

Growing Up Naturally

Early Intervention
in Natural Environments

A Guidance Document for
Early Intervention Providers
in North Carolina

Together
We Grow



North Carolina Early Intervention Services

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Division of Public Health, NC Department of Health & Human Services

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Purpose



One of the most exciting and rewarding aspects of early intervention services is the focus on natural environments. It has a myriad of benefits for children, families, and the programs that serve them. The impact of these benefits reaches all children, not just those with special needs.

Natural environments is not a new concept for families and service providers in North Carolina. Since the first early intervention programs were funded in the early 1970s this service has been carried out in children's homes and in other community settings such as child care centers. Also, opportunities to stimulate development and learning occur in the context of routines and activities that are part of the child's daily life. This focus on serving children in the natural settings in which they typically spend time was intensified in the 1997 reauthorization of Part C of the Individuals with Disabilities Education Act. State policies such as the Infant-Toddler Program Regulations and the North Carolina Birth to Five Interagency agreement have subsequently reinforced this direction. Equally important are the professional and parent interests in this concept and the growing body of research supporting the practice.

In recent years however, factors such as a significant increase in the number of children referred to early intervention and the greater diversity and complexity of their needs have made a systematic, high quality approach to natural environments more challenging for everyone.

The purpose of this document is to provide practical information and guidance for early intervention administrators, service providers and others. It was developed by parents and professionals here in North Carolina. It addresses such underlying questions as 'what,' 'why,' and 'how' from the perspective of the North Carolina statewide interagency system of services for infants, toddlers and preschoolers. This document is not a static one; rather it will be updated periodically to reflect new research and examples of recommended practices. Consequently, input on the format and content is welcome at any time.

Mission of the NC Early



& Guiding Principles Intervention System

The NC Early Intervention System Together We Grow program is designed to support children who have or are at risk for disabilities, ages birth through 5 years, and their families. It includes the Infant-Toddler Program (birth–2 years) mandated by Part C of the Individuals with Disabilities Education Act (IDEA) and the Preschool Program (3–5 years) mandated by Part B (Section 619) of IDEA. Its mission is to ensure that all families have equal access to a coordinated program of comprehensive services and supports that:

- foster collaborative partnerships among families and service providers
- are family centered
- occur in natural, least restrictive settings
- reflect current recommended practices in early intervention
- are built upon mutual respect and choice
- are evaluated systematically to ensure system and cost accountability.

Principles guiding the provision of early intervention supports and services reflect this coordinated, collaborative, and family-centered approach.

1. Children’s optimal development depends on their being viewed first as individuals with unique strengths. The presence of a disability is not the defining characteristic of any child.
2. A child’s family members are usually the primary individuals supporting and nurturing the child’s growth, development, and learning.
3. Early intervention is most effective and comprehensive when providers collaborate with families and other professionals to plan, deliver, and evaluate services.
4. All children have the right to belong to and participate fully in their communities. Children with disabilities and their families have the right to receive services within the typical routines, activities, events, and settings of everyday life.
5. Everyday routines, activities, and places offer countless opportunities for children to learn and develop.
6. Quality of life is enhanced for families when their preferred routines are maintained and when their beliefs and values are respected.
7. In recognition of the benefits of early childhood inclusion identified through research, the early intervention system promotes opportunities for children with and without disabilities to learn with and from each other.

Why Natural Environments?

Interest in natural environments as sources of young children’s learning and development is not new. Researchers and educators in many fields have recognized that children learn and develop in the context of their environments and have studied how everyday lives affect children’s health, physical, social, and educational outcomes. There are at least three rationales for providing early intervention services in natural environments. In addition to the foundation provided through federal legislation, research and common sense provide the educational and practical rationales for using natural, least restrictive environments.

Legal Foundation

In the field of early intervention, the term natural environment first appeared in the Federal Register in 1989 in regulations for the Education of the Handicapped Act Amendments of 1986 (Public Law 99-457). The term appeared in the law for the first time in the Individuals with Disabilities Education Act (IDEA) Amendments of 1991 (Public Law 102-119) and later in the 1997 amendments of IDEA (Public Law 105-17).

The following are relevant sections of the legislation related to natural environments from the IDEA Part C regulations at 34 CFR Part 303:

- “To the maximum extent appropriate to the needs of the child, early intervention services must be provided in natural environments, including the home and community settings in which children without disabilities participate.” 34 CFR 303.12(b)
- Each state participating in IDEA, Part C must establish and implement policies and procedures to ensure that
 - 1) “To the maximum extent appropriate, early intervention services are provided in natural environments; and
 - 2) The provision of early intervention services for any infant or toddler occurs in a setting other than a natural environment only if early intervention cannot be achieved satisfactorily for the infant or toddler in a natural environment.” 34 CFR 303.167 (c)
- “Natural environments means settings that are natural or normal for the child’s age peers who have no disabilities.” 34 CFR 303.18
- Each Individualized Family Service Plan (IFSP) must include a statement of “the natural environments, as described in 303.12(b), and 303.18 in which early intervention services will be provided, and a justification of the extent, if any, to which the services will not be provided in a natural environment.” 34 CFR 303.344 (d)(ii)



For children ages 3–5 years, Part B of IDEA requires a continuum of placement options and promotes the least restrictive environment as a first option for educational service delivery:

- “Children with disabilities, to the maximum extent appropriate, including children in public or private institutions or other care facilities are educated with children who are not disabled. Special classes, separate schooling or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.” 34 CFR 300.550

Related Research

A growing research base addresses specific instructional approaches that can be integrated effectively into the natural setting (e.g., activity-based intervention, embedded learning opportunities, milieu teaching, incidental teaching). The use of natural environments is consistent with inclusive practices and builds on the following research findings.

- Children with and without developmental disabilities learn from each other (National Research Council and Institute of Medicine, 2000).
- Children with disabilities make more progress in language and social skills in inclusive settings than in segregated settings apart from children without disabilities (Buisse & Bailey, 1993).
- Children learn best when they can practice skills in the settings and within the activities in which they typically would use those same skills rather than in contrived learning situations that may not represent real life challenges. Similarly, many naturally occurring routines can serve as development-enhancing opportunities, and research has shown that these opportunities optimize learning. In other words, providing early intervention services within the child’s typical daily living activities increases the number of learning opportunities and enhances the meaningfulness of what is learned. (See, for example: Bronfenbrenner, 1992; Cipani & Spooner, 1997; Cripe, Hanline, & Dailey, 1997; Dunst, 2001; Gallimore, Weisner, Bernheimer, Guthrie, & Nihira, 1993).



- Children are more likely to develop functional skills in natural settings that they can generalize to other situations enabling them to cope with a range of changing environmental demands (Bricker & Cripe, 1992; Hart & Risley, 1995).
- The progress of children with typical development is not impeded by the inclusion of children with disabilities in their setting (Buisse & Bailey, 1993). In fact, experience in an inclusive classroom is associated with increases in children's understanding of disabilities (Diamond, Hestenes, Carpenter, & Innes, 1997).
- Parents who are involved actively as team members in their child's early intervention feel empowered to enhance the development of their children. Early intervention services that are relevant to the lives of families have been found to reduce family stress (see, for example: Allen & Petr, 1996; Pearl, 1993; Thompson, Lobb, Elling, Herman, Jurkiewicz, & Hulleza, 1997).
- Parents of typically developing children perceive a variety of benefits of enrollment in inclusive early childhood programs that serve children both with and without disabilities. They report that their child is more aware of and responsive to the needs of others and develops acceptance of diversity in others (Peck, Carlson, & Helmstetter, 1992).

Common Sense and Practicality

- The services and supports families of children with special needs receive within the natural context of their family, home, and community increase their feelings of competency and reduce stress.
- The provision of services in natural settings and during daily routines and activities fosters the use and development of natural supports in a family's social and cultural network. This approach promotes the family's full participation in community life.
- The community benefits from opportunities to become acquainted with families and their children with developmental disabilities. Such opportunities promote a public understanding of special needs.
- When families are supported in their home and community, the likelihood of out-of-home placement of their child with disabilities is reduced.
- When parents and other caregivers identify and promote learning opportunities within daily activities and routines using available materials and resources, the child has more opportunities to experience and practice new skills.
- Children are more likely to learn appropriate and effective social skills in natural group environments.

Key Characteristics of Natural Environments

"Natural Environment" is not just about place. It's also about when and how services are provided. Providing services in natural environments for children with special needs means...

- providing early intervention in settings where the child and family normally spend their time or would spend their time if the child did not have a disability or developmental delay.
- using community resources as opportunities for the child's learning and activities such as local parks, recreation programs, sports events, public libraries, bookmobiles, stores, friends' or relatives' homes, child care programs, churches and other places of worship, restaurants, playgrounds, nature trails, museums, and community events.
- determining service settings that are right for each child and that reflect each child and family's resources, concerns, and priorities.
- identifying ways to weave early intervention strategies and services into the context of each child and family's routines and activities.
- focusing on functional outcomes within each family's daily routines in order to promote each child's acquisition of independent skills.
- using familiar materials naturally available in the home and community.
- assisting parents to provide their child with opportunities to practice skills throughout the child's daily life.
- increasing the opportunities for children to learn from their peers.
- providing children with and without special needs opportunities for positive interactions and friendships with each other.
- collaborating with other adults to achieve a mutual exchange of skills and information among parents, providers, and others to enhance the child's development.



A World of Opportunity



playing games at birthday party
 taking off coat
 petting dog
 playing with friend
 exploring garden
 getting a treat from an ice cream truck
 eating at a cookout



eating popsicles
 making new friends
 sharing toys
 planting flowers
 playing dress-up
 watching fish in aquarium
 drinking at water fountain
 looking at books
 dancing

listening to music
 going to the doctor
 eating out
 singing at church
 painting
 meeting new people



greeting & departing
 getting a haircut
 getting books at library
 playing games at community fairs
 sorting clothes at laundramat
 describing objects
 using elevator buttons
 tumbling at gymnasium
 swimming
 going on neighborhood walk
 attending concerts
 describing animals at zoo
 visiting a museum
 conversing in the car
 riding city bus



talking to cashier
 paying for merchandise
 looking in mirror
 carrying packages
 counting objects
 selecting items
 riding in cart
 folding clothes
 picking up toys
 getting mail
 cooking
 playing with siblings
 listening to stories
 enjoying a meal



getting in & out of car
 walking up steps
 watching people
 dressing
 taking a bath
 brushing teeth
 rough housing
 getting tucked in
 snuggle time
 talking on phone
 playing with pots & pans



exploring a stream
 feeding ducks
 camping
 sifting sand
 jumping in leaves
 flying a kite
 running
 gathering leaves
 swinging
 sliding
 being chased
 tossing a ball



A natural environment is

- a broad term encompassing a range of settings, but usually does not include settings that traditionally are designed and operated only for children with disabilities
- any authentic physical and social situation (grouping, setting, activity, event, routine) in which children and families generally find themselves
- developmentally and chronologically suited to the child
- planned specifically for individual children, and therefore, one that meets the unique needs of children and families
- identified in partnership with parents, family members, and other caregivers
- one in which supportive, qualified personnel are available as necessary
- one that can be adapted or enhanced as needed to enable a child with disabilities to benefit from the experiences available to children without disabilities
- one that is generally accessible to families in terms of transportation, language, cost, and culture. NOTE: Public schools must provide services on the IEP at no cost to families.

Providing services in natural environments does NOT mean

- providing services in one specific place only
- ignoring the child's needs
- placing children in settings without appropriate supports and services
- providing early intervention services in unsafe or unhealthy environments
- ignoring the concerns and priorities of families
- preventing families from networking with other families with children who have disabilities
- compromising the quality of early intervention
- serving the child in locations chosen expressly for the convenience of professionals
- serving children in segregated settings where the only available peers are children with disabilities.



Essential elements of successful service delivery in natural environments

1. The *philosophy of providing early intervention services*, including assessment, as part of the routines and daily activities of children and families is embedded in all written materials related to early intervention, and in all planning discussions with families and service providers. It is also promoted through all public awareness strategies and activities.
2. The philosophy of having the *services fit the child and the family* rather than requiring them to fit the services guides discussions, beginning at the initial contact with the family and continuing through the entire process of service delivery. Services build on the strengths of the child and family.
3. The focus of early intervention is on the *child's functional participation* in daily routines and activities and, for infants and toddlers, on the family's participation in a variety of community activities that are natural for them, including those that occur in the home.
4. The development of the IFSP follows *a collaborative process of*
 - (a) identifying child outcomes
 - (b) understanding the family's routines and daily activities, support network, and community
 - (c) determining which child outcomes can be addressed best through which family routines and activities
 - (d) identifying services and supports that can be provided within those routines and activities to maximize the child's opportunities to learn through the natural experiences of daily life.A good IEP should reflect many of these features.
5. Early intervention providers expand their services to include *consultation with other early childhood service providers and adults* in the community to help them, as well as the child's parents, to facilitate learning opportunities for the child in natural settings.
6. *Justification for providing services in a setting outside of natural environments* includes sufficient documentation to support the team's decision that the child's outcome could not be met in natural settings even with supplementary supports. This justification includes how the services provided in a specialized setting will be generalized into the child's daily activities and routines. For infants and toddlers, it also includes a plan with timelines and the supports necessary to be able to provide early intervention within natural environments in the future. Such a plan with timelines is not required for preschoolers with IEPs.
7. *Professional development activities* build attitudes, knowledge, and skills to identify learning opportunities and to provide early intervention services within the naturally occurring, daily activities and routines of children and families.



How to Implement Infant-Toddler Services in Natural Environments

A variety of strategies can be used to develop, deliver, and support services within everyday routines, activities, and places. This section provides examples of strategies for developing new opportunities in natural environments, first contacts with families, child evaluation, and IFSP development.

Developing New Opportunities

How can early intervention providers enhance the service system at the community level to increase opportunities in natural environments?

1. Identify key players who could contribute ideas about the delivery of services in natural environments such as families, early interventionists, therapists, child care providers (center and home), and staff of community agencies who serve all children.
2. Involve these key people in planning and conducting a community forum about the benefits to children and families of providing services in a way that does not disrupt, but rather makes the most of their everyday routines, activities, and locations.
3. Identify what resources exist in the community that could include young children with special needs and what additional resources are needed. Identify which resources are already used and if there are other resources of which people may not be aware.
4. Work with community groups to establish new inclusive opportunities such as toddler storytime at the public library, stroller/wheelchair-accessible nature trails, wee-ones swim time at the public pool, infant-toddler play equipment at the community parks, and other recreational activities.
5. Provide opportunities for community and agency professionals and families to share experiences, successes, and challenges they encounter as they deliver or receive services.
6. Compare notes with other early intervention programs, staff, and community leaders from different communities.
7. Identify what resources are needed to include children with special needs and their families in naturally occurring community opportunities (e.g., assistive technology, materials or curriculum adaptations, equipment).
8. Identify fiscal and policy barriers to intervention practices that reflect natural environments.
9. Develop a plan to coordinate early intervention outcomes and activities with the goals and activities of programs in the community at large.
10. Engage in an ongoing dialogue with other early intervention providers to identify and address their support needs (e.g., mentorship and supervision, training, resources).
11. Create and sustain opportunities for professionals in early care and education as well as in early intervention to receive training together to support all children's learning.





First Contacts with Families

How can early intervention providers convey the essence of natural environments to families? How can they gather information about the family's typical routines and activities that can be used to determine where, when, and how services and supports will be delivered?

1. Meet with families at a time and location convenient to them.
2. In advance of the meeting, provide them with information about the early intervention program, making sure that all written materials provide examples of how services can be embedded within typical routines, activities, and places.
3. Revise intake forms to reflect the natural flow of conversation between the professional and family. Consider ways that the form can facilitate discussion about the family's concerns, routines, and ideas about their child.
4. Think about the information needed from the family. Is there a way to obtain needed details about the pregnancy, birth, and medical history without asking the family during the first contact with them? Doing so relieves the family from having to repeat information they have provided before.
5. Ask questions about
 - what a typical day is like
 - activities the family enjoys at home
 - the child's favorite activities and toys
 - the types of community outings that are typical for the family
 - opportunities the child has to interact with other children
 - the child's strengths and challenges
 - how the family thinks their child learns best
 - what is most enjoyable/ most challenging
 - what has been tried that works/ doesn't work
 - where the family wants to spend time with the child
 - what questions the family hopes the child's evaluation will address
 - anything else the family wants to add to give a complete picture of their child.

Child Evaluation

1. Talk with the family about where they and their child would feel most comfortable having the evaluation conducted. Offer a traveling evaluation team that could visit the child at home or in another setting familiar to the child.
2. Begin the evaluation process with a discussion of the family's responses to questions about typical routines and activities. Ask the family if anything has changed since the last contact with the family.
3. Ask the family at the beginning of the evaluation and throughout the process whether the child seems to be having a typical day.
4. Explain to the family how the evaluation activities will relate to the family's concerns and to the child's functioning in daily life.
5. Describe to the family several ways they can participate in the evaluation. For example, they may want to initiate an evaluation activity, or be present in the same room with the child.
6. Gain as much information as possible with the least disruption of the child's play.
7. Do not repeat assessments or portions of assessments that have been completed recently by other providers.
8. Use toys and materials that are familiar or comforting to the child. Allow time for the children to explore them.
9. Depending on how the family chooses to participate in the evaluation, provide an ongoing explanation of each evaluation activity during the evaluation, including specifics about what area of concern is being addressed. Link the evaluation activity to skills needed in daily activities.
10. Ask if there is anything the child did or did not do during the evaluation that surprises the family.
11. Discuss the desired outcomes for the child in real life situations.
12. Write recommendations that describe early intervention supports that can be embedded in the child and family's typical routines and activities that the family has described.





IFSP Development

How can an IFSP reflect services in typical routines, activities, and places?

1. Confirm that all team members have a common understanding of the family's typical routines and activities, concerns and resources.
2. Encourage the family to invite key adults involved in the life of the child to be a part of IFSP development.
3. Brainstorm with the IFSP team what outcomes are a top priority for the child and family in the context of the family's routines. Discuss related objectives.
4. Be certain that the family is aware of a variety of community resources and opportunities related to their own and needs, interests, and priorities, and those of their child. Before the IFSP is developed, provide the family and professionals on the team with community resource information, including a map of their locations.
5. Consider the interface of early intervention services and community resources and identify which resources have the potential to support the outcomes the family wants for the child.
6. Ask the family to choose the most comfortable supports and collaborate with them to describe how, when, and where services can be provided.

NOTE: Many of the above strategies were adapted from Anketell, M., Grundrum, C., & Keith Knox, S. (2001). *Natural environments: Starting at the first phone call*. Hershey: Pennsylvania Statewide Early Intervention/ Early Childhood Conference.

Guiding Questions in Evaluating Services in Natural Environments

The *natural environment* is a developmental phenomenon that changes as a function of the child's skills and parent's decisions about services. Because it refers to the way services are designed and delivered, it will be necessary for the child's family and providers to evaluate the use of natural environments in early intervention. The following questions are intended as a guide for this process.

1. Is the setting for the service one in which the child and family would find themselves if the child did not have a disability? If not (e.g., a neurological evaluation takes place in a clinical setting), have modifications been made according to parents' suggestions about what would make their child and them feel most comfortable?
2. Are the people who know the child best making the decisions about services? Are they using a collaborative process to do so?
3. Are services and supports embedded within typical routines and activities in which the family would be engaged if the child did not have a disability?
4. Do services and supports make maximum use of the child's and family's preferred activities, toys, materials, and resources?
5. Are services and supports the simplest, most functional ways of addressing the child's and family's needs?
6. Is the family's natural network of supports and resources incorporated into the way services are planned and delivered?
7. Are services flexible and responsive to the changing concerns and priorities of the family and the changing needs of the child?
8. Are there opportunities for the child to form long-term, nurturing relationships with the people who are responsible for his or her early care and education?
9. Are services provided in a way that promotes the child's optimal functioning in daily life?
10. Have efforts been made to make the child's day as seamless as possible, by reducing the number of transitions the child and family must make in order to receive the services they need?

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