact on students' progress. Given a different population (such as students with orthopedic impairments), one might expect to see different specialists (such as physical or occupational therapists) valued the same way. As teams more closely scrutinize the supports they provide for students with disabilities, the authors suggest that they also carefully

consider the use of natural supports (such as teachers and peers), those that would be available even if the students did not have disabilities.

In considering these data, the authors were prompted to shift their thinking from "Who can help?" because this question can lead to unnecessarily large teams, which, according to general educators, are often not helpful to students, to "What services are really needed for students to receive an appropriate education?" Considerations of the latter question can lead to attempts to limit the size of teams to a reasonable number, more efficiently use staff who are likely to be available at school, and draw on the specialized skills of itinerant specialists as needed and for specific reasons.

For example, the participants may have judged that hearing and vision specialists have a limited impact on students' progress because these specialists' skills significantly overlap with those of other disciplines or because neither discipline has addressed the needs of students who are deaf-blind. Therefore, it should be an acceptable option for a team to decide that since the skills of a particular discipline are already available, input from that profes-

sional is not needed at a particular time. Such a decision would allow the team members to explore ways to gain access to the skills of a discipline in ways that build the capacity of those who spend the most time teaching the child. Thus, the team might use itinerant specialists to deal with certain issues for time-specific consultations or share specialized skills among the disciplines. By addressing these and other support service issues, the field can add to the constellation of practices necessary to create classrooms in which students with unique needs, such as those with deaf-blindness, can be successfully educated with their peers who do not have disabilities.

Future research should explore the factors that contribute to or interfere with the integral involvement of general educators and parents in the education of students with disabilities and find better ways to use the skills and resources of team members. In part, such studies should investigate methods of evaluating the impact of support services on students' access to education, achievement of important learning outcomes, and pursuit of valued life outcomes. The goal of this research should be to determine how support services can more effectively meet the educational needs of students with disabilities in general education settings. Additional research should explore whether providers of support services, who are often accustomed to working in clinical or more specialized settings, have the knowledge and skills to work collaboratively with others in the context of general education.

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