

Early Childhood Curriculum, Assessment, and Program Evaluation

Building an Effective, Accountable System in Programs for Children Birth through Age 8

This resource is based on the 2003 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)**. It includes the statement of position, recommendations, and indicators of effectiveness of the position statement, as well as an overview of relevant trends and issues, guiding principles and values, a rationale for each recommendation, frequently asked questions, and developmental charts.

Introduction

High-quality early education produces long-lasting benefits (Schweinhart & Weikart 1997; National Research Council & Institute of Medicine 2000; Peisner-Feinberg et al. 2000; National Research Council 2001; Reynolds et al. 2001; Campbell et al. 2002). With this evidence, federal, state, and local decision makers are asking critical questions about young children's education. What should children be taught in the years from birth through age eight? How would we know if they are developing well and learning what we want them to learn? And how could we decide whether programs for children from infancy through the primary grades are doing a good job?

Answers to these questions—questions about *early childhood curriculum, child assessment, and program evaluation*—are the foundation of the joint position statement from 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).

Overview

This document begins by summarizing the position of NAEYC and NAECS/SDE about what is needed in an effective system of early childhood education—a system that supports a reciprocal relationship among

curriculum, child assessment, and program evaluation. Next, the document outlines the position statement's background and intended effects. It describes the major trends, new understandings, and contemporary issues that have influenced the position statement's recommendations. With this background, the document then outlines the principles and values that guide an interconnected system of curriculum, child assessment, and program evaluation. We emphasize that such a system must be linked to and guided by early learning standards and early childhood program standards that are consistent with professional recommendations (NAEYC & NAECS/SDE 2002; NAEYC 2003).

Next, key recommendations, rationales, and indicators of effectiveness are presented for each of these components, accompanied by frequently asked questions. Although the recommendations and indicators will generally apply to children across the birth–eight age range, in many cases the recommendations need developmental adaptation and fine-tuning. Where possible, the position statement notes these adaptations or special considerations. To further illustrate these developmental considerations, each component is accompanied by a chart (pp. 19-26) that gives examples of how the recommendations would be implemented with infants and toddlers, preschoolers, and kindergarten-primary grade children. This resource concludes by describing examples of the support and resources needed to develop effective systems of curriculum, child assessment, and program evaluation.

The Position

The National Association for the Education of Young Children and the National Association of Early Childhood Specialists in State Departments of Education take the position that policy makers, the early childhood profession, and other stakeholders in young children's lives have a shared responsibility to

- construct comprehensive systems of curriculum, assessment, and program evaluation guided by sound early childhood practices, effective early learning standards and program standards, and a set of core principles and values: belief in civic and democratic values; commitment to ethical behavior on behalf of children; use of important goals as guides to action; coordinated systems; support for children as individuals and members of families, cultures,¹ and communities; partnerships with families; respect for evidence; and shared accountability.
- implement curriculum that is thoughtfully planned, challenging, engaging, developmentally appropriate,² culturally and linguistically responsive, comprehensive, and likely to promote positive outcomes for all young children.
- make ethical, appropriate, valid, and reliable assessment a central part of all early childhood programs. To assess young children's strengths, progress, and needs, use assessment methods that are developmentally appropriate, culturally and linguistically responsive, tied to children's daily activities, supported by professional development, inclusive of families, and connected to specific, beneficial purposes: (1) making sound decisions about teaching and learning, (2) identifying significant concerns that may require focused intervention for individual children, and (3) helping programs improve their educational and developmental interventions.
- regularly engage in program evaluation guided by program goals and using varied, appropriate, conceptually and technically sound evidence, to determine the extent to which programs meet the expected standards of quality and to examine intended as well as unintended results.

¹ The term *culture* includes ethnicity, racial identity, economic class, family structure, language, and religious and political beliefs, which profoundly influence each child's development and relationship to the world.

² NAEYC defines *developmentally appropriate practices* as those that "result from the process of professionals making decisions about the well-being and education of children based on at least three important kinds of information or knowledge: what is known about child development and learning...; what is known about the strengths, interests, and needs of each individual child in the group...; and knowledge of the social and cultural contexts in which children live" (Bredekamp & Copple 1997, 8–9).

- provide the support, professional development, and other resources to allow staff in early childhood programs to implement high-quality curriculum, assessment, and program evaluation practices and to connect those practices with well-defined early learning standards and program standards.

Position Statements' Intended Effects

In developing and disseminating position statements, NAEYC, NAECS/SDE, and their partner organizations aim to

- take informed positions on significant, controversial issues affecting young children's education and development³—in this case, issues related to curriculum development and implementation, the purposes and uses of assessment data, and benefits and risks in accountability systems for early childhood programs.
- promote broad-based dialogue on these issues, within and beyond the early childhood field.
- create a shared language and evidence-based frame of reference so that practitioners, decision makers, and families may talk together about early childhood curriculum, assessment, and program evaluation and their relationship to early learning standards and program standards.
- influence public policies—in this case, those related to early childhood curriculum development, adoption, and implementation; child assessment practices; and program evaluation practices—one by one and as these fit together into a coherent educational system linked to child outcomes or standards.
- stimulate investments needed to create accessible, affordable, high-quality learning environments and professional development that support the implementation of excellent early childhood curriculum, assessment, and program evaluation.
- build more satisfying experiences and better educational and developmental outcomes for all young children.

³ In this context, *development* is defined as the social, emotional, physical, and cognitive changes in children stimulated by biological maturation interacting with experience.

Trends and Issues

Since 1990, significant trends and contemporary issues, research findings, and new understandings of and changes in practice have influenced early childhood education. Many changes have had positive effects on the field and on the infants, toddlers, preschoolers, and kindergarten-primary children who are enrolled in early childhood programs. Other changes are less positive, raising concerns about how they may affect children's development, learning, and access to services.

To provide a context for the recommendations that follow, we outline some of these issues.

1. The contexts and needs of children, families, programs, and early childhood staff have changed significantly.

A snapshot taken today of the children and families served by our country's early childhood programs would look very different from one taken in 1990. Many more children would appear in the picture, as ever-higher proportions of children attend child care, Head Start, preschool, family child care, and other programs (Lombardi 2003; NIEER 2003). In more and more families, both parents work, further increasing the demand for child care, especially for infants and toddlers (Paulsell et al. 2002; Lombardi 2003). These changes in families' needs have influenced staffing patterns, hours of care, and other characteristics of programs for children before school entry, while also affecting the experiences children bring with them to kindergarten, first grade, and beyond.

The diversity of the U.S. population continues to expand, creating a far more multiethnic, multiracial, multireligious, and multicultural context for early childhood education. By the year 2030, 40 percent of all school-age children will have a home language other than English (Thomas & Collier 1997). Early childhood programs now include large numbers of immigrant children and children born to new immigrant parents, young children whose home language is not English, children living in poverty, and children with disabilities (Brennan et al. 2001; DHHS 2002; Rosenzweig, Brennan, & Ogilvie 2002; Annie E. Casey Foundation 2003; Hodgkinson 2003; U.S. Census Bureau 2003). These demographic trends have implications for decisions about curriculum, assessment practices, and evaluations of the effectiveness of early childhood programs.

Over the past decade, programs serving young children and families have also changed. Full-day and full-year child care and Head Start programs have expanded. Early Head Start did not exist in 1990, and few states offered prekindergarten programs either on a universal or targeted basis. In contrast, Early Head Start

in 2003 served approximately 62,000 low-income children from birth through age three (3 percent of the eligible children) and their families (ACF 2003), and 42 states and the District of Columbia had invested in prekindergarten programs based in or linked with public schools (Mitchell 2001), although most served relatively small numbers of children identified as living in poverty and at risk of school failure. Full-day kindergarten is now common in many school districts; in 2002, 25 states and the District of Columbia funded full-day kindergarten, at least in districts that chose to offer these services (Quality Counts 2002). Head Start programs increasingly collaborate with other early education programs, including state-funded prekindergarten programs, community-based child care providers, and local elementary schools (Head Start Program Performance Standards 1996; Lombardi 2003). Any new recommendations with respect to early childhood curriculum, child assessment, and program evaluation must take this expanded scope into account and must recognize the difficulties of coordinating and evaluating such a diverse array of programs.

National reports and government mandates have raised expectations for the formal education and training of early childhood teachers, especially in Head Start and in state-funded prekindergarten programs (National Research Council 2001; ASPE 2003). Teachers today are expected to implement more effective and challenging curriculum in language, literacy, mathematics, and other areas and to use more complex assessments of children's progress (National Research Council 2001). Both preschool teachers and teachers in kindergarten and the primary grades are expected to introduce academic content and skills to ever-younger children. These expectations, and the expanding number of early childhood programs, make the field's staffing crisis even more urgent, since the increased expectations have not been matched by increased incentives and opportunities for professional development.

The early childhood field lacks adequate numbers of qualified and sufficiently trained staff to implement appropriate, effective curriculum and assessment. Turnover continues to exceed 30 percent annually (Whitebook et al. 2001; Lombardi 2003), and compensation for early childhood educators continues to be inadequate and inequitable (Laverty et al. 2001). The staff turnover rate is greatly affected by a number of program characteristics, including the adequacy of compensation. All early childhood settings—including public-school-based programs—are experiencing critical shortages and turnover of qualified teachers, especially in areas that serve children who are at the highest risk for negative outcomes and who most need outstanding teachers (Keller 2003; Quality Counts 2003).

2. Evidence has accumulated about the value of high-quality, well-planned curriculum and child assessment.

In recent years, national reports and national organizations' position statements have sounded a consistent theme: Although children's fundamental needs are the same as ever, children, including the youngest children, are capable of learning more—and more complex—language, concepts, and skills than had been previously thought (National Research Council 2000; National Research Council & Institute of Medicine 2000; National Research Council 2001; Committee for Economic Development 2002).

We now have a better understanding of the early foundations of knowledge in areas such as literacy, mathematics, visual and performing arts, and science. In each of these areas, new research (for example, NAEYC & IRA 1998; National Research Council 1998; NAEYC & NCTM 2002) has begun to describe the sequences in which children become more knowledgeable and competent. This research is increasingly useful in designing and implementing early childhood curriculum. Well-planned, evidence-based curriculum, implemented by qualified teachers who promote learning in appropriate ways, can contribute significantly to positive outcomes for all children. Yet research on the effectiveness of specific curricula for early childhood remains limited, especially with respect to curriculum effects on specific domains of development and learning and curriculum to support young children whose home language is not English and children with disabilities.

3. State and federal policies have created a new focus on early childhood standards, curriculum, child assessment, and evaluation of early childhood programs.

Today, every state has K–12 standards specifying what children are expected to know and be able to do in various subject matter and/or developmental areas (Align to Achieve 2003). Head Start now has a Child Outcomes Framework (Head Start Bureau 2001), and a recent survey (Scott-Little, Kagan, & Frelow 2003) found that 39 states had or were developing standards for children below kindergarten age. As in the K–12 standards movement, states are beginning to link curriculum frameworks to early childhood standards (Scott-Little, Kagan, & Frelow 2003). Especially in the arena of literacy, both federal and state expectations emphasize the need for “scientifically based research” to guide curriculum adoption and evaluations of curriculum effectiveness.

The trend toward systematic use of child assessments and program evaluations has also led to higher stakes being attached to these assessments—in prekindergarten and Head Start programs as well as in kindergarten and the primary grades, where state accountability systems often dominate instruction and assessment. State investments in pre-K programs often come with clear accountability expectations. At every level of education, in an increasingly high-stakes climate, programs unable to demonstrate effectiveness in improving readiness or creating positive child outcomes may be at risk of losing support.

4. Attention to early childhood education has sometimes led to misuses of curriculum, assessment, and program evaluation.

Good intentions can backfire (Meisels 1992). In response to expectations that all programs should have a formal or explicit curriculum, programs sometimes adopt curricula that are of poor quality; align poorly with children's age, culture, home language (Tabors 1997; Fillmore & Snow 2000), and other characteristics; or focus on unimportant, intellectually shallow content (National Research Council 2001; Espinosa 2002). In other cases, a curriculum may be well designed but may be implemented with teaching practices ill suited to young children's characteristics and capacities (Bredekamp & Copple 1997). And few programs, districts, or states that adopt a particular curriculum track to see whether that curriculum is being implemented as intended and with good early childhood pedagogy.

Assessment practices in many preschools, kindergartens, and primary grade programs have become mismatched to children's cultures or languages, ages, or developmental capacities. In an increasingly diverse society, interpretations of assessment results may fail to take into account the unique cultural aspects of children's learning and relationships. As with curriculum, assessment instruments often focus on a limited range of skills, causing teachers to narrow their curriculum and teaching practices (that is, to “teach to the test”), especially when the stakes are high. An unintended result is often the loss of dedicated time for instruction in the arts or other areas in which high-stakes tests are not given.

In the press for results and accountability, basic tenets of appropriate assessment, as expressed by national professional organizations (for example, NASP 2002; AERA 2000; AERA, APA, & NCME 1999), are often violated. Assessments or screening tools may fail to meet adequate technical standards (Glascoe & Shapiro

2002), or assessments designed for one purpose (such as to guide teaching strategies) may be used for entirely different and incompatible purposes (NAEYC & NAECS/SDE 2002; Scott-Little, Kagan, & Clifford 2003). An example is the use of screening results to evaluate program effectiveness or to exclude children from services.

Summary

In the years since the publication of NAEYC's and NAECS/SDE's original position statement on early childhood curriculum and assessment (1990), much more has become known about the power of high-quality curriculum, effective assessment practices, and ongoing program evaluation to support better outcomes for young children. Yet the infrastructure of the early childhood education system, within and outside the public schools, has not allowed this knowledge to be fully used—resulting in curriculum, assessment systems, and program evaluation procedures that are not of consistently high quality. An overarching concern is that these elements of high-quality early education—curriculum, child assessment, and program evaluation—are often addressed in disconnected and piecemeal fashion.

The promise of a truly integrated, effective system of early childhood curriculum, assessment, and program evaluation is great. Although much is not yet known, greater research knowledge exists than ever before, and policy makers are convinced that early education is the key to later success, especially for our most vulnerable children. Despite disagreements about how best to use this key, early childhood educators today have unprecedented opportunities.

In taking advantage of these opportunities, clear principles and values are essential guides. Before turning to specific recommendations, the next section of this document proposes nine such principles.

Guiding Principles and Values

• *Belief in civic and democratic values*

The values of a democratic society guide the position statement's recommendations. Respect for others; equality, fairness, and justice; the ability to think critically and creatively; and community involvement are valued outcomes in early childhood programs. Decisions that affect young children, families, and programs involve stakeholders in democratic, respectful ways.

• *Commitment to ethical behavior on behalf of children*

NAEYC's Code of Ethical Conduct (NAEYC 1998) emphasizes that decisions about curriculum, assessment, and program evaluation must “first, do no harm”—never denying children access to services to which they are entitled and always creating opportunities for children, families, and programs to experience beneficial results.

• *Use of important goals as guides to action*

Clear, well-articulated goals that are developmentally and educationally significant—including early learning standards and program standards—direct the design and implementation of curriculum, assessment, and evaluation. These goals are public and are understood by all those who have a stake in the curriculum/assessment/evaluation design and implementation.

• *Coordinated systems*

The desired outcomes and content of the curriculum, the ways in which children's progress is assessed, and the evaluation of program effectiveness are coordinated and connected in a positive, continuous way.

• *Support for children as individuals and as members of families, cultures, and communities*

Curriculum, assessment, and program evaluation support children's diversity, which includes not only children's ages, individual learning styles, and temperaments but also their culture, racial identity, language, and the values of their families and communities.

• *Respect for children's abilities and differences*

All children—whatever their abilities or disabilities—are respected and included in systems of early education. Curriculum, assessment, and program evaluation promote the development and learning of children with and without disabilities.

• *Partnerships with families*

At all ages, but especially in the years from birth through age eight, children benefit from close partnerships and ongoing communication between their families and their educational programs.

• *Respect for evidence*

An effective system of curriculum, assessment, and program evaluation rests on a strong foundation of evidence. “Evidence” includes empirical research and well-documented professional deliberation and consensus, with differing weights given to differing types of evidence.

• *Shared accountability*

NAEYC and NAECS/SDE believe that professionals are indeed accountable to the children, families, and communities they serve. Although many aspects of children's lives are outside the influence of early

childhood programs, staff and administrators—as well as policy makers—must hold themselves accountable for providing all children with opportunities to reach essential developmental and educational goals.

Recommendations

This section presents recommendations for each of three critical elements of an effective system: curriculum, child assessment, and program evaluation. Each recommendation is followed by a rationale or justification. Next are listed indicators of effectiveness—what someone would be likely to see if the recommendation were well implemented. Because the position statement addresses the full birth–eight age range, appropriate distinctions are made wherever possible about how the recommendation or related indicators would be implemented with infants and toddlers, preschoolers, and kindergarten–primary children. A set of frequently asked questions is presented for each recommendation, and developmental charts provide examples that further elaborate these points.

Curriculum

Key Recommendation

Implement curriculum that is thoughtfully planned, challenging, engaging, developmentally appropriate, culturally and linguistically responsive, comprehensive, and likely to promote positive outcomes for all young children.

Rationale

Curriculum is more than a collection of enjoyable activities. *Curriculum* is a complex idea containing multiple components, such as goals, content, pedagogy, or instructional practices. Curriculum is influenced by many factors, including society's values, content standards, accountability systems, research findings, community expectations, culture and language, and individual children's characteristics.

Definitions and issues about the sources and purposes of curriculum have been debated for many years (Hyson 1996; Dahlberg, Moss, & Pence 1999; Marshall, Schubert, & Sears 2000; Goffin & Wilson 2001; Eisner 2002). Whatever the definition, good, well-implemented early childhood curriculum provides developmentally appropriate support and cognitive challenges and,

therefore, is likely to lead to positive outcomes (Frede 1998). A recurring theme in recent research syntheses has been that curriculum in programs for infants through the primary grades must be comprehensive, including attention to social and emotional competence and positive attitudes or approaches to learning (Peth-Pierce 2001; Raver 2002). Another emphasis is on the implementation of curricula providing cultural and linguistic continuity for young children and their families.

The position statement reflects the view that “curriculum that is goal oriented and incorporates concepts and skills based on current research fosters children’s learning and development” (Commission on NAEYC Early Childhood Program Standards and Accreditation Criteria 2003). But what should children *learn* through this curriculum? The answer is influenced by children’s ages and contexts. For example, for babies and toddlers, the curriculum’s heart is relationships and informal, language-rich, sensory interactions. For second graders, relationships continue to be important as a foundation for building competencies such as reading fluency and comprehension. And for young children of all ages, the curriculum needs to build on and respond to their home languages and cultures.

Researchers have found that young children with and without disabilities benefit more from the curriculum when they are engaged or involved (Raspa, McWilliam, & Ridley 2001; NCES 2002). Particularly for younger children, firsthand learning—through physical, mental, and social activity—is key. At every age from birth through age eight (and beyond), play can stimulate children’s engagement, motivation, and lasting learning (Bodrova & Leong 2003). Learning is facilitated when children can “choose from a variety of activities, decide what type of products they want to create, and engage in important conversations with friends” (Espinosa 2002, 5).

Widespread agreement exists that curriculum—including early childhood curriculum—should be based on evidence and evaluated for its effectiveness (National Research Council 2001). However, claims that specific curricula are *research based*—that is, evidence exists that these curricula are effective—are often not supported. A program can select a specific “research-based curriculum” for use with its enrolled children—confident that it is the right choice, when in reality the curriculum was shown to be effective with children who are older or younger, or who differ in culture or language, from the children for whom the curriculum is now being adopted. Other programs or school districts may adopt a curriculum for one specific area, such as reading or mathematics, with little regard for how that

curriculum aligns with, or is conceptually consistent with, other aspects of the program. The National Research Council (2001) warns that such a piecemeal approach can result in a disconnected conglomeration of activities and teaching methods, lacking focus, coherence, or comprehensiveness.

However, a body of longitudinal evidence does describe the long-term effects of some specific curriculum models or approaches—with benefits identified for curricula that emphasize child initiation (Schweinhart & Weikart 1997; Marcon 1999, 2002) and curricula that are planned, coherent, and well implemented (Frede 1998; National Research Council 2001). Evidence is also accumulating about development, learning, and effective early childhood curriculum in specific areas such as language and literacy (Hart & Risley 1995; Whitehurst & Lonigan 1998; Dickinson & Tabors 2001) and mathematics (NAEYC & NCTM 2002). Despite this evidence, there is still much we do not know. The forthcoming results of several federally funded programs of research on early childhood curriculum and other studies may help educators make better-informed decisions when adopting or developing curriculum. The goal is not to identify one “best” curriculum—there is no such thing—but rather to identify what features of a curriculum may be most effective for which outcomes and under which conditions.

Indicators of Effectiveness

- *Children are active and engaged.*

Children from babyhood through primary grades—and beyond—need to be cognitively, physically, socially, and artistically active. In their own ways, children of all ages and abilities can become interested and engaged, develop positive attitudes toward learning, and have their feelings of security, emotional competence, and linkages to family and community supported.

- *Goals are clear and shared by all.*

Curriculum goals are clearly defined, shared, and understood by all stakeholders (for example, program administrators, teachers, and families). The curriculum and related activities and teaching strategies are designed to help achieve these goals in a unified, coherent way.

- *Curriculum is evidence-based.*

The curriculum is based on evidence that is developmentally, culturally, and linguistically relevant for the

children who will experience the curriculum. It is organized around principles of child development and learning.

- *Valued content is learned through investigation, play, and focused, intentional teaching.*

Children learn by exploring, thinking about, and inquiring about all sorts of phenomena. These experiences help children investigate “big ideas,” those that are important at any age and are connected to later learning. Pedagogy or teaching strategies are tailored to children’s ages, developmental capacities, language and culture, and abilities or disabilities.

- *Curriculum builds on prior learning and experiences.*

The content and implementation of the curriculum builds on children’s prior individual, age-related, and cultural learning, is inclusive of children with disabilities, and is supportive of background knowledge gained at home and in the community. The curriculum supports children whose home language is not English in building a solid base for later learning.

- *Curriculum is comprehensive.*

The curriculum encompasses critical areas of development, including children’s physical well-being and motor development; social and emotional development; approaches to learning; language development; cognition and general knowledge; and subject matter areas such as science, mathematics, language, literacy, social studies, and the arts (more fully and explicitly for older children).

- *Professional standards validate the curriculum’s subject-matter content.*

When subject-specific curricula are adopted, they meet the standards of relevant professional organizations (for example, the American Alliance for Health, Physical Education, Recreation and Dance [AAHPERD], the National Association for Music Education [MENC]; the National Council of Teachers of English [NCTE]; the National Council of Teachers of Mathematics [NCTM]; the National Dance Education Organization [NDEO]; the National Science Teachers Association [NSTA]) and are reviewed and implemented so that they fit together coherently.

- *The curriculum is likely to benefit children.*

Research and other evidence indicates that the curriculum, if implemented as intended, will likely have beneficial effects. These benefits include a wide range of outcomes. When evidence is not yet available, plans are developed to obtain this evidence.

Early Childhood CURRICULUM: Frequently asked questions

1. What are curriculum goals?

The goals of a curriculum state the essential desired outcomes for children. When adopting a curriculum, it is important to analyze whether its goals are consistent with other goals of the early childhood program or with state or other early learning standards, and with program standards. Curriculum goals should support and be consistent with expectations for young children's development and learning.

2. What is the connection between curriculum and activities for children?

Whether for toddlers or second graders, a good curriculum is more than a collection of activities. The goals and framework of the curriculum do suggest a coherent set of activities and teaching practices linked to standards or expectations—although not in a simple fashion: Good activities support multiple goals. Together and over time, these activities and practices will be likely to help all children develop and learn the curriculum content. Standards and curriculum can give greater focus to activities, helping staff decide how these activities may fit together to benefit children's growth. Appropriate curriculum also promotes a balance between planned experiences—based on helping children progress toward meeting defined goals—and experiences that emerge as outgrowths of children's interests or from unexpected happenings (for example, a new building is being built in the neighborhood). While these experiences are not planned, they are incorporated into the program in ways that comply with standards and curriculum goals.

3. What are the most important things to consider in making a decision about adopting or developing a curriculum?

It is important to consider whether the curriculum (as it is or as it might be adapted) fits well with (a) broader goals, standards, and program values (assuming that those have been thoughtfully developed), (b) what research suggests are the significant predictors of positive development and learning, (c) the sociocultural, linguistic, and individual characteristics of the children for whom the curriculum is in-

tended, and (d) the values and wishes of the families and community served by the program. While sometimes it seems that a program's decision to develop its own curriculum would ensure the right fit, caution is needed regarding a program's ability to align its curriculum with the features of a high-quality curriculum (that is, to address the recommendation and indicators of effectiveness of the position statement). Considerable expertise is needed to develop an effective curriculum—one that incorporates important outcomes and significant content and conforms with research on early development and learning and other indicators noted in the position statement—and not merely a collection of activities or lesson plans (see also FAQ #7 in this section).

4. What should be the connection between curriculum for younger children and curriculum they will encounter as they get older?

Early childhood curriculum is much more than a scaled-back version of curriculum for older children. As emphasized in Early Learning Standards (NAEYC & NAECs/SDE 2002), earlier versions of a skill may look very different from later versions. For example, one might think that knowing the names of two U.S. states at age four in preschool is an important predictor of knowing all 50 states in fourth grade. However, knowing two state names is a less important predictor than gaining fundamental spatial and geographic concepts. Resources, including those listed at the end of this document, can help teachers and administrators become more aware of the curriculum in later years. With this knowledge, they can think and collaborate about ways for earlier and later learning to connect. Communication about these connections can also support children and parents as they negotiate the difficult transitions from birth–three to preschool programs and then to kindergarten and the primary grades.

5. Is there such a thing as curriculum for babies and toddlers?

Indeed there is, but as the developmental chart about curriculum suggests, curriculum for babies and toddlers looks very different from curriculum for preschoolers or

(continued on page 9)

Early Childhood CURRICULUM: FAQ (cont'd)

first-grade children. High-quality infant/toddler programs have clear goals, and they base their curriculum on knowledge of very early development. Thus a curriculum for children in the first years of life is focused on relationships, communicative competencies, and exploration of the physical world, each of which is embedded in daily routines and experiences. High-quality infant/toddler curriculum intentionally develops language, focusing on and building on the home language; promotes security and social competence; and encourages understanding of essential concepts about the world. This lays the foundation for mathematics, science, social studies, literacy, and creative expression without emphasizing disconnected learning experiences or formal lessons (Lally et al. 1995; Lally 2000; Sendlak 2000).

6. When should the early childhood curriculum begin to emphasize academics?

There is no clear dividing line between “academics” and other parts of a high-quality curriculum for young children (Hyson 2003a). Children are learning academics from the time they are born. Even infants and toddlers are beginning—through play, relationships, and informal opportunities—to develop the basis of later knowledge in areas such as mathematics, visual and performing arts, social studies, science, and other areas of learning. As children transition into K–3 education, however, it is appropriate for the curriculum to pay focused attention to these and other subject matter areas, while still emphasizing physical, social, emotional, cognitive, and language development, connections across domains, and active involvement in learning.

7. Should programs use published curricula, or is it better for teachers to develop their own curriculum?

The quality of the curriculum—including its appropriateness for the children who will be experiencing it—should be the important question. If a published, commercially available curriculum—either a curriculum for one area such as literacy or mathematics or a comprehensive curriculum—is consistent with the position statement’s recommendations and the program’s goals and values, appears well suited to the children and families served by the program, and can be imple-

mented effectively by staff, then it may be worth considering, especially as a support for inexperienced teachers. To make a well-informed choice, staff (and other stakeholders) need to identify their program’s mission and values, consider the research and other evidence about high-quality programs and curricula, and select a curriculum based on these understandings. Some programs may determine that in their situation the best curriculum would be one developed specifically for that program and the children and families it serves. In that case—if staff have the interest, expertise, and resources to develop a curriculum that includes clearly defined goals, a system for ensuring that these goals are shared by stakeholders, a system for determining the beneficial effects of the curriculum, and other indicators of effectiveness—then the program may conclude that it should take that route.

8. Is it all right to use one curriculum for mathematics, another for science, another for language and literacy, another for social skills, and still another for music?

If curricula are adopted or developed for distinct subject matter areas such as literature or mathematics, coherence and consistency are especially important. Are the goals and underlying philosophy of each curriculum consistent? What will it feel like for a child in the program? Will staff need to behave differently as they implement each curriculum? What professional development will staff need to make these judgments?

9. What’s needed to implement a curriculum effectively?

Extended professional development, often with coaching or mentoring, is a key to effective curriculum implementation (National Research Council 2001). Well-qualified teachers who understand and support the curriculum goals and methods are more likely to implement curriculum effectively. So-called scripted or teacher-proof curricula tend to be narrow, conceptually weak, or intellectually shallow. Another key to success is assessment. Ongoing assessment of children’s progress in relation to the curriculum goals gives staff a sense of how their approach may need to be altered for the whole group or for individual children.

Assessment of Young Children

Key Recommendation

Make ethical, appropriate, valid, and reliable assessment a central part of all early childhood programs. To assess young children's strengths, progress, and needs, use assessment methods that are developmentally appropriate, culturally and linguistically responsive, tied to children's daily activities, supported by professional development, inclusive of families, and connected to specific, beneficial purposes: (1) making sound decisions about teaching and learning, (2) identifying significant concerns that may require focused intervention for individual children, and (3) helping programs improve their educational and developmental interventions.

Rationale

Assessment components and purposes. Often people think of assessment as formal testing only, but assessment has many components and many purposes. Assessment methods include observation, documentation of children's work, checklists and rating scales, and portfolios, as well as norm-referenced tests. Consensus has developed around the four primary and distinctive purposes of early childhood assessment, best articulated in the work of the National Education Goals Panel (Shepard, Kagan, & Wurtz 1998). Issues concerning two of these purposes are the focus of this section of the position statement: (1) assessment to support learning and instruction and (2) assessment to identify children who may need additional services (Kagan, Scott-Little, & Clifford 2003). Two other purposes—assessment for program evaluation and monitoring trends and assessment for high-stakes accountability—will be discussed in the next recommendation, on Program Evaluation and Accountability.

High-quality programs are “informed by ongoing systematic, formal, and informal assessment approaches to provide information on children's learning and development. These assessments occur within the context of reciprocal communications with families and with sensitivity to the cultural contexts in which children develop” (Commission on NAEYC Early Childhood Program Standards and Accreditation Criteria 2003, np). For young bilingual children, instructionally embedded assessments using observational methods and samples of children's performance can provide a much fuller and more accurate picture of children's abilities than other methods. Individually, culturally, and linguistically appropriate assessment of all children's strengths, developmental status, progress, and needs provides

essential information to early childhood professionals as they attempt to promote children's development and learning (Meisels & Atkins-Burnett 2000; Stiggins 2001, 2002; McAfee & Leong 2002; Jones 2003).

When assessment is directed toward a narrow set of skills, programs may ignore the very competencies that have been shown to build a strong foundation for success in areas including but not limited to academics (National Research Council & Institute of Medicine 2000; Raver 2002). Furthermore, poor quality or poorly administered assessments, or assessments that are culturally inappropriate, may obscure children's true intellectual capacities. Many factors—anxiety, hunger, inability to understand the language of the instructions, culturally learned hesitation in initiating conversation with adults, and so on—may influence a child's *performance*, creating a gap between that performance and the child's actual ability, and causing staff to draw inaccurate conclusions that can limit the child's future opportunities.

Screening considerations. Research demonstrates that early identification and intervention for children with or at risk for disabilities can significantly affect outcomes (Shonkoff & Meisels 2000). Thus, early childhood programs play an important part in helping to identify concerns. Brief screening measures have been shown to be helpful in selecting children who may need further evaluation (Meisels & Fenichel 1996), but only if the screening tools meet high technical standards and if they are linked to access to further professional assessment.

Considerations in using individual norm-referenced tests. In general, assessment specialists have urged great caution in the use and interpretation of standardized tests of young children's learning, especially in the absence of complementary evidence and when the stakes are potentially high (National Research Council 1999; Jones 2003; Scott-Little, Kagan, & Clifford 2003). All assessment activities should be guided by ethical principles (NAEYC 1998) and professional standards of quality (AERA, APA, & NCME 1999). The issues are most pressing when individual norm-referenced tests are being considered as part of an assessment system. In those cases, the standards set forth in the joint statement of the American Educational Research Association, the American Psychological Association, and the National Center for Measurement in Education (AERA, APA, & NCME 1999) provide essential technical guidance. The “Program Evaluation and Accountability” section of this revised position statement discusses these issues in more detail.

Improving teachers' and families' assessment literacy. Teacher expertise is critical to successful assessment systems, yet such expertise is often lacking (Horton & Bowman 2002; Hyson 2003b; Scott-Little, Kagan, & Clifford 2003). Assessment literacy has been identified as a major gap in the preservice and inservice preparation of teachers (Stiggins 1999, 2002; Barnett 2003). Families are frequently given too little information about the purposes and interpretation of assessments of their children's development and learning (Popham 1999, 2000; Horton & Bowman 2002; Lynch & Hanson 2004).

Indicators of Effectiveness

- *Ethical principles guide assessment practices.*

Ethical principles underlie all assessment practices. Young children are not denied opportunities or services, and decisions are not made about children on the basis of a single assessment.

- *Assessment instruments are used for their intended purposes.*

Assessments are used in ways consistent with the purposes for which they were designed. If the assessments will be used for additional purposes, they are validated for those purposes.

- *Assessments are appropriate for ages and other characteristics of children being assessed.*

Assessments are designed for and validated for use with children whose ages, cultures, home languages, socioeconomic status, abilities and disabilities, and other characteristics are similar to those of the children with whom the assessments will be used.

- *Assessment instruments are in compliance with professional criteria for quality.*

Assessments are valid and reliable. Accepted professional standards of quality are the basis for selection, use, and interpretation of assessment instruments, including screening tools. NAEYC and NAECS/SDE support and adhere to the measurement standards set forth by the American Educational Research Association, the American Psychological Association, and the National Center for Measurement in Education (AERA, APA, & NCME 1999). When individual norm-referenced tests are used, they meet these guidelines.

- *What is assessed is developmentally and educationally significant.*

The objects of assessment include a comprehensive, developmentally, and educationally important set of goals, rather than a narrow set of skills. Assessments are aligned with early learning standards, with program goals, and with specific emphases in the curriculum.

- *Assessment evidence is used to understand and improve learning.*

Assessments lead to improved knowledge about children. This knowledge is translated into improved curriculum implementation and teaching practices. Assessment helps early childhood professionals understand the learning of a specific child or group of children; enhance overall knowledge of child development; improve educational programs for young children while supporting continuity across grades and settings; and access resources and supports for children with specific needs.

- *Assessment evidence is gathered from realistic settings and situations that reflect children's actual performance.*

To influence teaching strategies or to identify children in need of further evaluation, the evidence used to assess young children's characteristics and progress is derived from real-world classroom or family contexts that are consistent with children's culture, language, and experiences.

- *Assessments use multiple sources of evidence gathered over time.*

The assessment system emphasizes repeated, systematic observation, documentation, and other forms of criterion- or performance-oriented assessment using broad, varied, and complementary methods with accommodations for children with disabilities.

- *Screening is always linked to follow-up.*

When a screening or other assessment identifies concerns, appropriate follow-up, referral, or other intervention is used. Diagnosis or labeling is never the result of a brief screening or one-time assessment.

- *Use of individually administered, norm-referenced tests is limited.*

The use of formal standardized testing and norm-referenced assessments of young children is limited to situations in which such measures are appropriate and potentially beneficial, such as identifying potential disabilities. (See also the indicator concerning the use of individual norm-referenced tests as part of program evaluation and accountability.)

- *Staff and families are knowledgeable about assessment.*

Staff are given resources that support their knowledge and skills about early childhood assessment and their ability to assess children in culturally and linguistically appropriate ways. Preservice and inservice training builds teachers' and administrators' "assessment literacy," creating a community that sees assessment as a tool to improve outcomes for children. Families are part of this community, with regular communication, partnership, and involvement.

Child ASSESSMENT: Frequently asked questions

1. What is the connection between curriculum and assessment?

Curriculum and assessment are closely tied. Classroom- or home-based assessment tells teachers what children are like and allows them to modify curriculum and teaching practices to best meet the children's needs. Curriculum also influences what is assessed and how; for example, a curriculum that emphasizes the development of self-regulation should be accompanied by assessments of the children's ability to regulate their attention, manage strong emotions, and work productively without a great deal of external control.

2. What should teachers be assessing in their classrooms? When and why?

The answers to these questions depend, again, on the program's goals and on the curriculum being used. But all teachers need certain information in order to understand children's individual, cultural, linguistic, and developmental characteristics and to begin to recognize and respond to any special needs or concerns. The most important thing is to work with other staff and administrators to develop a systematic plan for assessment over time, using authentic measures (those that reflect children's real-world activities and challenges) and focusing on outcomes that have been identified as important. The primary goal in every case is to make the program (curriculum, teaching practices, and so on) as effective as possible so that every child benefits.

3. How is assessment different for children of varying ages, cultures, languages, and abilities?

The younger the child, the more difficult it is to use assessment methods that rely on verbal ability, on focused attention and cooperation, or on paper-and-pencil methods. The selection of assessments should include careful attention to the ages for which the assessment was developed. Even with older children (kindergarten–primary age), the results of single assessments are often unreliable for individuals, since children may not understand the importance of “doing their best” or may be greatly influenced by fatigue, temporary poor health, or other distractions. Furthermore, in some cultures competition and individual accomplishment are discouraged, making it difficult to validly assess young

children's skills. For young children whose home language is not English, assessments conducted in English produce invalid, misleading results. Finally, children with disabilities benefit from in-depth and ongoing assessment, including play-based assessment, to ensure that their individual needs are being met. When children with disabilities participate in assessments used for typically developing classmates, the assessments need adaptation in order for all children to demonstrate their competence (Meisels & Atkins-Burnett 2000; Sandall, McLean, & Smith 2000; McLean, Bailey, & Wolery 2004).

4. How should specific assessment tools or measures be selected? Is it better to develop one's own assessments or to purchase them?

Thorough discussion of early learning standards, program goals and standards, and the curriculum that the program is using will guide selection of specific assessment measures. In a number of cases, curriculum models are already linked to related assessments. It is important to think systemically so that assessments address all important areas of development and learning. This may seem overwhelming, but the same assessment tool or strategy often gives helpful information about multiple aspects of children's development. Other important considerations are whether a particular assessment tool or system will create undue burdens on staff or whether it will actually contribute to their teaching effectiveness. Issues of technical adequacy are also important to examine, especially for assessments used for accountability purposes. Special attention should be given to whether an assessment was developed for and tested with children from similar backgrounds, languages, and cultures as those for whom the assessment will be used. When selecting assessments for children whose home language is not English, additional questions arise; for example, are the assessment instruments available in the primary languages of the children who are to be assessed? Given these challenges, it seems tempting to develop an assessment tailored to the unique context of a particular program. However, beyond informal documentation, the difficulty of designing good assessments multiplies. Those who plan to develop their own assessment tools

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Child ASSESSMENT: FAQ (cont'd)

need to be fully aware of the challenges of standardizing and validating these assessments.

5. What is screening and how should it be used?

Screening is a quickly administered assessment used to identify children who may benefit from more in-depth assessment. Although screening tools are brief and appear simple, they must meet strict technical standards for test construction and be culturally and linguistically relevant. Only staff with sufficient training should conduct screening; families should be involved as important sources of information about the child; and, when needed, there should always be referrals to further specialized assessment and intervention. Screening is only a first step. Screening may be used to identify children who should be observed further for a possible delay or problem. However, screening should not be used to diagnose children as having special needs, to prevent children from entering a program, or to assign children to a specific intervention solely on the basis of the screening results. Additionally, screening results should not be used as indicators of program effectiveness.

6. What kind of training do teachers and other staff need to conduct assessments well?

Professional development is key to effective child assessment. Positive attitudes about assessment and “assessment literacy” (knowledge of assessment principles, issues, and tools) are developed through collaboration and teamwork, in which all members of an

early childhood program come to agree on desired goals, methods, and processes for assessing children’s progress. In addition, preservice programs in two- and four-year higher education institutions should provide students with research-based information and opportunities to learn and practice observation, documentation, and other forms of classroom-level assessment (Hyson 2003b). Understanding the purposes and limitations of early childhood norm-referenced tests, including their use with children with disabilities, is also part of assessment literacy, even for those not trained to administer such tests.

7. How should families be involved in assessment?

Ethically, families have a right to be informed about the assessment of their children. Families’ own perspectives about their child are an important resource for staff. Additionally, families of young children with disabilities have a legal right to be involved in assessment decisions (IDEA 1997). Early childhood program staff and administrators share the results of assessments—whether informal observations or more formal test results—with families in ways that are clear, respectful, culturally responsive, constructive, and use the language that families are most comfortable with.

Program Evaluation and Accountability

Key Recommendation

Regularly evaluate early childhood programs in light of program goals, using varied, appropriate, conceptually and technically sound evidence to determine the extent to which programs meet the expected standards of quality and to examine intended as well as unintended results.

Rationale

With increased public investments in early childhood education come expectations that programs should be accountable for producing positive results (Scott-Little, Kagan, & Clifford 2003). The results of carefully designed program evaluations can influence better education for young children and can identify social problems that require public policy responses if children are to benefit. Program evaluations vary in scope from a relatively informal, ongoing evaluation that a child care center might conduct to improve its services, to large scale studies of the impact of statewide prekindergarten initiatives (Gilliam & Zigler 2000; Schweinhart 2003), to district and statewide evaluations of children's progress in the early grades of school. As part of this effort, program monitoring is an important tool for judging the quality of implementation and modifying how the program is being implemented.

The higher the stakes for programs and public investments, the more critical and rigorous should be the standards for evaluation design, instrumentation, and analysis, although this is not always the case (Henry 2003; Scott-Little, Kagan, & Clifford 2003). Evaluation specialists (for example, Shepard, Kagan, & Wurtz 1998; Jones 2003) emphasize that the goals of program evaluation are different from the goals of classroom-level assessment intended to improve teaching and learning. These specialists further emphasize that many instruments originally designed for one purpose cannot be validly used for other purposes. When such efforts are undertaken, special attention is needed to issues of sampling and aggregation (Horn-Wingerd, Winter, & Plocfchan 2000; Scott-Little, Kagan, & Clifford 2003).

Of particular importance is the issue of alignment—in this case, alignment of evaluation instruments with the identified goals of the program and with the curriculum or intervention that is being evaluated. Mismatches between program goals and evaluation design and instruments may lead to erroneous conclusions about the effectiveness of particular interventions (Yoshikawa & Zigler 2000; Muenchow 2003).

More and more states are using data about children's outcomes as part of a system to evaluate the effectiveness of prekindergarten and other programs. In this climate, clear guidelines are essential—guidelines about the technical properties of the measures to be used as well as the place of child-level data within a larger system that includes other data sources, such as assessments of classroom quality, parent interviews, or community-level data (Love 2003). Several issues have been discussed extensively: (1) the risk of misusing child outcome data to penalize programs serving the most vulnerable children, especially when no information is available about the gains children have made while in the program (Muenchow 2003); (2) the potential misuse of individually administered, norm-referenced tests with very young children as a substitute for, and as the sole indicator of, program effectiveness (Yoshikawa & Zigler 2000); (3) the risk of using data from assessments designed for English-speaking, European American children to draw conclusions about linguistically and culturally diverse groups of children; and (4) the risk of conducting poor quality evaluations because little investment has been made in training, technical assistance, and data analysis capabilities. Any effective system of program evaluation and accountability must take these issues into consideration.

Indicators of Effectiveness

- *Evaluation is used for continuous improvement.*

Programs undertake regular evaluation, including self-evaluation, to document the extent to which they are achieving desired results, with the goal of engaging in continuous improvement. Evaluations focus on processes and implementation as well as outcomes. Over time, evidence is gathered that program evaluations do influence specific improvements.

- *Goals become guides for evaluation.*

Evaluation designs and measures are guided by goals identified by the program, by families and other stakeholders, and by the developers of a program or curriculum, while also allowing the evaluation to reveal unintended consequences.

- *Comprehensive goals are used.*

The program goals used to guide the evaluation are comprehensive, including goals related to families, teachers and other staff, and community as well as child-oriented goals that address a broad set of developmental and learning outcomes.

- *Evaluations use valid designs.*

Programs are evaluated using scientifically valid designs, guided by a "logic model" that describes ways

in which the program sees its interventions having both medium- and longer-term effects on children and, in some cases, families and communities.

- *Multiple sources of data are available.*

An effective evaluation system should include multiple measures, including program data, child demographic data, information about staff qualifications, administrative practices, classroom quality assessments, implementation data, and other information that provides a context for interpreting the results of child assessments.

- *Sampling is used when assessing individual children as part of large-scale program evaluation.*

When individually administered, norm-referenced tests of children's progress are used as part of program evaluation and accountability, matrix sampling is used (that is, administered only to a systematic sample of children) so as to diminish the burden of testing on children and to reduce the likelihood that data will be inappropriately used to make judgments about individual children.

- *Safeguards are in place if standardized tests are used as part of evaluations.*

When individually administered, norm-referenced tests are used as part of program evaluation, they must be developmentally and culturally appropriate for the particular children in the program, conducted in the

language children are most comfortable with, with other accommodations as appropriate, valid in terms of the curriculum, and technically sound (including reliability and validity). Quality checks on data are conducted regularly, and the system includes multiple data sources collected over time.

- *Children's gains over time are emphasized.*

When child assessments are used as part of program evaluation, the primary focus is on children's gains or progress as documented in observations, samples of classroom work, and other assessments over the duration of the program. The focus is not just on children's scores upon exit from the program.

- *Well-trained individuals conduct evaluations.*

Program evaluations, at whatever level or scope, are conducted by well-trained individuals who are able to evaluate programs in fair and unbiased ways. Self-assessment processes used as part of comprehensive program evaluation follow a valid model. Assessor training goes beyond single workshops and includes ongoing quality checks. Data are analyzed systematically and can be quantified or aggregated to provide evidence of the extent to which the program is meeting its goals.

- *Evaluation results are publicly shared.*

Families, policy makers, and other stakeholders have the right to know the results of program evaluations.

PROGRAM EVALUATION and ACCOUNTABILITY:

Frequently asked questions

1. What is the purpose of evaluating early childhood programs?

The primary purpose of program evaluation is to improve the quality of education and other services provided to young children and their families.

2. What is accountability?

The term *accountability* refers to the responsibility that programs have to deliver what they have been designed to do and, in most cases, what they have been funded to do. Accountability usually is emphasized when programs such as prekindergartens, public school programs, or Head Start have received local, state, or federal funds. In those cases the public has a legitimate interest in receiving information about the results obtained.

3. What standards of quality should be used in evaluating programs that serve young children?

Attention should be given to the goals that the program itself has identified as important. National organizations (such as NAEYC through its accreditation standards and criteria), state departments of education, and others have developed more general standards of quality. In addition, comprehensive observation instruments and other rating scales are widely used to obtain data on program quality. The advantage of using such measures, or participating in a national accreditation system, is that the program is evaluated against a broad set of criteria that have been developed with expert input.

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PROGRAM EVALUATION and ACCOUNTABILITY: FAQ (cont'd)

4. Is it necessary for all programs serving young children to be evaluated?

Programs differ in size, scope, and sponsorship. For some, regular evaluation is a requirement and condition of continued support. However, all programs serving young children and their families should undergo some kind of regular evaluation in order to engage in continuous self-study, reflection, and improvement. In large-scale state assessments (for example, of state prekindergarten programs), some data may be collected from all programs, while a smaller sample may participate in an intensive scientific evaluation with appropriate comparison groups (Schweinhart 2003).

5. What components should a program evaluation include?

Evaluation should always begin with a review of the program's goals and, where relevant, its mandated scope and mission. In every case the evaluation should address all components of the program as designed and as delivered. In other words, evaluation should include attention to the processes by which services and educational programs are delivered as well as to the outcomes or results. Outcomes, especially child outcomes, cannot be understood without knowing how effectively educational and other services were actually implemented.

6. Who should conduct program evaluations?

This depends on the scope and purpose of the evaluation. In some cases, program staff themselves are able to gather the information needed for review and improvement. However, greater objectivity is obtained when evaluations are conducted by others, often through in-depth interviews or discussions with staff and families. In high-stakes situations, it is not desirable for those who have a direct investment in the outcome of the evaluation to be involved in collecting and analyzing data.

7. What kinds of support are needed to conduct a good evaluation?

Adequate resources are essential, so that program evaluation does not drain resources from the actual delivery of services. Consultation about the design of the evaluation is helpful, as is assistance in gathering and interpreting data. Print and Web-based resources are available to those just getting started in thinking about program evaluation (ACYF 1997; Gilliam & Leiter 2003; McNamara 2003; Stake 2003). Support systems or facilitation projects are available to help programs that are preparing for accreditation or other evaluative reviews.

8. How should data gathered in a program evaluation be analyzed?

Once again, the purpose of the evaluation and the scope of the program and the evaluation itself will influence the answer to this question. Both quantitative and qualitative methods are appropriate and useful, depending on the questions being asked. Returning to the central questions of the evaluation will guide analysis decisions, since the results will help answer those questions.

9. How should information from a program evaluation be used?

As described earlier, program evaluation data are intended to improve program quality. In an open process, results are shared with stakeholders, who may include families, staff, community members, funders, and others. Objective discussion of strengths and needs in light of the program's goals and mission will help guide decisions about changes that would create even higher quality and more effective service delivery.

Data from program monitoring and evaluation, aggregated appropriately and based on reliable measures, should be made available and accessible to the public.

Creating Change through Support for Programs

Implementing the preceding recommendations for curriculum, child assessment, and program evaluation requires a solid foundation of support. Calls for better results and greater accountability from programs for children in preschool, kindergarten, and the primary grades have not been backed up by essential supports. All early childhood programs need greater resources and supportive public policies to allow the position statement's recommendations to have their intended effects.

The overarching need is to create an integrated, well-financed system of early care and education that has the capacity to support learning and development in all children, including children living in poverty, children whose home language is not English, and children with disabilities. Unlike many other countries (OECD 2001), the United States continues to have a fragmented system for educating children from birth through age eight, under multiple auspices, with greatly varying levels of support, and with inadequate communication and collaboration (Lombardi 2003). Several examples illustrate the kinds of supports that are needed.

Teachers as the key. As expectations for professional preparation and for implementing high-quality curriculum and assessment systems rise (National Institute on Early Childhood Development and Education 2000; National Research Council 2001), the early childhood field faces persistent low wages and high turnover (National Research Council 2001; Whitebook et al. 2001; Quality Counts 2002; Lombardi 2003). Yet research continues to underscore the role of formal education and specialized training in producing positive outcomes for children (National Research Council 2001), as well as less tangible teacher qualifications such as curiosity about children, willingness to engage in collaborative inquiry, and skilled communication with culturally and linguistically diverse families and administrators. Finding and keeping these highly qualified professionals, and ensuring a diverse and inclusive work force, will require significant public investment.

Standards for preparing new teachers. NAEYC's standards for early childhood professional preparation (Hyson 2003b) describe the knowledge, skills, and dispositions that higher education programs should de-

velop in those preparing to teach young children. Those standards are fully consistent with and support the position statement's recommendations concerning curriculum and assessment. Expanded professional development resources will help better prepare higher education faculty to develop these competencies, using current, evidence-based information and practices. Strong accreditation systems create incentives for institutions to align their two-year, four-year, and graduate programs with these kinds of national standards.

The value of ongoing professional development. Although not replacing formal education, ongoing professional development is another key to helping staff implement evidence-based, effective curriculum and assessment systems for all children, responding to children's diverse needs, cultures, languages, and life situations. All staff—paraprofessionals as well as teachers and administrators—need access to professional development and to professional time and opportunities for collaboration that enable them to develop, select, implement, and engage in ongoing critique of curriculum and assessment practices that meet young children's learning and developmental needs. Time and resources for collaborative professional development now are often limited, both in public schools and in child care settings.

Research has identified many characteristics of effective staff development (National Research Council 2000; NAESP 2001; NSDC 2001; Education World 2003), yet much "training" still consists of one-time workshops with little follow-up, coaching, or mentoring (National Research Council 2000). The design and delivery of professional development often ignore the diversity of adult learners who vary in prior experience, culture, and education. In addition, little time is available for program staff—teachers, administrators, and others—to meet around critical issues of curriculum and assessment, or to prepare for program evaluations in a thoughtful way (National Research Council 2000). And once program evaluations are completed and results are available, public policies often fail to support needed improvements and expansion of services at the program, district, or state level—especially if the costs of the assessments themselves are absorbing resources needed in cash-strapped states and cities (Muenchow 2003).

Even well-qualified staff need ongoing, job-embedded professional development to help them better understand the curriculum, adapt curriculum to meet the learning needs of culturally and linguistically diverse children and children with disabilities, and design more effective approaches to working with all children. A key issue is creating genuine "learning communities" of

staff, within and across programs, who can support and learn from one another and from the wider professional environment as they implement integrated systems of curriculum and assessment. Resources beyond early education settings (for example, community cultural and civic resources such as arts organizations and libraries) can be tapped to supplement and enrich staff professional development opportunities.

Administrators' needs. Whether they are elementary school principals, child care directors, or Head Start coordinators, administrators hold the key to effective systems of curriculum, assessment, and program evaluation. Administrators are often the primary decision makers in adopting curriculum and assessment systems, arranging for staff development, and planning program evaluations. For administrators, intensive and

ongoing professional development is essential—often participating in the same training provided to staff to create a shared frame of reference. This professional development needs to address administrators' varied backgrounds, work settings, and needs. For example, some elementary school administrators have not yet had opportunities to gain insights into the learning and developmental characteristics of young children. Others may be well grounded in infant/toddler or preschool education yet have had little opportunity to communicate with and collaborate with other administrators whose programs serve children as they transition from Head Start or child care into public schools.

A shared commitment. As these examples show, many challenges face those who want to provide all young children with high-quality curriculum, assessment, and evaluation of early childhood programs. Public commitment, along with significant investments in a well-financed system of early childhood education and in other components of services for young children and their families, will make it possible to implement these recommendations fully and effectively.

Position Statement Revisions Committee

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Developmental Charts

Although the recommendations in the position statement are applicable to all programs serving children from birth through age eight, some of the specifics may differ. Therefore, the next section contains developmental charts that provide brief but not exhaustive examples of ways in which each recommendation of the position statement would be implemented in programs for infants and toddlers, preschoolers, and kindergarten-primary age children.

The following charts are included:

- Curriculum in Programs for Infants, Toddlers, Preschoolers, Kindergartners, and Primary Grade Children
- Assessment in Programs for Infants, Toddlers, Preschoolers, Kindergartners, and Primary Grade Children
- Program Evaluation and Accountability in Programs for Infants, Toddlers, Preschoolers, Kindergartners, and Primary Grade Children

CURRICULUM in programs for infants, toddlers, preschoolers, kindergartners, and primary grade children

POSITION STATEMENT RECOMMENDATION:

Implement curriculum that is thoughtfully planned, challenging, engaging, developmentally appropriate, culturally and linguistically responsive, comprehensive, and likely to promote positive outcomes for all young children.

Infants/Toddlers	Preschoolers	Kindergarten/Primary
<p>Curriculum that is thoughtfully planned: Whatever the children’s ages, curriculum goals link with important developmental tasks and are comprehensive in scope. Teaching strategies are tailored to children’s ages, developmental capacities, language and culture, and abilities or disabilities. A major shift as children move into kindergarten and the primary grades is toward greater focus on subject matter areas, without ignoring their developmental foundations.</p> <p>Goals focus on children’s development as they learn about themselves and others, as well as ways to communicate, think, and use their muscles.</p> <p>Goals for infants address security, responsive interactions with caregivers, and exploration.</p> <p>Goals for toddlers address independence, need for control, discovery, and beginning social interactions.</p>	<p>Goals focus on children’s exploration, inquiry, and expanding vocabularies.</p> <p>Goals address children’s physical well-being and motor development; social and emotional development; approaches to learning; language development; and cognition and general knowledge.</p> <p>Experiences provide for knowledge and skill learning in literacy, mathematics, science, social studies, and the visual and performing arts.</p>	<p>Goals focus on children’s emergent knowledge and skills in all subject matter areas, including language and literacy, mathematics, science, social studies, health, physical education, and the visual and performing arts.</p> <p>Goals continue to address all developmental areas including socioemotional development, and approaches to learning (“habits of mind”).</p>
<p>Curriculum that is challenging and engaging: For all ages the curriculum leads children from where they are to new accomplishments while maintaining their interest and active involvement. Content that is engaging for children of different ages changes with development and with new experiences, requiring careful observation and adaptation.</p> <p>Children can use their whole bodies and their senses as they manipulate toys and other safe objects and engage in play alone, with a primary caregiver, and at times with or near other infants.</p> <p>Children’s enthusiasm for exploring is supported by matching their interests with challenging curricula.</p> <p>For toddlers, curriculum also focuses on their emerging abilities to play with other children.</p>	<p>Curriculum facilitates children’s construction of knowledge through their interactions with materials, each other, and adults.</p> <p>Curriculum promotes experiences in which children’s thinking moves from the simple to the complex, from the concrete to the abstract.</p> <p>Curriculum provides opportunities for children to initiate activities, as well as for teacher initiation and scaffolding.</p> <p>Curriculum leads to children’s recognition of their own achievements.</p>	<p>Curriculum promotes children’s developing attitudes as “learners”—using their curiosity, creativity, and initiative.</p> <p>Curriculum provides experiences in which children use oral and written language, mathematical and scientific thinking, and investigatory skills to build a knowledge base across disciplines and expand their skills repertoire.</p> <p>Curriculum leads to children’s recognition of their own competence.</p>

The information in this chart is based on the recommendations of the NAEYC-NAECS/SDE Position Statement on Curriculum, Assessment, and Program Evaluation (www.naeyc.org/resources/position_statements/pscape.pdf). The chart provides examples of ways in which the recommendations of the NAEYC-NAECS/SDE Position Statement on Curriculum, Assessment, and Program Evaluation can be implemented in programs for infants/toddlers, preschoolers, and kindergarten/primary age children. The examples can best be understood within the context of the full position statement.

(chart continued on page 20)

CURRICULUM chart (cont'd)

Infants/Toddlers	Preschoolers	Kindergarten/Primary
<p>Curriculum that is developmentally appropriate and culturally and linguistically responsive: Whatever the children's ages, curriculum fits well with their developmental levels, abilities and disabilities, individual characteristics, families and communities, and cultural contexts. Curriculum supports educational equity for children who are learning a second language. Curriculum for younger children makes cultural connections primarily through relationships, daily routines, and "rituals"; older children benefit from more explicit incorporation of culturally relevant materials and from topic-centered as well as integrated learning opportunities.</p> <p>Curriculum addresses the wide variations in infants' and toddlers' interests, temperaments, and patterns of growth and development.</p> <p>Curriculum planning and implementation emphasize understanding of and respect for home culture, efforts to incorporate home values and practices, and discussion with families about differences between their expectations and those of the program.</p>	<p>Integration across subject matter areas is high, while some "focusing" is appropriate (e.g., experiences devoted to learning about print and numbers).</p> <p>Curriculum planning and implementation—including the use of "props" for play and other representations—emphasize experiences that reflect the children's cultures and cultural values.</p>	<p>Curriculum focuses on a continuum of learning in topic areas and integration across disciplines. The curriculum also facilitates adaptation of instruction for children who are having difficulty and for those needing increasing challenges.</p> <p>Children learn ways to develop constructive relationships with other people and respect for individual and cultural differences.</p>
<p>Curriculum that is comprehensive: Whatever the children's ages, the curriculum attends to a broad range of developmental and learning outcomes—across domains and subject matter areas and including experiences that promote children's nonviolent behavior and conflict resolution. For older children, the curriculum pays greater attention to specific content areas but without ever ignoring some domains in favor of a narrow set of other outcomes.</p> <p>Curriculum incorporates children's relationships with their caregivers and routines (e.g., sleeping, diapering/toileting) as opportunities for learning, as well as through experiences in which children play with objects, their caregivers, and (increasingly) each other.</p> <p>Curriculum provides a context in which teachers use their knowledge about each child to plan opportunities for learning across domains—physical well-being and motor development; social and emotional development; approaches to learning; language development; and cognition and general knowledge.</p>	<p>Curriculum facilitates children's learning through individual and small and large group experiences that promote physical well-being and motor development; social and emotional development; approaches to learning; language development, including second-language development; and cognition and general knowledge.</p> <p>Curriculum provides a context in which children learn through meaningful everyday experiences, including play. Within this context, various academic disciplines are addressed—including mathematics, literacy, science, social studies, and the arts.</p>	<p>Curriculum and related instruction are increasingly focused on helping children acquire deeper understanding of information and skills in subject areas (e.g., language and literacy, science, mathematics, social studies, and visual and performing arts) within a comprehensive set of developmental outcomes.</p> <p>Curriculum helps children recognize the connections between and across disciplines and domains.</p> <p>Curriculum-based experiences encompass a variety of active strategies in which individuals or small groups explore, inquire, discover, demonstrate, and solve problems.</p>

CURRICULUM chart (cont'd)

Infants/Toddlers	Preschoolers	Kindergarten/Primary
<p>Curriculum that promotes positive outcomes: Whatever the children's ages, the curriculum is selected, adapted, and revised to promote positive outcomes for children. Outcomes include both immediate enjoyment and nurturance and longer-term benefits. Curriculum for younger children pays special attention to those key developmental outcomes shown to be essential to later success—not focusing simply on earlier versions of specific academic skills.</p> <p>Curriculum promotes experiences that lead to documented evidence that infants and toddlers are learning about themselves and others, communicating their needs to responsive adults, gaining understandings of basic concepts, and developing motor and coordination skills appropriate for their ages. Outcomes also include evidence that each child is developing a sense of trust, security, and, increasingly, independence.</p>	<p>Curriculum provides experiences that lead to documented evidence that preschoolers are acquiring and applying knowledge and skills in physical well-being and motor development; social and emotional development; approaches to learning; language development; and cognition and general knowledge—as well as more specific skills important for later school success.</p> <p>Children demonstrate positive attitudes toward learning and their increasing abilities to represent their experiences in a variety of ways (e.g., through drawing/painting, dictating/writing, and dramatic play).</p>	<p>Curriculum provides experiences that lead to documented evidence that children are acquiring important competencies in literacy, mathematics, science, visual and performing arts, and other subject matter areas—as well as continuing to develop cognitive, physical, and socioemotional competencies. These outcomes are appropriate for children's ages as well as their interests and the communities in which they live.</p> <p>Children demonstrate positive attitudes toward learning and their increasing understanding of key concepts, skills, and tools of inquiry of the subject matter areas; their application of these understandings to various situations; and their understanding of the connections across disciplines.</p>

ASSESSMENT in programs for infants, toddlers, preschoolers, kindergartners, and primary grade children

POSITION STATEMENT RECOMMENDATION: Make ethical, appropriate, valid, and reliable assessment a central part of all early childhood programs. To assess young children's strengths, progress, and needs, use methods that are developmentally appropriate, culturally and linguistically responsive, tied to children's daily activities, supported by professional development, inclusive of families, and connected to specific, beneficial purposes: making sound decisions about teaching and learning; identifying significant concerns that may require focused intervention for individual children; and helping programs improve their educational and developmental interventions

Infants/Toddlers

Preschoolers

Kindergarten/Primary

Assessment that is developmentally appropriate and culturally and linguistically responsive: Whatever the children's ages, the focus of the assessment is consistent with the program's goals for children. The assessment system incorporates methods that have been validated for use with children whose ages, cultures, home languages, socioeconomic status, abilities and disabilities, and other characteristics are similar to those of the children with whom the assessments will be used. Assessment methods include accommodations for children with disabilities, when appropriate. Assessment of older children relies more on direct measures and formal methods.

Assessments focus on children's status and progress in their abilities to learn about themselves and others, communicate, think, and use their muscles.

Assessment measures ensure teachers' recognition of similar knowledge and skills across differences in cultural representation and incorporate families' home values, languages, experiences, and rituals.

Assessments focus on children's exploration, inquiry across disciplines, and expanding vocabularies.

Assessment measures address children's physical well-being and motor development; social and emotional development; approaches to learning; language development; and cognition and general knowledge.

Measures also ensure teachers' recognition of similar knowledge and skills across differences in cultural representation and incorporate culturally based experiences, including family values and languages.

Assessments continue to address broad dimensions of development yet are increasingly focused on the continuum of learning in topic areas as well as integration across disciplines—language and literacy, mathematics, science, social studies, health, physical education, and visual and performing arts.

Teachers involve children in evaluating their own work.

Assessment measures ensure teachers' recognition of similar knowledge and skills across differences in cultural representation and incorporate culturally based experiences, including family values and languages.

The information in this chart is based on the recommendations of the NAEYC-NAECS/SDE Position Statement on Curriculum, Assessment, and Program Evaluation (www.naeyc.org/resources/position_statements/pscpe.pdf). The chart provides examples of ways in which the recommendations of the NAEYC-NAECS/SDE Position Statement on Curriculum, Assessment, and Program Evaluation can be implemented in programs for infants/toddlers, preschoolers, and kindergarten/primary age children. The examples can best be understood within the context of the full position statement.

(chart continued on page 23)

ASSESSMENT chart (cont'd)

Infants/Toddlers	Preschoolers	Kindergarten/Primary
<p>Assessment that is tied to children's daily activities: Whatever the children's ages, assessment incorporates teachers' observation recordings and other documentation, obtained during regular classroom activities, collected systematically at regular intervals. Whatever the children's ages, teachers observe both what children can do on their own and what they can do with skillful adult prompting and support. For younger children, assessment is primarily incorporated with their play and interactions; for older children, assessment methods may be more clearly defined, separate from other activities, and include some paper-and-pencil methods.</p>	<p>Assessments include teachers' observation recordings of children's performance during classroom experiences, as well as other documentation (e.g., photographs of children's block constructions; samples of easel paintings).</p>	<p>Assessments include teachers' observation recordings of children's performance during instructional activities, as well as other documentation (e.g., children's written records of their knowledge and skill acquisition, samples of work completed).</p>
<p>Assessment that is supported by professional development: For teachers of all children from birth through age eight, professional development incorporates research-based information regarding assessment systems and measures and includes opportunities for teachers to refine their assessment and analysis skills. Professional development needs for teachers of younger and older children change from a more exclusive focus on informal, play-based assessment to include knowledge of formal assessments connected to learning standards.</p>	<p>Assessments address observation recordings and other forms of documentation regarding children's play and interactions (e.g., children's writing samples, graphs representing children's experiences with quantities).</p>	<p>Assessments address observation recordings, collections of children's work, and more formal assessment methods (e.g., teachers asking children questions regarding their knowledge of topics, children's performance on problem-solving tasks).</p>
<p>Assessment that is inclusive of families: Families are informed about the assessment of their children (at all ages). Teachers obtain information from parents and share information about children in ways that are clear, respectful, and constructive. With younger children, the information that is shared focuses primarily on health and development. As children become older, families share information that also includes children's progress in academic domains as assessed in more formal and often state-mandated ways.</p>	<p>Teachers and parents share information periodically about children's progress in all domains.</p> <p>Teachers and parents work together to make decisions regarding children's learning goals and approaches to learning.</p>	<p>Teachers and parents share information periodically about children's progress in all domains and disciplines.</p> <p>Assessment measures might include letter or numerical grades; when such grades are used, reports to parents also include narrative comments regarding children's learning across disciplines. Teachers inform parents about the meaning, uses, and limitations of the results of large-scale assessments.</p>
<p>Teachers and parents share information periodically about children's engagement in routines (e.g., being fed or eating) and experiences (e.g., playing peekaboo or looking for hidden objects).</p> <p>For infants, parents also receive daily information about children's eating, sleeping, and eliminating.</p>		

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ASSESSMENT chart (cont'd)

Infants/Toddlers	Preschoolers	Kindergarten/Primary
<p>Assessment that is used to make sound decisions about teaching and learning: Whatever the children's ages, assessment information is used to support learning, consistent with the goals of the curriculum. For younger children, information about each child's growth and development is used to make decisions regarding possible changes to the environment, interactions, and experiences. With older children, assessment information is also used for making decisions about each child's current understanding and skills in content areas, what he or she should be ready to learn next, and instructional methods that help the children meet important developmental and learning goals</p>	<p>Assessment addresses children's physical well-being and motor development; social and emotional development; approaches to learning; language development; and cognition and general knowledge.</p> <p>Teachers develop short- and long-range plans for each child and the group based on children's knowledge and skills, interests, and other factors.</p>	<p>The teaching and learning decisions that are made on the basis of assessment results increasingly include a focus on how best to promote acquisition of literacy, mathematics, and other content-specific areas—yet with broader assessment results continuing to have a strong influence on instructional decisions.</p> <p>Teachers use assessment information to determine which teaching approaches are working, as well as adaptations needed for individual children who are having difficulty and for those needing increasing challenges.</p>
<p>Assessment addresses children's abilities to learn about themselves and others, communicate, think, and use their muscles. Teachers adjust their routines and experiences for each child based on assessment of the child's skill acquisition, temperament, interests, and other factors.</p>	<p>Assessments continue to focus on health needs and possible developmental delays.</p> <p>Screening typically is conducted as children enter Head Start and other preschool programs. Often, staff from these programs receive specific training for conducting the assessments.</p>	<p>Assessment that is used to identify significant concerns that may require focused intervention: Whatever the children's ages, health and developmental screening is used to identify those children who may benefit from more in-depth assessment. Very young children may be screened regularly for potential health problems and developmental delays. For older children, screening and follow-up assessment may lead to identification of disabilities or other specific concerns that were not apparent when children were younger. When disabilities or other problems are diagnosed, appropriate interventions are planned and implemented.</p>
<p>Assessments focus on health needs and acquisition of normal developmental milestones.</p> <p>Screening may be conducted as part of a child's well-baby or well-child care and/or through participation in Early Head Start or other group programs.</p>	<p>Assessments, including vision and hearing screening, typically are conducted for all children entering kindergarten.</p> <p>Formal school-district or state-mandated screening and referral protocols are followed for all children.</p>	<p>Assessments continue to focus on health needs and possible developmental delays.</p> <p>Screening typically is conducted as children enter Head Start and other preschool programs. Often, staff from these programs receive specific training for conducting the assessments.</p>

(continued on page 25)

ASSESSMENT chart (cont'd)

Infants/Toddlers	Preschoolers	Kindergarten/Primary
<p>Assessment data are collected regarding immunizations, well-baby care received, and sensory and perceptual capacities. Analysis of assessment information may lead to changes in primary caregiver responsibilities, styles of interactions, strategies to promote language development, indoor and outdoor environments, and/or other aspects of the program.</p>	<p>Assessment information is gathered regarding physical well-being and motor development; social and emotional development; approaches to learning; language development; and cognition and general knowledge. Analysis of assessment information may lead to changes in the daily schedule, curriculum and teaching strategies, styles of interaction, interest area arrangements, outdoor play area resources, and/or other aspects of the program.</p>	<p>Assessment that is used to help programs improve their educational and developmental interventions: In all early childhood programs, information is used to help teachers and program administrators maintain an awareness of the effects of program activities on the children and families served. With this awareness, improvements to programs can be made. Assessment information for younger children predominantly addresses physical characteristics and health issues, moving toward more direct measures of older children's knowledge and skills (e.g., paper-and-pencil tests that are discipline specific).</p> <p>Assessment information is gathered primarily through direct measures (across disciplines). Analysis of assessment information may lead to changes in teaching approaches for the whole group, design and implementation of activities for small groups of children, and/or other aspects of the program.</p>

POSITION STATEMENT RECOMMENDATION: Regularly evaluate early childhood programs in light of program goals, using varied, appropriate, conceptually and technically sound evidence to determine the extent to which programs meet the expected standards of quality and to examine intended as well as unintended results.

PROGRAM EVALUATION and ACCOUNTABILITY

in programs for infants, toddlers, preschoolers, kindergartners, and primary grade children

Infants/Toddlers	Preschoolers	Kindergarten/Primary
<p>Effective program evaluation and accountability: Programs serving children of all ages engage in ongoing evaluation in light of their identified goals and are accountable for producing beneficial results. Although many similarities are found across all high-quality early childhood programs, the specific standards of quality used to evaluate programs (e.g., program standards and early learning standards), issues about the kinds of evidence that are most appropriate, and specific risks inherent in accountability systems vary depending on the ages of the children served. Programs for older children are more likely to be mandated to participate in large-scale evaluations using norm-referenced assessments; in those cases, multiple safeguards should be in place, ensuring that the tests are developmentally appropriate, conducted in the language children are most comfortable with, and employ other accommodations as appropriate. Aggregated, not individual, data should be used as part of an accountability system, and gain scores should be emphasized rather than “snapshots” of scores upon exit from a program.</p> <p>Program evaluation and accountability uses standards of quality (program and early learning standards) that are specific to infants and toddlers and address the developmental domains (physical well-being and motor development; social and emotional development; approaches to learning; language development; and cognition and general knowledge), as well as those that are relevant to all programs.</p> <p>In evaluating program effectiveness, great importance is placed on family-related goals and outcomes because of their critical developmental significance for infants and toddlers.</p> <p>Use of children’s gain scores as part of an accountability system, while preferable over other types of comparisons, still warrant caution because of the wide variability and unevenness of early development.</p>	<p>Program evaluation and accountability attends to a comprehensive range of developmental and learning outcomes, both in identifying program goals and in evaluating effectiveness.</p> <p>As preschool programs increasingly become part of state accountability systems, outcomes should not be limited to academic disciplines but should include developmental domains—physical well-being and motor development; social and emotional development; approaches to learning; language development; and cognition and general knowledge—as well as address adherence with applicable program standards.</p> <p>Given the difficulty of using formal standardized assessments with preschool children, alternate methods and sampling procedures should be emphasized.</p>	<p>Program evaluation and accountability in programs serving kindergarten and primary-age children is typically conducted within a system of federal, state, and district expectations.</p> <p>Although more capable of participating in some kinds of formal assessments, children six to eight may still fail to show their level of competence under testing conditions, leading to erroneous conclusions about programs as well as individual children.</p> <p>Accountability systems for children this age run the risk of reinforcing a narrow range of program goals; special attention is needed to maintain a comprehensive, developmentally appropriate system that focuses on program standards as well as learning standards.</p> <p>Assessment of kindergarten and primary grade children using formal standardized assessments continues to be problematic. Alternate methods of sampling procedures should be emphasized.</p>

The information in this chart is based on the recommendations of the NAEYC-NAECS/SDE Position Statement on Curriculum, Assessment, and Program Evaluation (www.naeyc.org/resources/position_statements/pscape.pdf). The chart provides examples of ways in which the recommendations of the NAEYC-NAECS/SDE Position Statement on Curriculum, Assessment, and Program Evaluation can be implemented in programs for infants/toddlers, preschoolers, and kindergarten/primary age children. The examples can best be understood within the context of the full position statement.

Glossary

This glossary includes brief definitions of some key terms used in the position statement and in this resource. Definitions are based on common usage in the fields of early education, child development, assessment, and program evaluation. Terms with asterisks are adapted from a recent glossary of standards and assessment terms (see below).

Aggregation: A process of grouping distinct information or data (for example, combining information about individual schools or programs into a data set describing an entire school district or state).

Alignment: In this context, coherence and continuity among goals, standards, desired results, curriculum, and assessments, with attention to developmental differences as well as connections across ages and grade levels. Alignment includes attention to developmental differences as well as connections.

***Assessment:** A systematic procedure for obtaining information from observation, interviews, portfolios, projects, tests, and other sources that can be used to make judgments about children's characteristics.

Assessment Literacy: Professionals', students', or families' knowledge about the goals, tools, and appropriate uses of assessment.

Child Development: In this early childhood context, development is defined as the social, emotional, physical, and cognitive changes in children stimulated by biological maturation interacting with experience.

Cognition: Includes processes for acquiring information, inquiring, thinking, reasoning, remembering and recalling, representing, planning, problem solving, and other mental activities.

***Criterion or Performance-Oriented Assessment:** Assessment in which the person's performance (that is, score) is interpreted by comparing it with a prespecified standard or specific content and/or skills.

Culturally and Linguistically Responsive: In this instance, development and implementation of early childhood curriculum, assessment, or program evaluation that is attuned to issues of values, identity, worldview, language, and other culture-related variables.

* Terms adapted from "The Words We Use: A Glossary of Terms for Early Childhood Education Standards and Assessments," developed by the State Collaborative on Assessment and Student Standards (SCASS). Glossary online: www.ccsso.org/projects/SCASS/projects/early_childhood_education_assessment_consortium/publications_and_products/2838.cfm.

Culture: Includes ethnicity, racial identity, economic class, family structure, language, and religious and political beliefs.

Data: Factual information, especially information organized for analysis or used to make decisions.

Developmentally Appropriate: NAEYC defines developmentally appropriate practices as those that "result from the process of professionals making decisions about the well-being and education of children based on at least three important kinds of information or knowledge: what is known about child development and learning...; what is known about the strengths, interests, and needs of each individual child in the group...; and knowledge of the social and cultural contexts in which children live" (Bredekamp & Copple 1997, 8–9).

***Documentation:** The process of keeping track of and preserving children's work as evidence of their progress or of a program's development.

***Early Learning Standards:** Statements that describe expectations for the learning and development of young children.

Implementation: In this context, the process of taking a planned curriculum, assessment system, or evaluation design and "making it happen" in ways that are consistent with the plan and desired results.

Logic Model: A model of how components of a program or service effect changes that move participating children and families toward desired outcomes.

Matrix Sampling: An approach to large-scale assessment in which only part of the total assessment is administered to each child.

***Norm-Referenced:** A standardized testing instrument by which the person's performance is interpreted in relation to the performance of a group of peers who have previously taken the same test—a "norming" group.

Observational Assessment: Assessment based on teachers' systematic recordings and analysis of children's behavior in real-life situations.

Outcomes: In this case, desired results for young children's learning and development across multiple domains.

Pedagogy: A variety of teaching methods or approaches used to help children learn and develop.

Program Evaluation: A systematic process of describing the components and outcomes of an intervention or service.

Program Monitoring: A tool for judging the quality of program implementation and modifying how the program is being implemented. Frequently part of a regulatory process.

***Program Standards:** Widely accepted expectations for the characteristics or quality of early childhood settings in schools, early childhood centers, family education homes, and other education settings.

Referral: In this context, making a recommendation or actual linkage of a child and family with other professionals, for the purpose of more in-depth assessment and planning. Usually follows screening or other preliminary information gathering.

Reliability: The consistency of an assessment tool; important for generalizing about children's learning and development.

Sampling: In this instance, the use of a smaller number of children or programs (often randomly selected) in large-scale assessments in order to statistically estimate the characteristics of a larger population.

***Screening:** The use of a brief procedure or instrument designed to identify, from within a large population of children, those children who may need further assessment to verify developmental and/or health risks.

Significance (goals/content/assessment): "Significant" curriculum goals, content, or objects of assessment are those that have been found to be critically important for children's current and later development and learning. (In other contexts, it refers to *statistical* significance or the likelihood that a research finding was not produced by chance.)

Stakeholders: Those who have a shared interest in a particular activity, program, or decision.

Standardized: An assessment with clearly specified administration and scoring procedures and normative data.

Unintended Consequences: In this context, the results of a particular intervention or assessment that were not intended by the developers and that may have potential—and sometimes negative—impact.

Validity: The extent to which a measure or assessment tool measures what it was designed to measure.

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