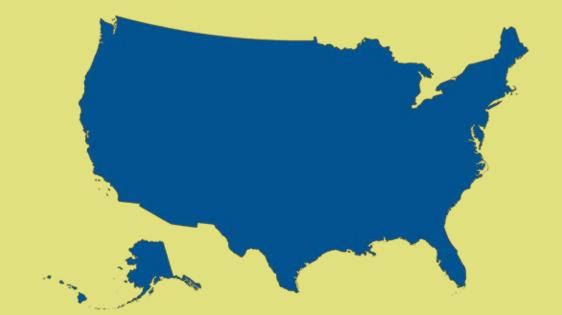
Early Learning Guidelines for Infants and Toddlers: Recommendations for States









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INTRODUCTION

n this document, ZERO TO THREE presents recommendations to assist states in creating or revising Early Learning Guidelines for Infants and Toddlers (ELG/ITs). These guidelines consist of "widely accepted expectations for learning" for children from birth to three.¹ Even though states are not required by federal mandate to enact such guidelines, nearly half have developed them and others are working on them.

As states have developed these guidelines, the unique features of this age range pose some equally unique challenges and questions:

- How can we best create guidelines that will inform adults who work with infants and toddlers about how and what these children are learning?
- How can we use these frameworks to help connect the learning foundations set in infancy with later school success?
- How can we write guidelines that appreciate the natural trajectory of learning in the first three years of life and do not set unrealistic expectations or pressures for babies to perform academically?
- How do we gain access to the loosely organized infant toddler field that includes thousands of families, friends, and neighbors who provide unregulated care?
- How do we describe the formation of basic learning processes that cut across domains, such as attention, memory, problem-solving, curiosity, initiative, and persistence?
- How can we create frameworks that incorporate the importance of the adultchild relationship?
- How can we include in guidelines expectations and values that support the development of a child's cultural identity?

ZERO TO THREE's Commitment to This Issue

ZERO TO THREE: The National Center for Infants, Toddlers, and Families—a leading national organization serving the infant and toddler field —offers these recommendations as a framework to states seeking to create useful guidelines. Learning guidelines have the potential to advance the field by increasing awareness of what infants and toddlers are learning. This new awareness for families and caregivers may have significant impact on later development, on providing the conditions infants and toddlers need to learn effectively, and on promoting quality early experiences to improve child outcomes. Drawing on the expertise of national leaders, we propose these recommendations for states to consider so they can design an inclusive process and develop accurate, research-based guidelines.

Beginning with the work of the National Infant and Toddler Child Care Initiative at ZERO TO THREE (NITCCI) in 2003, ZERO TO THREE has continued to explore issues raised by ELG/ITs. NITCCI continues to collect and analyze ELG/ITs as they become available. In 2004, an internal task force comprised of Board members, staff, and fellows created an initial set of considerations for states working on ELG/ITs. In 2007, with funding from the Buffett Early Childhood Fund, ZERO TO THREE convened an expert Advisory Panel, chaired by Board member and former Board president Dr. Samuel Meisels. These experts included state child care administrators, university faculty, representatives from national organizations, program administrators, and ZERO TO THREE staff. The rich discussions from these meetings formed the foundation of this document, which was further revised by comments from reviewers across the country.



A Standards-Based Environment

he interest in early learning guidelines for infants and toddlers follows a national movement toward standards-based education that has dominated public education reform throughout the late 20th and first part of the 21st century. During this time, some states began developing guidelines for preschool-aged children or children from birth through age five. In 2002, the presidential initiative for early childhood, Good Start, Grow Smart, required each state to develop early learning guidelines for language, literacy, and mathematics for federally funded child care programs. However, this initiative allowed for the use of pre-existing standards for state prekindergarten programs. Some states, while initially creating only preschool guidelines, found enough benefit in the process that they then decided to create guidelines beginning at birth.

In addition to the influence of Good Start, Grow Smart, other elements influenced states to begin defining what infants and toddlers can learn, when they should be expected to acquire and master specific concepts and skills, and what circumstances are necessary to create optimal environments for learning. Research into early brain development and cognition provides clear evidence that early experiences establish the ability to learn throughout life.² Such research has drawn renewed attention to the first years of life. At the same time, more than 65 percent of infants and toddlers are in outof-home care for at least part of each week. About half of those children are in formal group care and the other half in family, friend, or neighbor care.³ This change in rearing patterns of families has also brought a great deal of notice about what is happening to infants and toddlers in these out-ofhome settings.

Many states that have written and implemented ELG/ITs have found the process to be worthwhile

ELG/ITs

Early Learning Guidelines for Infants and Toddlers (ELG/ITs), as for preschoolers, are often called by a variety of names, such as early learning standards, frameworks, foundations, learning strands, developmental standards, benchmarks, and indicators of progress. No matter the name, and even though state guidelines vary widely in breadth and scope of content, they all describe expectations about what infants and toddlers should know and be able to do during specified age ranges.

on several levels. ELG/ITs emphasize the learning processes that develop in infancy and the foundations of later learning. As adults better understand how and what infants are learning, they can support exploration, discovery, and mastery. An understanding of and appreciation for these processes could influence states as they revise their Pre-K or K–12 standards. The process of writing ELG/ ITs may take two years or more, but it is worth the investment of time and financial resources.

Quality in Group Care

ELG/ITs can serve as a significant resource for group care settings in promoting the learning and development of infants and toddlers. Current research clearly demonstrates the importance of program quality for children's learning.

Numerous studies in the 1980s and 1990s investigated the effect of program quality on children's outcomes. They collectively found that "a significant correlation exists between program



quality and outcomes for children."⁴ Although the most recent National Institute of Child Health and Human Development (NICHD) Early Child Care longitudinal study results reiterate that no factor is as important in child outcomes as the parent–child relationship,⁵ many child outcomes are related to quality, such as cooperative play, sociability, creativity, the ability to resolve conflicts, self-control, and language and cognitive development.⁶

"The positive relation between child care quality and virtually every facet of children's development that has been studied is one of the most consistent findings in developmental science."⁷ Poor-quality child care is associated with less optimal child outcomes and higher quality care is associated with desirable outcomes. While poor quality may have more devastating effects on children living in poverty, quality is important for **all** children, regardless of family income.⁸ One of the rationales for the development of ELG/ITs is to improve the quality of programs by increasing the skills and knowledge of the adults who work with young children.

Early Learning Guidelines for Infants and Toddlers

A joint position statement of the National Association for the Education of Young Children (NAEYC) and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE) on Early Learning Guidelines notes:

NAEYC and NAECS/SDE take the position that "early learning standards can be a valuable part of a comprehensive, high-quality system of services for young children," ⁹ contributing to young children's educational experiences and to their future success. But these results can be achieved only if early learning standards:

(1) emphasize significant, developmentally appropriate content and outcomes;
(2) are developed and reviewed through informed, inclusive processes;
(3) use implementation and assessment strategies that are ethical and appropriate for young children; and
(4) are accompanied by strong supports for early childhood programs, professionals, and families.¹⁰



ZERO TO THREE has produced a series of recommendations for states to follow to ensure their ELG/ITs meet these criteria. The recommendations address both the process of developing ELG/ITs and steps to ensure that the content of ELG/ITs is based on research and is developmentally and culturally appropriate.

The Recommendations

For the process of developing ELG/ITs:

- 1. The purpose, intended uses, and primary audiences of the ELG/ITs should be clearly defined at the beginning of the process.
- 2. The membership of the ELG/ITs working group should include all key stakeholders. The structure of the working group should assure a coherent process and research-based guidelines.
- 3. Adequate resources should be available and budgeted for the development, dissemination, implementation, and evaluation of the ELG/ITs.
- 4. ELG/ITs should be aligned with Pre-K guidelines and K–12 standards in a way that illustrates how the foundations of learning are established in the first years of life.
- 5. ELG/ITs should be developed in relationship to other elements of the early childhood care and education system, including program standards, knowledge about child development, quality rating and improvement systems, licensing regulations, and child assessment.
- 6. States should establish processes and criteria to assure the accuracy, quality, and inclusiveness of ELG/ITs from the beginning of the writing process.
- 7. ELG/ITs should inform every aspect of the professional development system, including pre-service and in-service training.
- 8. States should plan and budget for the dissemination and implementation of the guidelines, including training for the identified primary audiences.
- 9. States should establish a process for monitoring the use of the guidelines and their impact on improving adult knowledge and skills.

For developing the content of the ELG/ITs:

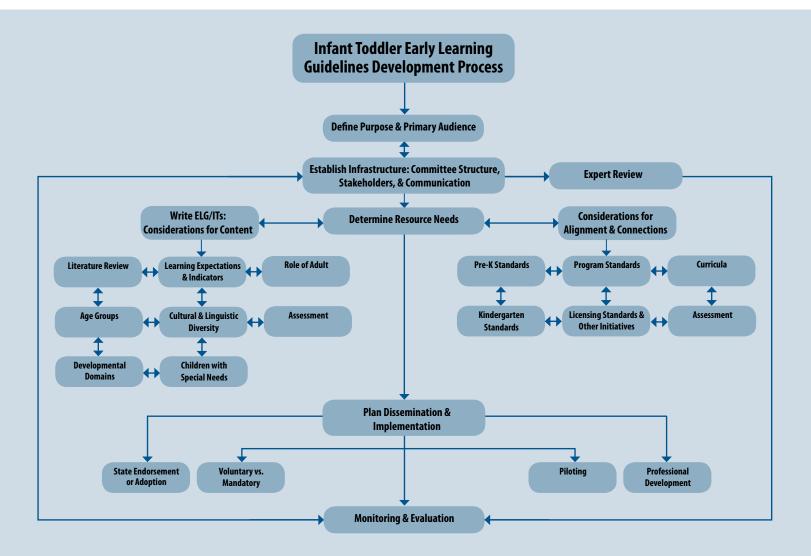
- 10. The development of ELG/ITs should begin with a comprehensive review of reliable resources, including research-based publications, assessments, interviews, and practitioners' experience regarding this age group.
- 11. Because development occurs at a rapid pace during the first three years of life, ELG/ITs should be divided into age groups that are broad enough to allow for normal variation in development and still small enough to have meaning.
- 12. ELG/ITs should cover multiple developmental domains while still reflecting the underlying learning processes, the significance of relationships during this period, and areas of health and well-being that cut across domains in infancy.
- 13. Learning expectations for each domain should be clearly stated and include discrete and observable indicators.
- 14. Learning expectations, indicators, and examples should be written to describe a variety of goals and ways of achieving them that are inclusive of the state's diverse cultural, ethnic, and linguistic populations.
- 15. ELG/ITs should be explicitly inclusive of all children, demonstrating that infants and toddlers with disabilities and special needs are expected to learn and be served in these programs.
- 16. ELG/ITs should describe the importance of very young children's relationships with adults as the foundation of their learning.
- 17. Child assessment should be aligned with *ELG/ITs and its purpose and use should be clearly defined.*



ach recommendation is discussed in the following sections along with a rationale for its importance, key considerations to assure that state guidelines are research-based and responsive to their populations, and, in many cases, examples of how states are implementing that recommendation. The recommendations in this paper are divided between those addressing the process of developing guidelines and those addressing the content of the

guidelines, although there is considerable overlap between content and process in this work.

Section I describes the recommendations for the process of developing ELG/ITs. Section II addresses recommendations for developing the content and use of ELG/ITs. Appendices with additional resources follow. The chart on this page outlines the entire process.





SECTION I

The Process of Developing Guidelines

Recommendation 1 Define Purpose and Primary Audience

The purpose, intended uses, and primary audiences of the ELG/ITs should be clearly defined at the beginning of the process.

Rationale

The initial motivation for states to develop Early Learning Guidelines is generally a legislative mandate, a state agency directive, or some other perceived need.¹¹ The purpose defines the primary audiences, which, in turn, have implications for the level of language used; the types of strategies or examples that illustrate skills; dissemination and implementation; training; and development of supplemental materials. The words used throughout the document should reflect not only the diversity of cultures, languages, and abilities of the children, but also the diverse characteristics of the adults to whom the document is targeted. ELG/ITs can be written for providers and teachers in a variety of early care and education settings, such as center-based care in child care programs, Early Head Start programs, and regulated family child care homes. States can also choose to include a wider audience, such as early intervention and home visiting programs; parents; and family, friend, and neighbor care.

It is important to an effective, collaborative process that the group developing the ELG/ITs establish a shared vision based on the intended uses of the ELG/ITs. A national Web-based survey of the 50 states and the District of Columbia related to preschool early learning guidelines found that a variety of purposes informed the development of these documents.¹² The most commonly cited purposes of the guidelines were to:

- Improve teaching practices;
- Serve as a curriculum resource;
- Improve professional development; and
- Educate parents about child learning and development.

Of course, ELG/ITs can not do everything that is needed to improve the quality of care. No single document could. However, a clear articulation of what infants and toddlers should know and how they may demonstrate that knowledge provides one of the important foundations for quality.



Key Considerations

- The working group should have a shared understanding of the initial motivation for the state to engage in this work.
- The intended uses of the guidelines should be clearly defined. Minnesota, for example, describes how parents and family members, caregivers and teachers, community members, and policymakers can potentially use the guidelines.
- A common vision and guiding principles should be established that reflect the intended use of the guidelines and the values of the working group, and delineate the boundaries of the document. Georgia's guidelines, for example, provide a clear statement of purpose and guiding principles that recognize parents as children's first and primary teachers; the uniqueness of each child; the interconnectedness of all areas of development; the power of play; the importance of respecting and supporting children from diverse cultures, races, and abilities; the powerful role of teachers and families; and the importance of using research-based knowledge to guide practice.
- At a minimum, the primary audience for ELG/ITs should be teachers who work with infants and toddlers in center-based care and regulated family child care homes.
- The language used throughout the document should reflect the diversity of cultures and languages of the adults to whom the document is targeted.

Recommendation 2

Establish Infrastructure: Committee Structure, Stakeholders, & Communication

The membership of the ELG/ITs working group should include key stakeholders. The structure of the working group should assure a coherent process and research-based guidelines.

Rationale

The composition of the group created to develop and implement the ELG/ITs should be inclusive of all individuals and organizations that invest in services for infants and toddlers in the state. Members, including parents, may need to be recruited to elicit important, diverse perspectives. A broad representation will help assure the quality, adoption, and use of the guidelines and increase the likelihood that the guidelines will reflect the broad range of cultures and abilities in the infant and toddler population. This broad representation may include:

- Members of culturally and linguistically diverse groups;
- State agencies that impact young children and families;
- Governor's office;
- Local providers from public education, Early Head Start, child care (public, private, family, friend, and neighbor, home family, and faith-based), and early intervention;
- Advocates;
- Legislators;
- Health and mental health representatives;





- Higher education institutions;
- Parents,
- 0-3 expert consultants, and
- The business and private sector.

Existing statewide early childhood coalitions, commissions, or councils may already be positioned to take on this work with some modifications in composition and structure.

- The composition of the working group and the structure and frequency of meetings should be determined early in the process. Georgia had an Advisory Committee with representatives from state agencies, universities, advocates, and the local early childhood community. Three director-level personnel oversaw development, and a project manager was employed. A national consultant was also engaged to support the process and review the document. Drafts were reviewed by (a) the Advisory Committee, (b) a statewide panel of early childhood professionals and parents, (c) the public through feedback forums at four locations around the state, and (d) a panel of national experts.
- The working group should find a balance between broad representation and a group size that is small enough to be cohesive and productive.
- The working group should determine a formal process to keep others informed and to elicit feedback both within the committee structure (horizontally and vertically) and with other groups outside the committee structure.
- The membership of the working group should make every effort to have the guidelines reflect infant/toddler development as it is understood by diverse cultural groups in the state.
- Existing state-level groups may be utilized as a coordinating body. This could facilitate coordination between the development of ELG/ITs and other efforts underway in the state related to early development and learning.
- The ELG/ITs working group may consider adopting the elements of the process that were particularly useful for writing the Pre-K guidelines.
- A group leader or coordinator can provide effective support to the infrastructure by:
 - Organizing and coordinating meetings;
 - ▶ Ensuring completion of tasks and other follow-up activities;
 - ► Gathering resources; and
 - Ensuring timely communication and sharing of information between committee members and other stakeholders.
- A neutral facilitator can attend to the group process by creating an environment for the free exchange of ideas and to promote action and decision-making.
- A writer may be hired with responsibilities that include gathering resource documents, working with committees to promote consistency across sub-sections, and writing supplementary pieces of the document such as the introduction.
- Local experts on the working committee could provide expertise on cultural and linguistic diversity. The local experts could facilitate the external review process.
- Sufficient time should be allowed for stakeholders to work through their varied and common concerns prior to the writing process.



Recommendation 3 Determine Resources

Adequate resources should be available and budgeted for the development, dissemination, implementation, and evaluation of the ELG/ITs.

Rationale

Developing ELG/ITs is a complex, resource-intensive undertaking. The investment of time by the working group, outside experts, possible focus group members, and reviewers should be realistically assessed and compensated. Financial resources should be sought from the various agencies and organizations that are involved in the process, potentially increasing "buy-in." Investing adequate resources in the development, dissemination, and implementation of the document will go a long way toward supporting appropriate use of the guidelines and positive outcomes for children.

Key Considerations

- The state should consider all aspects of the planning and development process when determining resource needs and allocation, such as:
 - Committee support (meetings, hospitality, travel);
 - Literature and research review;
 - Expert review/content validation;
 - Support for a leader/coordinator, facilitator, and/or writer;
 - ► Compensation for work group members to be chairs/co-chairs of the subgroups; and
 - Dissemination and implementation activities and materials, including possible focus groups, piloting, and training.
- Cross-agency funds should be used to support the development of the ELG/ITs.
- The state should anticipate a process that involves a considerable amount of time from multiple stakeholders.

Recommendation 4 Align with Content Standards

ELG/ITs should be aligned with Pre-K guidelines and K–12 standards in a way that illustrates how the foundations of learning are established in the first years of life.

Rationale

ELG/ITs reflect the foundational processes of learning, the content of early learning, and the progression of learning and development in the early years. The content represents the foundation for all later learning and should be aligned with Pre-K early learning guidelines and



Kindergarten content standards to the extent that is developmentally appropriate. This means that there should not be a "push down" of content standards from Kindergarten to Pre-K to infants and toddlers; rather, there should be substantial dialogue about the upward progression of early learning and development, the uniqueness of the infant and toddler period, and how to adequately and appropriately link them. As the foundation upon which all later learning is built, ELG/ITs should be the "basis for decisions we make about curricula, assessments, professional development, and expectations for teachers' daily practice."¹³

- ELG/ITs should be aligned with Pre-K early learning guidelines and Kindergarten content standards. The ELG/ITs could describe the foundations of learning and Pre-K and Kindergarten guidelines could describe how the content of learning becomes increasingly differentiated and skill-oriented. Several states describe how their infant and toddler guidelines align with their Pre-K standards. Kentucky also visually depicts how their ELG/ITs align with Pre-K and K–12 standards. Kansas has devoted an entire section in their guidelines, entitled "Early Learning Connections," that shows the connections between their 0–5 guidelines, their School Readiness indicators, and their K–3rd grade standards and indicators.
- An analysis of the documents and a deliberate dialogue about how to approach alignment should occur. Options may include:
 - Aligning ELG/ITs with Pre-K guidelines to ensure consistency in language and approach (without necessarily using the same domains, e.g., science, math, and social studies);
 - Ensuring ELG/ITs provide a good foundation for Pre-K guidelines and Kindergarten content standards but are not limited by them (ELG/ITs will have more focus on social–emotional development than may be the case with older children);
 - ► Developing early learning guidelines that cover birth to five or older, and in that process revising Pre-K guidelines or Kindergarten content standards to align with ELG/ITs. For example, Pennsylvania and Rhode Island revised their Kindergarten standards to align with their Pre-K early learning guidelines.¹⁴
- To assure that the preschool guidelines reflected the processes of learning in infancy, lowa had birth to three experts work on both the writing committees for Pre-K and infant/ toddler guidelines.



Recommendation 5 Connect with Other State Initiatives

ELG/ITs should be developed in relationship to other elements of the early childhood care and education system, including program standards, knowledge about child development, quality rating and improvement systems, licensing regulations, and child assessment.

Rationale

ELG/ITs provide a framework for adult interactions with young children, and as such, should play a fundamental role among the components of an early care and education system. All components of the system should work together to effectively promote development and learning. A careful analysis of how these components fit together could result in a more consistent, clear, and effective set of tools for adults to use.

- The state should systematically analyze how ELG/ITs connect with program standards, licensing regulations, child competencies, curricula, and child assessment, then prioritize and refine as needed for a more consistent and meaningful set of quality documents. In addition to alignment with Pre-K and K–12 standards, Georgia and Michigan, for example, provide information about how their ELG/ITs align with Head Start standards. New Hampshire also explains how their guidelines complement the basic knowledge areas and competencies in their Early Childhood Professional Development System.
- ELG/ITs should be embedded in the early childhood system infrastructure in a variety of ways:
 - As a requirement in licensing regulations, program standards, or other state initiatives;
 - In the quality rating and improvement system or tiered reimbursement system; and/or
 - ► Tied to funding streams.
- The connections between the ELG/ITs and other standards and initiatives should be included in the training process for the primary audiences.
 - Questions to ask may include:
 - "Does the content of the standards match what the curriculum says we should be teaching?"
 - "Are our child assessments consistent with the content of the standards?"
 - "Do the things we expect teachers to know and be able to do align with what we expect children to know and be able to do?"¹⁵





Recommendation 6 Assure Accuracy and Quality

States should establish processes and criteria to assure the accuracy, quality, and inclusiveness of ELG/ITs from the beginning of the writing process.

Rationale

Research on infant learning and development has provided the field with a vast amount of information in recent years. However, no national organization has reviewed and synthesized this information or created content standards for infants and toddlers. The education community has resisted adopting national content standards at the K–12 level. While potentially problematic, this circumstance reflects the importance many educators place on contextual factors within a state in defining standards. For alignment purposes, it may be desirable for ELG/ITs committees to develop guidelines within each state.

In order for each state to assure the ELG/ITs are current, accurate, and reflect the cultural values of the population, an expert panel of reviewers and consultants should be established to work with the committee throughout the process. Engaging the assistance of state and national early childhood researchers and experts to (a) provide guidance related to content and (b) review the proposed guidelines is a crucial step toward ensuring that the guidelines accurately reflect research about the processes and outcomes of early learning.

- A panel of national and state and/or local experts should be used from the beginning of the ELG/IT process, including review of the drafts of the document. State and local experts should be engaged to ensure knowledge of child development, culture of the population, and wisdom of practice. Ohio's journey began through their Build initiative.¹⁶ A leadership team from Build Ohio oversaw the process of developing their ELG/ITs. One of their first decisions was to enlist the expertise of national experts through WestEd's Center for Child and Family Studies.¹⁷ WestEd staff facilitated process and content discussions and provided content expertise, review, and guidance throughout the entire development process. Writing teams for each domain area were established, with both a facilitator and a team leader, and included representatives from state government, higher education, and local early care and education, health, and mental health providers.
- Specific questions should be prepared for the expert panel to help the members work through difficult issues during the writing process.
- States should think carefully about what their particular challenges are in developing the ELGs and then seek experts, convene focus groups, and/or obtain other input to specifically address those issues.
- Decisions and resources used for making decisions should be documented throughout the process (including cultural and practical resources).
- Access to the document should be provided to the public for review and comment during the process. In addition to public forums, Iowa, for example, also used an Internet-based survey whereby the public could respond to the draft document.



Recommendation 7 Inform Professional Development

ELG/ITs should inform every aspect of the professional development system, including pre-service and in-service training.

Rationale

How teachers interact with young children is an important predictor of child learning and development. Research indicates that specialized training for teachers is related to higher quality learning environments, which impact child outcomes.¹⁸ ELG/ITs support teachers' and caregivers' efforts to be intentional about the knowledge and skills they nurture in young children.

Training and education are needed for teachers to use the guidelines effectively. Unfortunately, there is a wide disparity in levels of professional preparation and ability in the early childhood workforce across programs and from state to state. Although some states have developed or are developing infant/toddler credentials, certifications, or endorsements, the range of training requirements varies widely (from several hours of training to Master's degrees) and the content also varies considerably.¹⁹ To maximize teacher knowledge and skills, extensive and coordinated pre-service (teacher preparation programs) and in-service training and professional preparation is needed. Many states have also begun initiatives to find and offer information and professional development to family, friend, and neighbor caregivers.

- States should develop and implement in-service training specific to ELG/ITs. Pennsylvania recently completed a "train the trainers" program for their guidelines. Washington State has a companion training booklet that includes an introduction to their guidelines, how they are organized, and ways of integrating them into provider training.²⁰ States should use their ELG/ITs to inform professional development in training related to:
 - Infant toddler credentialing;
 - Child Development Associate (CDA) credentialing;
 - Child care licensing regulations;
 - Quality rating and improvement systems;
 - Program standards;
 - ► Curricula;
 - ► Training approval programs;
 - The skills and knowledge identified by the state as being necessary for child care teachers to have;
 - National accreditation;
 - Mentoring programs;
 - ► State conferences; and
 - ▶ Other infant and toddler training programs and venues.



- States should work with higher education teacher preparation programs to include ELG/ITs as part of their program of study and to articulate research-based, in-service training programs into college credits that lead to college degrees in the field. In West Virginia, for example, the state departments of Education and Health and Human Resources with the Head Start State Collaboration Office jointly fund one-week summer credit-bearing courses about the state's preschool standards at universities in four regions of the state. These courses are tuition-free and apply to undergraduate or graduate early childhood degree programs.
- States should develop active outreach programs to introduce ELG/ITs to family, friend, and neighbor caregivers. Their unlicensed status may exclude them from the typical communication chains, but they serve half the babies in care. Information on the ELG/ITs needs to be offered in ways that are useful to them.

Recommendation 8 Disseminate and Implement

States should plan and budget for the dissemination and implementation of the guidelines, including training for the identified primary audiences.

Rationale

How the ELG/ITs are disseminated and implemented throughout the state is a significant aspect of the planning process. States must determine whether the guidelines will be implemented on a voluntary or mandatory basis. All current ELG/ITs are implemented on a voluntary basis unless a state agency requires their use in licensing or program standards or other legislative or departmental directives. If their use is required, a monitoring system will need to be established. Embedding ELG/ITs in quality rating and improvement systems or tiered reimbursement systems will create incentives for using them.

Having guidelines does not automatically translate into their effective use. The guidelines should be not only widely distributed but also actively embedded in professional development pre-service and in-service programs. (Recommendation 7: Inform Professional Development contains more specific information about training and professional development activities related to ELG/ITs.)

- The format of the ELG/ITs should be easy to follow with language that is clear, concise, and understandable. Consider presenting the document in a format that allows ease of revision at a later date (for example, binder notebook so pages can be easily revised and replaced).
- The working group should consider getting feedback from targeted audiences through focus groups or surveys and/or piloting the ELG/ITs in selected programs.



- Official recognition of the ELG/ITs may be obtained through endorsement or adoption by state boards or other organizations.
- The working group should plan to widely distribute the document in a way that will create excitement throughout the state.
- Pre-service and in-service training should be developed and implemented with specific outreach to family, friend, and neighbor child care providers.

Recommendation 9 Monitor and Evaluate

States should establish a process for monitoring the use of the guidelines and their impact on improving adult knowledge and skills.

Rationale

In addition to developing and implementing guidelines, states must also turn their attention to how they are being used and with what impact. A system of monitoring and evaluation should be built into the planning and development process. The 2005 survey of preschool ELGs conducted by the Council of Chief State School Officers found that the type of data collected as part of the monitoring process included the extent that the guidelines were used in professional development plans, program planning, daily lesson planning, and for children with special needs through review of Individual Educational Plans.²¹

- A monitoring process should be established during the development of the ELG/ITs. Possible activities include:
 - Document review;
 - Site visits;
 - Classroom observations;
 - Self-assessments;
 - Discussions with teachers to collect data related to the use of guidelines in programming, professional development, and daily lesson planning; and
 - ► Examining how the guidelines align with curricula and/or assessment. ²²
- Inclusion of the guidelines as a requirement in a state quality rating and improvement system can be a tool for ongoing monitoring.
- To positively affect outcomes, sufficient training and support should be provided to teachers and other adults using the guidelines.
- The working group should learn what is working and what is not through focus groups with primary audiences and other interested groups and make revisions to the ELG/ITs as necessary.
- ELG/ITs are dynamic and should be revised as new research becomes available or other factors indicate a need for revision.



SECTION II

The Content of the Guidelines

Recommendation 10 Review Literature and Research

The development of ELG/ITs should begin with a comprehensive review of reliable resources, including research-based publications, assessments, interviews, and practitioners' experience regarding this age group.

Rationale

Many Pre-K ELGs are based on national content standards established by professional organizations. Since there are no national learning standards for children age birth to three, each state and territory must determine what information will be included in its ELG/ITs. A review of the research should ensure that ELG/ITs reflect current knowledge and research about the development and learning processes of infants and toddlers and the link between children's early experiences and success in school and life. Since ELG/ITs describe what young children should know and be able to do, they can shape how teachers and other caregivers support and interact with young children, impacting what children learn.

Key Considerations

- It is important to identify and maintain a record of all sources of information. Many state guidelines include a reference list and/or bibliography. A few states, such as lowa and Kentucky, cite research and other professional sources throughout the document and include an extensive list of references and append other resource documents.
- ELG/ITs written and implemented by other states should be reviewed.
- Information may be gathered from interviews with early childhood professionals and parents and, where appropriate, from conventional wisdom about early childhood development, especially in such areas as cultural beliefs and values that may not be well researched.
- To ensure accuracy, current resources—those published within the last 10 years—should be used. Important earlier work should be validated by more recent publications.

For a list of potential resources, see Appendix A.



Recommendation 11 Group by Age

Because development occurs at a rapid pace during the first three years of life, ELG/ITs should be divided into age groups that are broad enough to allow for normal variation in development and still small enough to have meaning.

Rationale

During the first three years of life, children undergo remarkable growth and development. It would not be appropriate to expect a 6 month-old to be able to do the same things as a 36 month-old. Therefore, ELG/ITs should be divided into age groups so that expectations for children's behavior are age-appropriate. Decisions about the number and range of age groups should be based on current research and should take into consideration implications for assessment, continuity of care, state child care licensing, and other infant/toddler initiatives. The many differences between the number and range of age groups in existing ELG/ITs and in other national early childhood resources reflect the challenging nature of these decisions.

Key Considerations

- In deciding upon the number of age groups, consideration should be given to the real-world implications of this decision. Too few age groups could produce inappropriate expectations for children at the early end of the age range. For example, expectations for a "birth to 12 months" age group would be too high for young infants (e.g., a newborn being able to self-soothe). By contrast, choosing too great a number of age groups (especially for the second and third years) could create artificial divisions; for example, are there distinct developmental differences between "26 to 28 months" and "28 to 30 months"?
- The number and range of age groups also has implications for continuity of care. Too many age groups and/or very narrow age groups might result in children being moved between classrooms and/or providers too often. ELG/ITs should include information about the importance of continuity of care and concrete examples of how providers can implement continuity of care in their programs.
- Some states use overlapping age ranges for its age groups. While this overlap may be developmentally appropriate, it could pose difficulty for assessment. An individual child may fall into two of the age groups at a given point in time, yet she can only be assessed in one age group. If a state or territory does choose to employ overlapping age ranges, the ELG/ITs should include explicit directions about how children are to be identified for assessment purposes.

A table showing different ways of dividing infants and toddlers into age groups developed by national early childhood organizations is available in Appendix B.



Recommendation 12 Cover Multiple Developmental Domains

ELG/ITs should cover multiple developmental domains while still reflecting the underlying learning processes, the significance of relationships during this period, and areas of health and well-being that cut across domains in infancy.

Rationale

Domains are the traditional categories of the early childhood field and can help link the ELG/ITs to existing Pre-K guidelines. Since the developmental domains are highly interrelated in infancy, it can be difficult to isolate any one behavior or concept as belonging to only one domain. Development "unfolds along individual pathways whose trajectories are characterized by continuities and discontinuities"²³ and are affected by individual differences, experiences, culture, and early relationships.

States must decide which domains will be used in developing their guidelines. It is important that the ELG/ITs guide adults to understand, appreciate, and support each infant's natural interest in discovery and learning.²⁴ Although domain titles such as "Mathematics" or "Science" may raise awareness that some early understandings of academic topics are developing in infancy, they suggest that a more academic environment than is appropriate should be created. At a minimum, states should cover these domains:

- Physical (including health and well-being);
- Emotional–social;
- Language and emergent literacy; and
- Cognitive.

In the infant and toddler years, the underlying learning processes are being established, such as regulation, attention, curiosity, problem-solving, memory, and gathering information. Many states address these processes under a heading titled "Approaches to Learning." Some states also use "Creative Expression" and "Mathematics and Science" as additional categories of learning. Some states use these academic subject area headings as a way to promote alignment with their Pre-K guidelines. The danger is that instead of presenting how the foundations of learning lead to later success in school, some tenuous subject matter connections may be proposed. It is important to be aware that infant and toddler learning is not subject-specific or domain-specific. Learning occurs through relationships, play, and discovery and is dynamic and multidimensional.

Key Considerations

• Language used in naming the domains must be understandable to people with no training in the field, as well as relate to the language used in the state's preschool guidelines. Arkansas provides an example of using both conventional and accessible language to



describe the domains, such as "Emotional Development: To Learn About Their Feelings."

• There are sometimes overlaps between program standards and ELGs; however, the ELG/ ITs should only address the components of children's learning. Child health and wellbeing, for example, are usually included in program standards, such as "programs will provide nutritious meals." Health also has components that apply to children's learning and development. Those components should be embedded in the guidelines, such as learning to wash hands before eating or learning how to brush teeth. Both Alaska and Washington state, for example, have a "Physical Health, Well-Being and Motor Development" domain that includes child indicators and caregiver strategies for such skills as bathing, dressing, dental hygiene, nutrition, and safety. Tennessee also includes learning expectations and performance indicators for health as part of their "Physical Development" domain.

Recommendation 13

State Learning Expectations and Indicators

Learning expectations for each domain should be clearly stated and include discrete and observable indicators.

Rationale

Learning expectations (sometimes called benchmarks or performance standards) describe what babies should know. Benchmarks or performance standards are "clear, specific descriptions of knowledge or skill that can be supported through observations, descriptions, and documentations of a child's performance or behavior and by samples of child's work often used as points of reference in connection with more broadly stated content standards."²⁵

Learning expectations in ELG/ITs usually include developmental milestones. Milestones are behaviors that demonstrate changes in skills due primarily to maturation (i.e., first smile, crawling, first words). ELG/ITs, however, describe learning that goes beyond traditional milestones to include functional or practical objectives as well. Indicators describe how babies demonstrate this knowledge.

Clear language facilitates the adult's understanding and use of the guidelines. This will affect the adult's interactions with the child, which will, in turn, influence the child's behavior. The example in the side bar on p.20 illustrates the use of a milestone, "Uses a variety of sounds and movements to communicate." The milestone is followed by a short paragraph richly describing what and how children learn, and the bulleted list is a series of observable indicators. The language is clear, vivid, and easily accessible to the reader.



Milestones and Learning Expectations

Here is an example from Florida that starts with a traditional milestone but then goes on to add context and richness to the description of the behaviors to be observed:

Uses a variety of sounds and movements to communicate. H.S./CFR 1304.21(a)(1) (i) – (a)(1)(v); (b)(1)(i)

Starting at birth, young infants build connections between sounds, gestures, and meaning. During the first months of life, an infant communicates with gazes, cries, coos, smiles, and frowns to make their interests and their needs known. They use their eyes to direct attention to particular things and enjoy making sounds back and forth with responsive parents, caregivers, and teachers. They begin to use syllables as a way to communicate their wants and needs, along with their bodies. Young infants demonstrate the use of sounds and movements to communicate by:

- using cries and body movements to gain parents', caregivers', and teachers' attention;
- experimenting with different types of sounds, such as making raspberries or popping lips;
- taking turns making sounds with their parents, caregivers, and teachers;
- beginning to coo, using vowel sounds like aah, eee, ooo and other speech sounds that are consistent with their home language;
- babbling, using repeated syllables such as ma ma ma, ba ba;
- using their bodies to communicate, such as waving and pointing and holding their hands to their eyes to play peek-a-boo.

- Learning expectations (benchmarks or performance standards) describe learning beyond traditional milestones.
- The choice of such terms as learning expectation, performance standard, or benchmark may be determined by the need to align with Pre-K guidelines and by the meaning of the terms within the working group.
- Indicators may illustrate more than one way to achieve the learning expectation (benchmark or performance standard). For example, becoming competent at dressing may be achieved through increasing autonomy in some cultures but by becoming cooperative in others.
- The breadth or specificity to be described in learning expectations and/or indicators should be consistent throughout the guidelines. Most ELG/ITs include indicators as a subheading to a learning expectation. These indicators describe more specific and measurable aspects of a learning expectation.



Recommendation 14 Incorporate Cultural and Linguistic Diversity

Learning expectations, indicators, and examples should be written to describe a variety of goals and ways of achieving them that are inclusive of the state's diverse cultural, ethnic, and linguistic populations.

Rationale

Culture, ethnicity, and language are incorporated by young infants into their sense of self through their relationships and experiences in their environment. Each child learns how I am to behave and how others should be with me through culturally prescribed interactions. Accordingly, the child care environment should "be in harmony with what goes on at home, following the form and style of what is familiar to the child."²⁶

ELG/ITs must be developed with attention to issues of culture, ethnicity, and language in order to be accepted by members of different groups. For example, a cultural group that believes children should be increasing their skills and knowledge in achieving cooperation might reject guidelines that assume that autonomy and independence are commonly accepted learning goals.

ELG/ITs need to describe how accomplishments can be achieved in languages other than English, so that they support the linguistic and cultural foundations provided by other primary home languages. Indeed, as a NAEYC position paper states: "Because knowing more than one language is a cognitive asset, early education programs should encourage the development of children's home language while fostering the acquisition of English."²⁷

Key Considerations

- States should engage with different cultural groups to learn what they consider to be the learning accomplishments of the first three years of life.
- The working group should examine assumptions within learning expectations and indicators to eliminate cultural bias. For example, instead of achieving "autonomy," a more generally accepted goal would be "competence and participation."
- ELG/ITs should support the linguistic and cultural foundations provided by a home language. Iowa's benchmarks include culturally diverse examples, as in the "Social and Emotional Development" domain, sub-area "Sense of Community," which states "The infant or toddler: 1) shows enjoyment at being in a familiar setting or group, 2) chooses and participates in familiar activities, including songs and stories from the home culture." An example for this benchmark is "Chi's father, who is from Vietnam, visits the classroom during snack. He shows the toddlers how he uses chopsticks to eat his food and lets them explore using child-size chopsticks with their food. Chi beams."

Use indicators and examples within the actual guidelines to illustrate how cultural differences might look.

Examples of ways that cultural differences may be expressed more explicitly include:

- The toddler recognizes print symbols in the alphabet of his home language as having meaning.
- The toddler eats as expected according to family norms, which might include being spoon-fed by an adult, finger- or spoonfeeding himself, using "learner" chopsticks, scooping stewed meats and vegetables with pieces of the sponge-like bread injira, or rolling foods in tortillas.
- The baby takes part in "conversations" according to family and cultural norms which may mean reciprocal interactions, listening only, meeting the speaker's eyes, or keeping one's eyes cast down.



Recommendation 15 Include Infants and Toddlers with Special Needs

ELG/ITs should be explicitly inclusive of all children, demonstrating that infants and toddlers with disabilities and special needs are expected to learn and be served in these programs.

Rationale

Early Learning Guidelines should be applicable to all children, including children with varying abilities and needs. It is important that adults understand how to apply these guidelines according to each child's individual needs and abilities.

"Guidelines that are inclusive of children with special needs focus on describing the developmental process and what children can do at each stage, allow for individualization in how achievement is described and measured, and link caregivers to information and resources."²⁸

Although most states discuss the use of ELG/ITs with infants and toddlers with disabilities, they vary widely in the depth and breadth of the discussion and supports. Some states provide guidance within the guidelines themselves, some develop separate supporting documents, and some provide training and technical assistance.

- Every child is a child first. ELG/ITs apply to all children in all settings. Iowa, for example, in the "Caregiving Supports" section under each standard, stresses how caregivers can support each child in ways that reflect special developmental needs and home cultures.
- The writing process should involve experts with knowledge about and experience with disabilities, such as parents and state and local level representatives from early intervention (Parts B & C of the Individuals with Disabilities Act).
- Examples of adaptive materials should be used along with resources related to specialized services. Nebraska, for example, includes a section on "Strategies to support inclusive learning environments" at the beginning of each of their domain areas, while Maine has a section on "Responding to Individual Differences" under each of their age group headings.
- Inclusive terminology should be used throughout the document, such as person-first language (for example, saying "a child with Down syndrome rather than a Down syndrome child").
- Children with disabilities should be included in examples throughout the document.
- The guidelines can be piloted in inclusive settings.
- Training and technical assistance about using the guidelines with children with special needs should be provided to primary audiences.
- A companion resource document can be developed that provides more in-depth information about accommodations for children with special needs.



Recommendation 16 Describe the Role of Adults

ELG/ITs should describe the importance of very young children's relationships with adults as the foundation of their learning.

Rationale

The role of adults in providing care and education is usually described in program standards rather than in Early Learning Guidelines. However, adults play such a significant role in developing the foundations of learning and the infant's growing sense of self that it is nearly impossible to explain early learning without some description of the role of the adult.

The responsiveness of adults who care for infants and toddlers is critical to child well-being.²⁹ Research shows that infants with secure attachment relationships with their caregivers are more likely to play, explore, and interact with adults in their child care setting.³⁰ Responsive caregivers create learning environments that support child-initiated learning and imitation while building and sustaining positive relationships among adults and children.³¹

Continuity of care is important for the relationship between caregivers and infants and toddlers. Too many changes in caregivers can lead to a child's reluctance to form new relationships.³² Caregivers who are attuned to each child's unique needs and personality can support, nurture, and guide the child's growth and development.³³ The better somebody knows a child, the better he or she can read a young child's subtle clues to understand what the child needs.³⁴

- Some states, such as Louisiana, include both ELG/ITs and program standards for infant and toddler programs in the same document. With this format, it is important to clearly distinguish between the early learning guidelines, which are child-focused, and the program standards, which are program-focused. An introduction to each topic area can also be useful to outline the role of the adult in supporting the child's development.
- Some states create separate documents related to ELG/ITs for parents. These documents tend to be shorter and easier to read than the ELG/ITs, and they are often designed to be more visually appealing as well. For example, Arkansas and Kentucky have companion documents for parents. Arkansas' *Infant and Toddler Family Connections* is a packet of materials for families and Kentucky's *Parent Guide for Children Birth to Three* supports families in understanding and using the ELG/ITs in English and Spanish.
- States may need companion teaching strategies that are aligned with their ELG/ITs. Developing such strategies would likely require a great deal of time and resources to ensure they were developmentally appropriate and that caregivers could effectively implement them.
- Many states include strategies or activities for caregivers under each domain area or with their indicators or benchmarks. Connecticut, Delaware, Maryland, Indiana, and Oregon are examples of states that take this approach. Some states also include suggestions and resources for parents within their ELG/ITs.



Recommendation 17 Align Assessment

Child assessment should be aligned with ELG/ITs and its purpose and use should be clearly defined.

Rationale

ELG/ITs provide the framework for what infants and toddlers are expected to be able to know and do. Assessments collect information about an individual child's performance relative to the content of the guidelines, providing formative information that helps individualize planning for each child. The development of the assessment should follow and complement the development of the guidelines so that the assessment is a clear and direct reflection of the guidelines.³⁵ Without ELG/ITs, it is difficult, if not impossible, to create meaningful assessments. The relationship between assessments and guidelines is very close, because assessments enable us to keep track of whether children have mastered the guidelines, and guidelines focus the assessments.

- ELG/ITs should not be misinterpreted as an assessment tool.
- Assessments should be identified during development of the guidelines. States should have an understanding of assessment activities already occurring in early childhood systems and programs, such as early intervention.
- ELG/ITs should be useful for all children, including children with disabilities, and assessment should never be used to exclude children from a program.
- ELG/ITs should not be integrated into an accountability system that could have negative consequences for the children. When accountability is determined by child outcome, programs may be tempted to simply teach to the test.
- Assessments should be reasonable to administer and easy to interpret.
- States should clearly define the purpose of assessment, how it relates to the use of the ELG/ITs, and how it will be used.
- There should be a close match between the intention, priorities, and content of the guidelines and the intention, priorities, and content of assessment. Assessment should reflect the guidelines. For example, California's Child Development Division has an assessment instrument, the Desired Results Development Profile–Revised (DRDP-R), that is currently used in every subsidized care and education program in the state. An alignment study currently in process is reviewing the alignment of the content of the DRDP-R to the Infant Toddler Foundations (California's ELG/ITs). Some changes will be made to the assessment instrument to ensure alignment with their ELG/ITs.
- Assessment should be fair and equitable. It is more equitable if multiple measures are used and accommodations made for children with special needs and different cultural/ linguistic backgrounds.

SUMMARY

he development and implementation of Early Learning Guidelines for Infants and Toddlers (ELG/ITs) has been a challenging process for many states. ZERO TO THREE believes that a clear articulation of what infants and toddlers should be learning is an important element of an early childhood system and one that may provide support to states in their efforts to address, support, and improve quality of care.

Working with a group of experts in the field, ZERO TO THREE has developed this series of recommendations for states to consider as they write or revise their ELG/ITs. The process of developing ELG/ITs should begin with a clear definition of the purpose and intended uses of the document. The process should be inclusive of a variety of stakeholders and adequately supported with funds and personnel. ELG/ITs need to be thoughtfully developed within the context of existing Pre-K guidelines and K–12 standards as well as existing elements of the early childhood system within the state.

There are no national learning standards describing what infants and toddlers should be learning, so developing the domains and learning expectations is a particular challenge. Issues arise concerning the unique aspects of this age, such as the development of learning processes, the emerging sense of self and its foundation in culture, and the primary context of relationships.

Early Learning Guidelines for Infants and Toddlers can make a strong contribution to the professional development of the infant family field. However, to be useful, they must be thoughtfully and carefully constructed through an intentionally inclusive process.



APPENDIX A RESOURCE LIST

Mental Health

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, NJ: Erlbaum.

Bowlby, J. (1988). A secure base: Parent-child attachment and healthy human development. New York: Basic Books.

Finello, K. (Ed.), (2005). *The handbook of training and practice in infant and preschool mental health*. San Francisco: John Wiley & Sons.

Greenspan, S., & Wieder, S. (2007). *Infant and early childhood mental health: A comprehensive developmental approach to assessment and intervention*. Arlington, VA: American Psychiatric Association.

Osofsky, J. D. (2007). Young children and trauma: Intervention and treatment. New York: Guilford Press.

Sameroff, A., McDonough, S., & Rosenblum, K. (2004). *Treating* parent–infant relationship problems: Strategies for intervention. New York: Guilford Press.

Shirilla, J., & Weatherston, D. (Eds.). (2002). *Case studies in infant mental health: Risk, resiliency, & relationships*. Washington, D.C.: ZERO TO THREE Press.

Stern, D. (2000). *The interpersonal world of the infant*. New York: Basic Books.

ZERO TO THREE. (2005). *Diagnostic classification of mental health and developmental disorders of infancy and early childhood*: Revised edition (DC:0–3[®]) Washington, DC: ZERO TO THREE Press.

Public Policy

Brazelton, T. B., & Greenspan, S. I. (2000). *The irreducible needs of children: What every child must have to grow, learn, and flourish*. New York: Perseus.

Center on the Developing Child at Harvard University. (2007). *A* science-based framework for early childhood policy: Using evidence to improve outcomes in learning, behavior, and health for vulnerable children. Available from www.developingchild.harvard.edu

Council of Chief State School Officers. (2007). *The words we* use: A glossary of terms for early childhood education standards and assessment. Washington, DC: CCSSO. Retrieved July 10. 2007, from www.ccsso.org/projects/scass/Projects/Health_ Education_Assessment_Project/Publications_and_Products/

Friedman, D. (n.d.). What science is telling us: how neurobiology and developmental psychology are changing the way policymakers and communities should think about the developing child. Retrieved April 15, 2005, from www.developingchild. net/papers/paper_2.pdf

Heckman, J. J. (2006). *Skill formation and the economics of investing in disadvantaged children. Science 312* (5782), 1900–1902.

Lombardi, J., & Bogle, M. Eds. (2004). *Beacon of hope: The promise of Early Head Start for America's youngest children*. Washington, DC: ZERO TO THREE Press.

Scott-Little, C. Lesko, J. Martella, J. Millburn. (2005). *Early learning standards: Results from a national survey to document trends in state-level policies and practices*. Council of Chief State School Officers. Retrieved July 9, 2007 from http://ecrp.uiuc. edu/v9n1/little.html

Early Development

Astington, J. W., & Barriault, T. (2001). Children's theory of mind: How young children come to understand that people have thoughts and feelings. *Infants and Young Children*, *13*(3), 1–12.

Bayley, N. (2006). *Bayley scales of infant and toddler development* (3rd ed.). San Antonio, TX: Harcourt Assessment, Inc.

Bowman, B. T., Donovan, M. S., & Burns, M. S. (2000). *Eager* to learn: Educating our preschoolers [Executive summary]. Washington, DC: National Academy Press.

Cryer, D., & Harms, T. (2000). *Infants and toddlers in out of home care*. Baltimore: Brookes.

Dodge, D. T., Rudick, S., & Berke, K. (2006). *The creative curriculum for infants, toddlers and twos*. (2nd ed.). Washington,

DC: Teaching Strategies, Inc.

Friedman, D. (n.d.a). *Interaction and the architecture of the brain*. Retrieved April 15, 2005, from www.developingchild.net/ papers/020705_interactions_article.pdf

Friedman, D. (n.d.b). *Stress and the architecture of the brain*. Retrieved April 15, 2005, from **www.developingchild.net**/ **papers/stress_article.pdf**

Gandini, L., & Edwards, C. (Eds.). (2001). *Bambini: The Italian approach to infant and toddler care*. New York: Teachers College Press.

Gopnik, A., Meltzoff, A. N., & Kuhl, P. K. (1999). *The scientist in the crib: Minds, brains, and how children learn*. New York: Morrow.

Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore, MD: Paul H. Brooks Publishing Co.

High/Scope. (2007). *Child observation record (COR) for infants and toddlers*. Ypsilanti, MI: High Scope Press.

Lally, J. R. & P Mangione. (2006). The uniqueness of infancy demands a responsive approach to care. *Young Children, 61*(4): 14–20.

Lally, J. R., et. al. (2004). *Caring for infants and toddlers in groups: developmentally appropriate practice*. Washington, DC: ZERO TO THREE Press.

Meisels, S. J., Dombro, A. L., Marsden, D. B., Weston, D. R., & Jewkes, A. M. (2003). *The ounce scale*. New York: Pearson Early Learning.

National Scientific Council on the Developing Child. (2007). *The science of early childhood development*. www.developingchild.net

National Scientific Council on the Developing Child. (2004). Young children develop in an environment of relationships. Available at: www.developingchild.net/pubs/wp/Young_ Children_Environment_Relationships.pdf

Post, J., & Hohmann, M. (2000). *Tender care and early learning: Supporting infants and toddlers in child care settings*. Ypsilanti, MI: High/Scope Press.

Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press. Shonkoff, J. P., & Meisels, S. J. (Eds.). (2000). *Handbook of early childhood intervention*. (2nd Ed.) New York: Cambridge University Press.

Shonkoff, J. P., Phillips, D. A., (Eds.). (2000). From neurons to neighborhoods: The science of early childhood development. Washington, DC: National Academy Press.

Shelov, S. P., & Hannemann, E. P. (2005). *Caring for your baby and young children: Birth to age 5* (4th ed.). Elk Grove Village, IL: American Academy of Pediatrics.

Siegel, D. J. (2001). *The developing mind: How relationships and the brain interact to shape who we are.* New York: Guilford Press.

Small, M. F. (1999). *Our babies, ourselves: How biology and culture shape the way we parent*. New York: Anchor.

Trawick-Smith, J. (2006). *Early childhood development: A multicultural perspective*. Upper Saddle River, NJ: Pearson.

WestEd Laboratory. (2006). Concepts for care: 20 essays on infant/toddler development and learning. San Francisco: WestEd Laboratories. Available from www.wested.org/cs/we/view/rs/822

Wittmer, D. S. & Petersen, S. H. (2006). *Infant and toddler development and responsive program planning: A relationshipbased approach*. Upper Saddle River, N.J.: Pearson Merrill Prentice Hall.

ZERO TO THREE. *Zero to Three* Journal. Published bi-monthly. Washington, DC: ZERO TO THREE Press.

Websites for Current Research and Statistics:

Child Care and Early Education Research Connections. www.childcareresearch.org/

Child Trauma Academy. www.childtraumaacademy.com

Harvard Family Research Project. www.gse.harvard.edu/hfrp/

National Association for the Education of Young Children. www.NAEYC.org

National Center for Children in Poverty. www.nccp.org

National Child Care Information Center. www.NCCIC.org

National Institute for Early Education Research. www.nieer.org

ZERO TO THREE. www.zerotothree.org

APPENDIX B AGE GROUPS

There is no national standard for the number or range of age groups for children ages birth to three years. Resources for national early childhood organizations and programs present different ways of dividing infants and toddlers into age groups.

National Resource	Number and Range of Age Groups
American Academy of Pediatrics, as cited in Lally, J. R., Griffin, A., Fenichel, E., Segal, M., Szanton, E. S. and Weissbourd, B. (2003). <i>Caring for Infants and Toddlers</i> <i>in Groups: Developmentally Appropriate Practice</i> . Washington, DC: ZERO TO THREE.	In its recommendations for group size, ratios, <i>Caring for Infants and Toddlers in Groups</i> reports that the American Academy of Pediatrics identifies three age groups: Birth to 12 months 12 to 18 months 18 to 35 months
Head Start Program Performance Standard 1304.52. Available from: http://eclkc.ohs.acf.hhs.gov/hslc/ Program%20Design%20and%20Management/ Head%20Start%20Requirements/Head%20Start%20 Requirements/1304	For teacher–child ratios in Early Head Start (EHS) programs, EHS performance standards use a single age group for birth to three: Birth to 36 months
National Association for the Education of Young Children. (2005). <i>NAEYC Accreditation Criteria: Teacher–</i> <i>Child Ratios within Group Size</i> . Available from: www.naeyc.org/academy/criteria/teacher_child_ ratios.html	For teacher-child ratios in accredited programs, the National Association for the Education of Young Children identifies four age groups from birth to three: Infants (birth to 15 months) Toddler/Twos (12-28 months) Toddler/Twos (21-36 months) Preschool (30 - 48 months) The "Infants" and "Toddlers" age groups overlap—this is explained in the document: "These age ranges purposefully overlap. Programs may identify the age group to be used for on-site assessment purposes for groups of children whose ages are included in multiple age groups."
Signer, S., & Tuesta, A. (2004). Steps toward implementation of PITC recommendations for group size. [Handout from Module II training session, and the advanced training 2004 session]. Unpublished document. Sausalito, CA: The Program for Infant/Toddler Care. Available from: www.pitc.org/cs/pitctr/view/ pitc_res/715	In its recommendations for group size, ratios, and amount of space, the Program for Infant/Toddler Care identifies three age groups: Young Infants (birth to 8 months) Mobile Infants (6 to 18 months) Older Infants (18 to 36 months) The "Young Infants" and "Mobile Infants" groups overlap.
ZERO TO THREE, as cited in Lally, J. R., Griffin, A., Fenichel, E., Segal, M., Szanton, E. S. and Weissbourd, B. (2003). <i>Caring for Infants and Toddlers in Groups:</i> <i>Developmentally Appropriate Practice</i> . Washington, DC: ZERO TO THREE.	In its recommendations for group size and ratios, <i>Caring for Infants and Toddlers in Groups</i> reports that ZERO TO THREE identifies three age groups: Birth to 9 months 8 to 18 months 16 to 36 months

APPENDIX C STATES WITH INFANT AND TODDLER EARLY LEARNING GUIDELINES WEBSITES

Note: The states highlighted in yellow have guidelines for children birth to age 5 or birth to kindergarten age; all others cover children birth to age 3 separately from their preschool guidelines.

Alaska: *Early Learning Guidelines* Available at: www.eed.state.ak.us/news/elg_guidelines.pdf

Arkansas: Arkansas Framework for Infant and Toddler Care Available at: www.arkansas.gov/childcare/bench.pdf

Connecticut: Guidelines for the Development of Early Learning for Infants and Toddlers (Draft) Available at: www.wheelerclinic.org/children/EGdraft2forweb.pdf

Delaware: Delaware Infant and Toddler Early Learning Foundations: A Curriculum Framework Available at: www.doe.k12.de.us/files/pdf/earlychildhood_infant-toddler.pdf

Florida: Florida Birth to Three Learning and Developmental Standards Available at: www.floridajobs.org/earlylearning/downloads/pdf/birth_to_3book.pdf

Georgia: Georgia Early Learning Standards: Birth Through Age 3 Available at: www.decal.state.ga.us/CCS/CCSServices.aspx?Header=67&SubHeader= &Position=18&HeaderName=Georgia%20Early%20Learning%20Standards

Indiana: Foundations to the Indiana Academic Standards for Young Children from Birth to Age 5 Available at: www.doe.state.in.us/primetime/pdf/foundations/indiana_foundations.pdf

Iowa: *Iowa Early Learning Standards* Available at: www.iowa.gov/educate/3-to-5-years-old/early-childhood-standards_3.html

Kansas: Kansas Early Learning Guidelines: A Developmental Sequence Building the Foundation for Successful Children (Draft)

Available at: www.ksde.org/Default.aspx?tabid=1741

Kentucky: Building a Strong Foundation for School Success: Kentucky's Early Childhood Standards Available at: www.education.ky.gov/KDE/Instructional+Resources/Early+Childhood+ Development/Building+a+Strong+Foundation+for+School+Success+Series.htm

Louisiana: Louisiana's Early Learning Guidelines and Program Standards: Birth Through Three Available at: www.dss.state.la.us/Documents/OFS/LAEarlyLearningGuide.pdf

Maine: Supporting Maine's Infants & Toddlers: Guidelines for Learning & Development Available at: **www.maine.gov/dhhs/occhs/infantstoddlers.pdf**

Maryland: Guidelines for Healthy Child Development and Care for Young Children (Birth–Three Years of Age) Available at: www.dhr.state.md.us/cca/pdfs/guidechild.pdf

Michigan: Michigan Early Childhood Standards of Quality for Infant and Toddler Programs Available at: www.michigan.gov/documents/mde/ECSQ-IT_Final_180649_7.pdf **Minnesota:** Early Childhood Indicators of Progress: Minnesota's Early Learning Guidelines for Birth to 3 Available at: edocs.dhs.state.mn.us/lfserver/Legacy/DHS-4438-ENG

Nebraska: Nebraska Early Learning Guidelines for Ages Birth to 3 Available at: www.nde.state.ne.us/ech/ELGuidelines/ELG_IT.pdf

New Hampshire: New Hampshire Early Learning Guidelines Available at: www.dhhs.nh.gov/DHHS/CDB/LIBRARY/Policy-Guideline/learning-guidelines.htm

Ohio: Ohio's Infant & Toddler Guidelines Available at: http://jfs.ohio.gov/CDC/InfantToddler.pdf

Oregon: *Early Childhood Foundations* Available at: http://findit.emp.state.or.us/childcare/childhood_foundations.pdf

Pennsylvania: Infants and Toddlers: Pennsylvania Learning Standards for Early Childhood Available at: www.pde.state.pa.us/early_childhood/lib/early_childhood/Infant_Toddler_Standards_4_07.pdf

Tennessee: Tennessee Early Childhood Early Learning Developmental Standards Available at: www.state.tn.us/education/ci/standards/earlychildhood/

Washington: Washington State Early Learning and Development Benchmarks Available at: www.k12.wa.us/EarlyLearning/Benchmarks.aspx

As of publication date, the following states are in the process of developing or publishing Early Learning Guidelines for Infants and Toddlers: California, Idaho, Nevada, North Carolina, North Dakota, and Oklahoma.

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