

Natural Environments: Service and Advocacy for Children Who Are Visually Impaired or Deafblind

Background

The purpose of this paper is to look at the viability of specialized groups as a service option that enhances the development of children with visual impairments and their families. This paper is an attempt to outline some of the core issues relative to the natural environments section of Part C of *Improving Education Results for Children with Disabilities Act* (formerly IDEA) as it relates to children with visual impairments and their families (birth through age 3). It is a compilation of input received from professionals and family members at the Early Connections Conference in Vancouver, B.C. (2000) and the International Preschool Seminar in Oregon (2001).

Overview of Natural Environments Legislation

The natural environments language of Part C of *Improving Education Results for Children with Disabilities Act* reads as follows:

“...to the maximum extent appropriate, early intervention services are provided in natural environments: and the provision of early intervention services for any infant or toddler with a disability occurs in a setting other than a natural environment that is most appropriate; as determined by the parent and the individualized family service plan team, only when early intervention cannot be achieved satisfactorily for the infant or toddler in a natural environment.” (H. R. 1350)

Decisions about where the services are to be provided are made within the Individualized Family Service Plan (IFSP) process by the IFSP team, which includes the child’s parents. The IFSP for each infant or toddler receiving early intervention services must include a statement of natural environments ***“...in which early intervention services will be appropriately provided, including a justification of the extent, if any, to which the services will not be provided in a natural environment.” (H. R. 1350)***

Definition of Natural Environments

There is a growing body of research and literature directed at defining what is meant by the term “natural environments.” Initially, environments were defined as places, but the growing trend is to broaden their scope as follows:

“First, natural learning environments are not places but rather the experiences afforded children in the context of activity settings that make up the fabric of family and community life. Second, defining natural environments as necessitating the joint presence of children with or without disabilities or delays is limited and not consistent with research.” (Dunst 2001)

When we discuss the area of service delivery in natural environments, we are **not** discussing a specific placement as we do under Part B, but rather an array of services, that is, one component of a mix of services provided to a child with visual impairments and to their family. Natural environments should be viewed as services provided within a family's daily routines and should be driven by the outcomes decided upon in the IFSP.

Services to infants and toddlers and their families do not follow a linear model of development. As the medical, developmental, and/or environmental issues of the child and family change over time, so do the family's needs and the capacity and/or the ways the family copes with those changes. The strength of the IFSP and the emphasis on working within the family's routines is that it encourages flexibility to meet the unique needs of each child and family.

If only one option to achieve goals is given in any service provision model, then the service system falls short of the intent of the natural environments mandate. For example, if services are only provided in segregated groups or only within the child's home, then full utilization of the variety and range of settings or routines in which services could be provided to achieve outcomes would seem to fall short of the scope of the mandate's intent.

Although several states have taken a realistic perspective on the implementation of this mandate, many states have interpreted this section of the law in a manner that has resulted in decreasing service options for the healthy development and growth of both the child and their caregivers. These states have interpreted the law as requiring that services are only received in environments where non-disabled peers are present and that disability specific groups or segregated groups are not a viable service option. In these states clinical justification of these services has been ignored and only integrated learning opportunities have been deemed as appropriate and fundable group options.

The natural environments mandate, however, does allow for justification of disability specific services.

Unique Developmental Needs of Children with Visual Impairments

The unique needs of the young child who is blind or visually impaired demand special consideration when natural environments implementation is being evaluated by the IFSP team.

The intention of Part C was for all children with disabilities to have equal opportunities to learn, but children with visual impairments or deafblindness have unique needs that bar them from learning in the same way that sighted children do.

“Most children learn incidentally, without specific instruction, because they have watched someone else do something, or because they associate what they have seen with what they have heard. Children with blindness and visual impairment do not have this advantage and often must be specifically taught what other children learn incidentally.”(Ferrell 1997)

Because an estimated 75% (Gold, Tait 2004) of early learning is visual, each child with a visual impairment learns differently and requires teaching strategies, activities, and environments that support and encourage developmental progress. The sighted child sees color, size, shape, texture, distance, facial expressions, gestures, and gender—all in one glance. In a tenth of a second, the sighted child can absorb a range of concepts; however, each of these concepts will need to be taught specifically and individually to the child with visual impairments. The child with visual impairments knows only what can be touched, that is, the world within arm’s reach. He must be guided to use all his senses to form an understanding of the objects and experiences within that world.

“Blind children, deprived of the visual connection with objects to one degree or another, must learn other, less direct ways of communicating with the object-world or learning about it—trusting its very existence apart from their physical connection with it. For a child who is blind and can hear, the ear and sound begin to substitute for the eye and sight.” (Miles, Riggio 1999)

The sense of sound alone, however, does not allow the child with visual impairments to develop an understanding of his world. The use of touch must be developed and refined to allow the child to truly interact with and understand the qualities of activities and objects in his world. For the child with visual impairments, the effective use of hearing and touch are skills that must be taught to allow the child full access to learning. Learning truly becomes an “in my hands” experience.

“Although infants and young children with visual handicaps are more alike than different from other children, it is the differences in learning style that must be addressed by specialized educational services. When vision is impaired, learning is often disorganized and fragmented; all areas of development are affected and concepts are altered.” (DVH-DEC Position Paper 1990)

A visual impairment also has an immediate and lasting impact on the family. The

psychological reaction experienced by parents, brothers, sisters, and extended family members at the time of diagnosis cannot be over-emphasized. So much of early infant-parent bonding is based upon eye contact between the parent and the child. How many of us recall that magic moment when our child first seemed to focus on our face, to look at us intensely? Open any book on parenting and you will find pictures of these magic moments. For parents of children with visual impairments, however, this special bonding moment will have to be found in observing and connecting to other behaviors of their child. These connections and the responsiveness of the child may be found in body language or hand movements rather than in the child's facial expressions. (Fraiberg 1977)

Caregivers "of blind infants must learn the many ways their children show signs of attention, excitement, exploration and anticipation." (Miles, Riggio, 1999)

As soon as the visual impairment is identified the family and child should have available, ongoing, individualized support and specialized services from providers trained and knowledgeable in the impact of visual impairments on the child and family. Development and implementation of these supports and services are at the heart of the IFSP process.

The Individual Family Service Plan: A Tool for Change

Services for infants and toddlers and their families are based upon the IFSP. This tool is used to document eligibility for services, assessment results, the child's developmental levels, desired family outcomes and strategies, the service delivery plan, and transition planning for the child.

The IFSP is meant to be a collaborative document developed jointly by early intervention professionals and the family of a child with special needs to address the priorities and concerns of the family. Based upon assessment both of the child and of the family's resources, the IFSP team develops the plan to enable the child and family to attain their desired outcomes.

The strategies to achieve these outcomes should be driven by the jointly established goals of the family and child. A variety of appropriate service options should be available to implement these strategies and achieve the desired outcomes.

The IFSP is meant to be a fluid document with periodic updates. It is revised to reflect the child's developmental changes and changes in the family's resources, priorities, concerns, and strengths. Revisions may include what services are provided, where the services are provided, and by whom and how often the services are provided.

The array of services provided should be driven by the changing priorities, concerns, and resources of the family, not by a preset model of services. During the past few years, there has been a growing emphasis on providing services within natural environments: settings where children with disabilities can be around their non-disabled peers. As with many newly-emphasized mandates, the definition of natural environments and settings has become a widely interpreted issue with some states choosing not to fund disability-

specific group services and to ignore the opportunity that exists within the law to justify such services.

Most recently, the definition of providing services within natural environments has centered on embedding services within the family's everyday routines, activities, and places. The priorities, concerns, and resources identified in the IFSP guide the family in the identification of routines. Service providers should look at the child's and family's daily routines and attempt to deliver services within that context. This more functional definition enriches service delivery options and should encourage states and providers to offer a full array of services within settings designed to meet the outcomes of the child and family.

For families of children with visual impairments, this array of service options should include the opportunity for specialized services to meet each child's unique developmental needs and the family's concerns about raising a child with visual impairments.

Participation in Specialized Groups: The Family

A natural way to learn the skills of parenting while encouraging the child's development and future relationships is to get together with other families. Each of us, within our family, develops routines that serve our needs at a particular time, and we adapt or change these routines as our children or family issues change. Many of us seek out or establish connections for ourselves and our children with adults or children who share our common interests or concerns. In the case of families of children with low incidence conditions such as visual impairments or deafblindness, making connections that establish a sense of parental and child competence are crucial.

One way to foster the sense of connection and to increase understanding of the child and the impacts of visual impairments on children is through specialized parent-child groups. Many families, still coping with the birth of a child with a visual impairment or deafblindness, are not ready to be placed in groups with non-disabled children.

If a parent is the only one in the group whose child has a visual impairment, he or she may experience further feelings of depression or a sense of failure since parents would naturally compare their children to other children in the group. Initial participation in a specialized parent-child group, however, can enhance the development or establishment of the ability to parent a child with visual impairments, since the parent sees her child's development in relation to other children with visual impairments.

Additionally, a parent has the opportunity to share her stories with other parents in a similar situation. Without the existence of such specialized groups, a family's opportunity to establish a routine that enables them to achieve their child and family outcomes in a timely and meaningful way is limited.

For example, one of the most common issues in these parent groups is how to deal with other people's reactions to their child's visual impairment. Parents of newly diagnosed

children share their fears, anger, and frustrations with parents of older children and from them learn strategies in how to cope and respond. These strategies have greater meaning and impact coming from other parents who are also living the situation than from professionals.

There is no one service option or mix to address all family and child outcomes. As a family's IFSP is developed and evolves, it has to remain sensitive to changing family and child dynamics. Just as it is not appropriate to insist that all children with visual impairments and their families attend a specialized group, it is equally inappropriate to discuss such an option for a child with visual impairments, or any disability, and their family. It is important to note that these groups are allowable with justification under both the previous and current legislation.

The mix, frequency, location, and type of services will need to be reassessed throughout the child and family's early intervention service period. As we develop the IFSP with the family as core members of the team we should view *all* child and family services as developmental. Our goal is jointly to optimize child and family development and to achieve readiness for the transition to school age services at age three. The path that each child and family will take toward this goal will vary, and our service system must be sensitive and responsive to unique family differences and needs.

The IFSP should reflect a truly collaborative process among the family, the early intervention program, and the teacher of the visually impaired and/or deafblind as they jointly assess and define concerns, priorities, and strengths. Families should be informed of the roles of all professionals involved with them in the development of their child's IFSP, and they should participate fully as a member of the team in determining the best ways to achieve their child and family outcomes.

Participation in Specialized Groups: The Child

After discussion of the family's needs, concerns, and priorities, and the development of outcomes by the IFSP team, the array of service options is presented to the family. When appropriate, a specialized, center-based program for young children with visual impairments, staffed by personnel with expertise in visual impairments, may be justifiable as an IFSP service option.

The specialized program offers an environment of peers whose means of learning and socializing closely matches those of the child. **An estimated 75% of early learning is visual; therefore, the child whose vision is impaired needs a different approach that includes structured teaching strategies and multi-sensory activities and environments that foster developmental progress.**

Specialized groups can provide opportunities for the child with visual impairments or deafblindness to develop competence in developmental areas that can translate to other environments. Just like any grouping of children without disabilities, a grouping of

children with visual impairments is heterogeneous and provides multiple opportunities for learning from one another. Organized settings and activities that enhance the child's compensatory or developmental skills provide the means to demonstrate and assess needed adaptations for all environments.

The goal of specialized groups is not to isolate children with visual impairments and their families and should never be the only service option. Rather, when combined with other service options such as home visits and community-based experiences within the family's routines, it provides an additional path to family/child competence. Based upon the family/child outcomes from the IFSP, the use of a specialized environment that encourages child/family competence and mastery of compensatory skills may be justifiable to facilitate the transition of the child into community settings.

What Makes a Specialized Center Program Unique?

Qualified Personnel

- Regular and frequent access to the Teacher of the Visually Impaired, whose training includes Structure and Function of the Eye, Functional Vision and Developmental Assessment for Young Children with Vision Impairments, and Learning Media Assessment for Children who are Visually Impaired.
- Regular and frequent access to a Teacher of the Deafblind whose training includes the study of the implications of dual sensory impairments of vision and/or hearing loss on development, Developmental and Communication Assessment, and competence in techniques that foster the development of these skill areas.
- Regular and frequent access to the Orientation and Mobility Specialist, whose training in interpretation of environmental sound cues, spatial awareness, and mapping skills for the young blind child prepares the child and family to move more confidently out into the community.

Specialized Strategies

- **Pacing** of program activities is slow and deliberate, allowing the child time to fully explore the physical and social environments.
- Stress on **use of language** to label objects and to describe activities in which the child is engaged.
- **Real objects** are used in place of replicas.
- **Frequent repetition** of common actions and activities helps the child who is blind/visually impaired internalize what sighted children see again and again, and creates opportunities for hands-on practice.

- A **structured approach** allows the child to function in a more predictable world and to generalize his knowledge to all environments and situations.
- **Small child to teacher** assures ongoing access to information and the environment
- A **process approach to learning** fosters the development of compensatory skills of touch, hearing, residual vision, taste, and smell as tools to concept development and organization of the child's world and experiences.
- Engagement in **readiness activities** involving pre-braille and early literacy experiences are integral parts of the program.
- Opportunity to develop and practice **orientation and mobility skills** in a safe and predictable environment.

Access to Peers

“Issue VI: Educators must ensure that students receive appropriate opportunities to participate with peers who are blind or visually impaired, as well as with those who are sighted.” (Pugh, Erin 1999)

“For most individuals, who do not have disabilities, grouping by competence is not seen as unusual or unnatural. Why, then, doesn't this same thinking apply to individuals with disabilities?” (Bricker 2001, 13(4) 21-31)

Families emerging into community life with their children are often eager to access activities in settings that meet their child's needs with peers who are learning at a similar developmental level and pace.

These desires are the same for parents of children with visual impairments whether or not they have additional disabilities. By observing their child in the company of others with similar needs, the family is better able to understand their child's needs and skills and to participate in the IFSP process. Their enhanced sense of competence and understanding of the developmental issues of children with visual impairments will enable them to effectively describe the needs and skills of their child to extended family and community members. They will be more effective advocates for appropriate services and for the inclusion of their child in a broader range of community based experiences.

Off To A Good Start: Transition

“States must additionally assist service providers in developing transition outcomes for both the child and family that include identifying community supports that can be used during and after the transition to preschool services, which can further assist the

family in developing mechanisms for addressing the needs of the child both within the home environment and in community settings.” (Sandall and Ostrosky 2000)

Although the following statement was written to describe services in the natural environment, it also applies to specialized services:

“One benefit of providing services in such settings is the early interventionist can model effective techniques for the parent or child care provider. These interventions can then be used throughout the child’s daily routines, at times when the young child is physiologically and psychologically ready for interaction”. Kleinhammer, Tramill, and Rosenkotter 1994)

When a child with visual impairments moves from specialized services to community-based services, he is best served when staff and family work together to exchange information. This helps ease the child and family into a new setting with a positive outlook for future success.

Strategies That Foster Smooth Transitions

- Staff from the new setting observes effective techniques modeled with the child and family in the specialized program.
- Staff from the specialized program offer individual/group training for new staff members regarding the development of young children with vision impairments and techniques most effective with this population.
- The orientation and mobility specialist accompanies the child to community settings before he/she starts in the program and when the environment is not in use to allow the child time to map the new space and experience its unique features, thus promoting safe mobility practices indoors and out.

This collaborative participation in the transition IFSP/IEP promotes awareness of all community services, fosters successful planning, and supports the benefits of seamless service provision for the child and family.

Conclusion

Successful early intervention is founded upon the collaboration of providers and families in serving children with disabilities. It is, however, the family and/or other caregivers who extend the learning of the child with visual impairments or deafblindness across the day. Their ability to do so is founded upon their confidence and competence in understanding their child and the appropriate interventions that enable learning.

“Among the personal characteristics likely to be most potent in affecting the cause...of development...are those that set in motion, sustain, and encourage processes of interaction between the [developing] person and two aspects of the proximal

environment: first, the people present in the setting; and second, the physical and symbolic features of the setting that invite, permit, or inhibit engagement in sustained, progressively more complex interaction with an activity in the immediate environment.” (Bronfenbrenner 1993, 11)

When appropriate, the use of a specialized environment that encourages child/family competence and mastery of compensatory skills may be justifiable to facilitate the transition of the child into community settings. Based upon the identified outcomes of each child’s IFSP, participation of the child with visual impairments and their family within specialized settings should be considered as **one** possible component of an array of services to attain their developmental goals.

Strategies to Address Natural Environments Issues

Legislation/Regulation Changes

- **Advocate to clarify the Natural Environments language in Improving Education Results for Children with Disabilities Act (formerly IDEA), in the development of the regulations.**

The term “segregated” used in the former regulations should be replaced by the word “specialized,” to clarify that the goal of developmentally appropriate, specialized services is not to isolate the child and her family but rather to offer child/parent group options to address specific needs and issues of children with visual impairments or deafblindness.

- **Advocate that in any revision of Part C regulations it is critical that the ability to justify specialized groups as a service option be clearly defined within the Natural Environments language so that states that have categorically refused to allow these services will broaden their philosophy and practice.**

Part C has set the goal of full inclusion as the ultimate outcome for children with disabilities.

- **Advocate for the full utilization of the IFSP process as a tool to achieve this goal and foster child and family development and allow for the utilization of an array of service options. Although the common outcome may be inclusion in society, the paths to competence and development will vary for each individual child and their family.**

ADVOCACY

The Early Connections meeting generated discussion on current implementation measures in each state and on recommendations for state level efforts to influence decision-making. Six priorities emerged from the discussion, which may serve as

preliminary guidelines for parents and professionals to offer input to federal and state decision makers on the issue of specialized services birth to age three. (Bernas - Pierce, Miller 2000)

1. Increased visibility at the state level

Take every opportunity to be visible and involved in the Natural Environments implementation process within your state by:

- Communicating with policy makers.
- Offering public input to decision-making bodies.
- Becoming active members of interagency coordinating councils.
- Facilitating family presentations in public forums on the unique needs of the child with visual impairments and addressing the diminished role of the family voice in program decisions related to Natural Environments.

2. Professionals in the field of early childhood vision impairment must join with other disability groups affected by the Natural Environments regulations.

Natural Environments regulations affect all center-based settings for infants and toddlers with disabilities, not just for children with low incidence disabilities. Joining with other professionals in the state to inform and influence decision making strengthens the message and expands the pool of creative solutions.

3. Presenting a uniform message to state decision-making committees is essential.

- Professionals in the field of visual impairments have long recognized the value of providing services for children with visual impairments within Natural Environments.
- States should acknowledge the ability to justify specialized groups as one of the service options available to meet the needs of children with low incidence conditions when identified on the IFSP.
- These services should be appropriately funded as a viable service option under Part C.

4. The field of early intervention visual impairments must articulate the unique components of best practice in center-based programs for infants and toddlers with vision impairments and their families.

Answering the question, “What are the unique elements of programs designed for toddlers with vision impairments?” is not only critical for the field as a whole, but it is also at the core of justification of specialized services as required by Natural

Environments regulations.

- 5. Professionals must include justifications as an integral part of the IFSP to insure that the unique needs of each child who is visually impaired are met with appropriate services in both specialized and community-based settings.**

Justifications must clearly state that environmental and social adaptations will provide full access to the tools of learning for each child.

- 6. Personnel preparation programs are key to preparing teachers of the visually impaired or deafblind and orientation and mobility specialists for their roles as partners and advocates with families in the early childhood special services system.**

Personnel preparation programs should provide training in the knowledge and skills necessary to work with infants and toddlers and their families. Professional competence in helping families of infants and preschoolers to understand vision impairment and its impact on early development and the family's role as advocate for their child in developing the IFSP will be central to the family's entry into and success within early intervention and the transition to school age services.

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REFERENCES

- Bernas-Pierce, J. and Miller, T. 2000. Report to AFB Committee on Specialized Programs. Unpublished.
- Bronfenbrenner, U. 1993. The Ecology of Cognitive Development: Research Models and Fugitive Findings in *Development in Context: Acting and Thinking in Specific Environments*. Hillsdale, NJ: Erlbaum. 3-44.
- Chen, D., Center-based Programs for Infants with Visual Impairments and Their Families: Natural or Unnatural Learning Environments? *Journal of Visual Impairment and Blindness*, (1999): 390-392
- Crane, P. and D. Cuthbertson *Equals in Partnership*. Watertown, MA: Perkins School for the Blind. 1997.
- Dunst, C., et al., Characteristics and Consequences of Everyday Natural Learning Opportunities. *Topics in Early Childhood Education*, Summer, 21:2 (2001): 68-92.
- Ferrell, K. 1990. *Family Focused Services for Infants and Young Children with Visual Handicaps* in Division of Visually Impaired-CEC Position Paper. Raleigh, NC: XIV International Seminar on Preschool Blindness.
- Division of Visually Impaired-CEC Position Paper. *Family Focused Services for Infants and Young Children with Visual Impairments*, XXII International Seminar on Preschool Blindness Berea, KY., 2004
- Fraiberg, S., *Insights from the Blind*. New York: Basic Books. 1977.
- Gold, D., Tait, A, (eds.) *A Strong Beginning: A sourcebook for health and education professionals working with children who are visually impaired or blind*. Toronto, Canada: Canadian National Institute for the Blind, 2004.
- H. Res. 1350, 108th Congress. *Congressional Record*, Rec. (2004): H9919.
- Kleinhammer, Trammell, and Rosenkotter, Natural Environments and Inclusion, *Young Exceptional Children*. Monograph Series No. 2.
- Miles, B. and Riggio, M., *Remarkable Conversations*. Watertown, MA: Perkins School for the Blind. 1999.
- Pugh, G.S., & Erin, J. (eds.) *Blind and Visually Impaired Students: Educational Service Guidelines*. Watertown, MA: Perkins School for the Blind. 1999.
- Sandall M. and Ostrosky, O., eds., 2000. Natural Environments and Inclusion, *Young Exceptional Children*. Monograph Series No. 2.