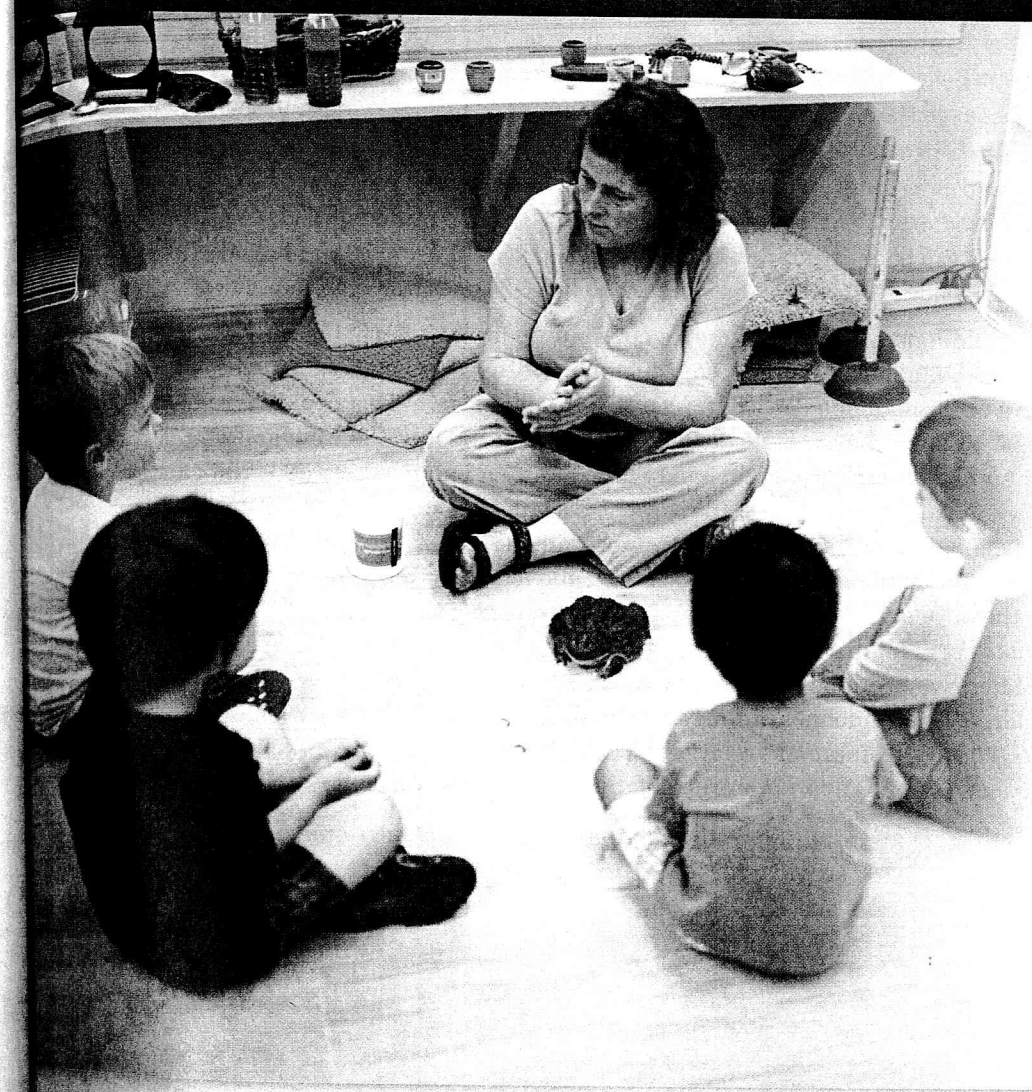
3 Planning for Developmentally Appropriate Curriculum



Learning Objectives

After studying this chapter, students should be able to:

- 3-1 Describe indicators of developmentally appropriate curricula, as defined by position statements.
- 3-2 Describe integrated curriculum.
- 3-3 Discuss the cycle of planning, describing each of the components.
- 3-4 Identify advantages and disadvantages of theme planning.
- 3-5 Define emergent curriculum, and discuss sources of emergent curriculum and the Project Approach.
- 3-6 Discuss strategies for planning emergent curriculum
- 3-7 Discuss the need for flexible planning forms.
- 3-8 Identify ideas for changing the planning process.

naeyc

Related NAEYC Standards

Accreditation Standards (see inside text back cover for full listing of the Accreditation Standards for exemplary early childhood programs): **1.A, 2**

Licensure Standards (see inside text front cover for full listing of the Licensure Standards for this chapter): **5a, 5b, 5c, 6b**

Rich play and other quality learning experiences do not just happen. Active learning requires teachers to plan curriculum—so that children have environments and materials to stimulate curiosity, exploration, and creativity—and experiences and interactions to support their constructivist learning. Spontaneous play and teacher planning go together, although the concepts may sound contradictory. The planning is not the traditional kind, where a lesson plan is quickly filled in, with tasks designed and controlled by teachers. That method lacks a full understanding of developmental appropriateness. Developmentally appropriate planning is based on understanding curriculum and how it evolves in the context of particular classrooms with particular children and within the context of standards and other community requirements.

Although teachers' general knowledge about development and mandated standards may help them identify learning tasks in the general sequence of development, the specific information about individual personalities, interests, learning styles, family values and backgrounds, and community

connections must be the real source of information for planning. Teachers cannot plan just by using benchmarks of development or curriculum checklists, or by preparing lessons far in advance using only purchased resource books or textbook guides. They must genuinely understand how to mesh their general developmental knowledge and understanding of how children learn with their specific knowledge of what a particular group of individual children is ready to learn. In addition, in this time of state- and program-defined learning standards, teachers must understand how to meet those objectives by using integrated appropriate activities, rather than by planning an isolated lesson that merely satisfies the requirements.

This chapter explores general ideas about planning for developmentally appropriate curriculum; these ideas are explored more specifically in the sections that follow.

3-1 What Is Curriculum?

Curriculum
Methods and content to be taught.

The task for early childhood teachers is to create **curriculum** for learning in the early years by developing their understanding of how that curriculum is created. Elizabeth Jones, in one of the first writings about early childhood curriculum, said, "Curriculum is what happens in an educational environment. It may be prescribed, emergent, or accidental and unidentified" (Jones, 1977).

Early childhood educators are challenged with finding a balance between "the early childhood error"—inadequate attention to the content of the curriculum in preschool programs with resulting trivialization or loss of learning opportunities—and the "elementary error"—overattention to specific, limited curriculum objectives, and less attention to the specific needs and interests or the developmental characteristics of the children (Bredekamp & Rosegrant, 1995). That is, some curriculum strategies used with many children do not demand enough of the youngest children, while other strategies ask for too much of the wrong thing for them and primary-age children. The guidelines of the National Association for the Education of Young Children (NAEYC) position statement related to planning curriculum begin the process of describing curriculum planning appropriate for children from birth through the primary grades:

a. Desired goals that are important in young children's learning and development have been identified and clearly articulated (see Figure 3-1).



Figure 3-1 Desired goals for young children's learning and development, including social skills, are identified and articulated.

b. The program has a comprehensive, effective curriculum that targets the identified goals, including all those foundational for later learning and school success.

c. Teachers use the curriculum framework in their planning to ensure there is ample attention to important learning goals and to enhance the coherence of the classroom experience for the children.

d. Teachers make meaningful connections a priority in the learning experiences they provide children, to reflect that all learners, and certainly young children, learn best when the concepts, language, and skills they encounter are related to something they know and care about, and when the new learnings are themselves interconnected in meaningful, coherent ways.

e. Teachers collaborate with those teaching in the preceding and subsequent grade levels, sharing information about children and working to increase the continuity and coherence across ages/grades, while protecting the integrity and appropriateness of practices at each level.

f. In the care of infants and toddlers, practitioners plan curriculum (although they might not always call it that). They develop plans for the important routines and experiences that will promote children's learning and development and enable them to attain desired goals.

Source—Reprinted from Copple, C., & Bredekamp, S. (Eds.). 2009. *Developmentally Appropriate Practice in Early Childhood Programs* (3rd ed., pp. 20–21). Washington, DC: NAEYC. © 2009 by the National Association for the Education of Young Children.

Curriculum involves making decisions about what will be taught (content) and how it will be taught (methods). Current standards outline the content, leaving teachers to decide on methods of teaching. This is where teachers can bring in their understanding of developmentally appropriate practices. Recommended methods include integrating curriculum to involve the whole child, building on prior skills and knowledge and integrating methods with content.

A position statement on curriculum, assessment, and program evaluation was published jointly by NAEYC and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE) in 2003 (NAEYC & NAECS/SDE, 2003). Regarding curriculum, the recommendations are for teachers to 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." The statement states that the goal is not to identify one "best" curriculum—in fact, it states, there is no such thing—but rather, to identify the components of a curriculum that indicate effectiveness. An effective curriculum includes the following components:

- Children are active and engaged, cognitively, physically, socially, and artistically.
- Curriculum goals are clearly defined and shared by all stakeholders, including administrators, teachers, and families. Goals state the essential desired outcomes for children.
- Curriculum is based on evidence that is relevant for the children involved and organized around known child development and learning principles.
- Important content is learned through investigation, play, and focused, intentional teaching. Teaching strategies are matched to children's ages, developmental abilities or disabilities, language, and culture (see Figure 3-2).
- Curriculum builds on prior learning and experiences. Both content and implementation of the curriculum build on children's prior individual and cultural learning, include children with disabilities, and support background knowledge learned at home and in the community.

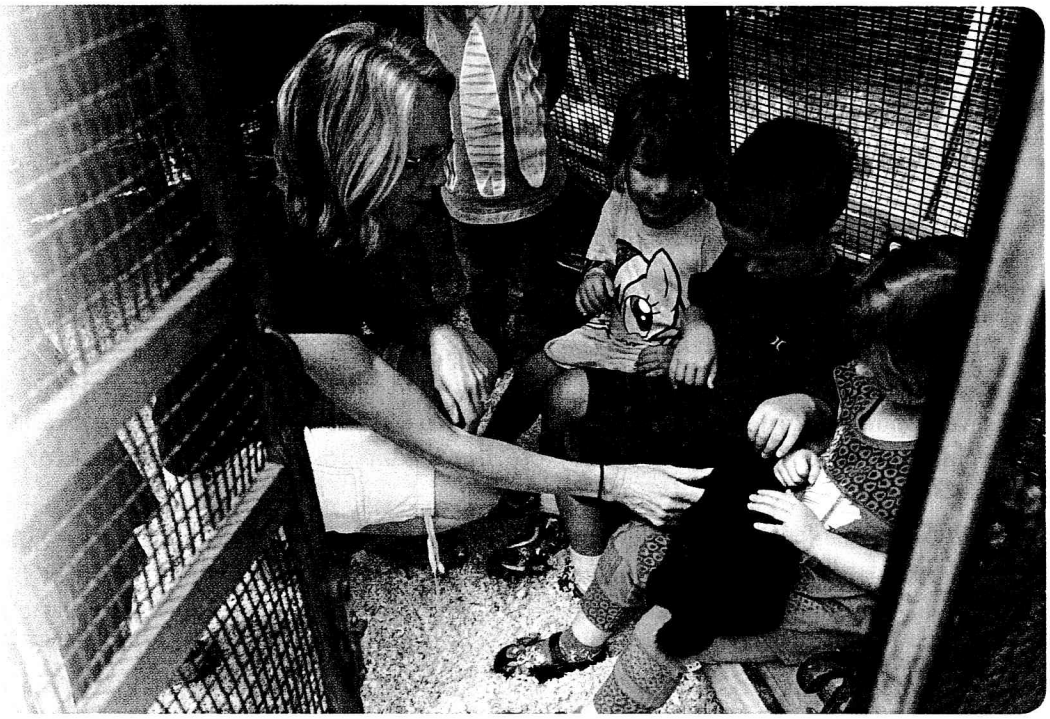


Figure 3-2 NAEYC says an effective curriculum has important content that is learned through investigation, play, and focused, intentional teaching.

- The curriculum is comprehensive, including important areas of development, as in physical well-being and motor skills, social and emotional development, language development, cognitive and thinking development, and dispositions to learning. In addition, subject matter areas such as science, mathematics, language, literacy, social studies, and the arts are part of a comprehensive curriculum.
- The curriculum's subject matter content is validated by **professional standards**. Standards of relevant professional organizations, such as the National Council of Teachers of Mathematics and the National Science Teachers Associations, are reviewed and implemented.
- The curriculum is likely to benefit children in a wide range of outcomes, according to research or plans to obtain such evidence.
- The most recent NAEYC position statement on technology and interactive media as tools in early childhood programs (NAEYC & Fred Rogers Center, 2012) makes it clear that when the integration of technology and interactive media is built on solid developmental foundations, essential materials, activities, and interactions may be enhanced. Technology and media may be used to support learning and expand young children's access to new content, rather than replacing activities such as creative play, real-life exploration, physical activity, conversations, and social interactions.

Professional standards
Standards for practice articulated by professional organizations.

These NAEYC position statements regarding curriculum make it clear that the guidelines are intended only for constructing appropriate curriculum; the specifics of "what" and "how" are left to individual teachers, programs, and school systems according to their philosophies as well as the goals and benchmarks of the various standards.

Head Start standards are currently being applied to many Title I preschool and pre-K programs around the country, as well as guiding the education for the hundreds of thousands of young children enrolled in Head Start programs. Regarding curriculum, the standards state that curricula should include:

- Goals for children's development and learning
- Experiences through which they will achieve the goals

- The roles of staff and parents in helping the children achieve the goals
- Materials needed to support the implementation of the curriculum

There are specific goals for children's development and learning:

- Develop positive and nurturing relationships with adults and peers.
- Develop a sense of trust and security.
- Identify and solve problems.
- Express thoughts and feelings.
- Think critically.
- Increase self-confidence.
- Respect the feelings and rights of others.
- Use creativity and imagination.
- Work independently and with others.
- Develop literacy, **numeracy**, reasoning, problem solving, and decision-making skills that form a foundation for school readiness learning (Head Start Bulletin # 67). (See Figure 3-3.)

Numeracy
Understanding of arithmetic principles.

From all these guidelines, it should be clear that a good curriculum is more than just a collection of activities or lesson plans. It is useful to consider curriculum as "a framework for developing a coherent set of learning experiences that enables children to reach the identified goals" (Copple & Bredekamp, 2009, p. 42). In some cases, programs or schools adopt a specific curriculum.

The decision about adopting a curriculum should be made by considering how it fits with the goals, values, and program standards that have been developed, including the values and desires of the families served by the program, and how it meets the sociocultural, individual, and linguistic characteristics of the children to be educated. The quality of the curriculum is the major factor. Often scripted, or so-called teacher-proof, curricula are adopted by administrators, believing this will solve the problem of having inexperienced or fewer well-qualified teachers. Elizabeth Jones has referred to these curricula as "canned," meaning that they have been mass-produced to try to fit the tastes of many consumers. Unfortunately, these curricula generally tend to be narrow and intellectually weak. It is far better to support staff development so that teachers are able to plan and implement effective curricula.



CURRENT TOPICS in DAP
Understanding the Standards Movement

Another aspect of considering curriculum is to consider the "what," which is the content that children should learn. Recent developments in early childhood education include standards that describe desired results, outcomes, or learning expectations for children before kindergarten. Head Start has developed a Child Outcomes Framework. All of the states have developed early learning standards, and NAEYC has issued a joint position statement with the NAECS/SDE with recommendations to guide the development and implementation of standards for young children (NAEYC & NAECS/SDE, 2003). National organizations have developed content standards in areas such as literacy and mathematics (NAEYC, 1998, 2002). Common Core State Standards for English language arts and mathematics have been developed for K–12 and accepted by most states. Science standards have been published by the National Research Council (2012) and the Next Generation Science Standards (2013), developed by the National Science Teachers Association, with the National Academy of Sciences.

No matter what teacher concerns may be regarding integrating standards into developmentally appropriate learning situations for children, there are positive aspects to defining early learning standards. As stated by the NAEYC and the NAECS/SDE in the position statement *Early Learning Standards: Creating the Conditions for Success*, "By defining the desired content and outcomes of young children's education, early learning standards can lead to greater opportunities for positive development and learning in the early years" (NAEYC & NAECS/SDE, 2002, p. 2). Several other positive aspects of early learning standards are noted by Gronlund (2006) and Seefeldt (2005). These include:

- Matching standards to what we are already doing
- Linking to primary standards to contribute to school readiness
- Helping to identify next steps and transitions, providing for continuous curriculum
- Providing higher expectations for children
- Creating a commonality and clarity for communication
- Providing a mechanism for accountability

The NAEYC position statement (2009) notes that "to be beneficial, standards need to be comprehensive across the learning domains and disciplines, aligned across grade levels, and appropriate to children's development and learning" (reprinted from Copple & Bredekamp, Eds., 2009).

Unfortunately, the various state learning standards show unevenness in their attention to these aspects. As you examine your own state early learning standards, consider whether they give greater attention to some areas of development while neglecting other domains. (If you don't already have a copy of your state's early learning standards, you can search for them at the Child Care and Early Education Research Connections website.)

Developed with little coordination, every state's standards address cognitive and academic skills, such as language, literacy, and mathematics; but many pay less attention to social-emotional development, physical health and development, and "approaches to learning," such as curiosity, persistence, and flexible thinking.

Thus, the negative possibilities of early learning standards cause concern among early educators. In general, a negative aspect is the ever-increasing focus on children's performance, which can be quantified and measured, and less concern for true learning and dispositions to learn, something that is impossible to measure. More specific negatives include:

- Teaching to the standards and loss of unique and appropriate curricula
- The risk of pushdown curricula and inappropriate expectations for young children
- Reliance on direct instruction to ensure addressing the standards
- Focus on superficial learning objectives
- Use of testing and other inappropriate methods of assessing progress. An example of the dangers of focusing on academics is offered by the fact that the 2003 reauthorization of Head Start ended program evaluations that included assessment of children's social and emotional functioning, and accentuated instead attainment of preliteracy and premath skills (Hirsh-Pasek et al., 2009).

The standards often seem to address content as if it were neatly compartmentalized into very separate subjects.

Standards are a reality of the current environment in education, and teachers need to consider how best to meet the standards while using developmentally appropriate learning activities, no matter what age child they teach. Standards tell us *what* content should be addressed; they do not tell us *how* it should be addressed. Those decisions can be made by teachers who understand both the principles and mechanics of implementing DAP and also the content of the standards. Intentional teachers integrate both aspects.

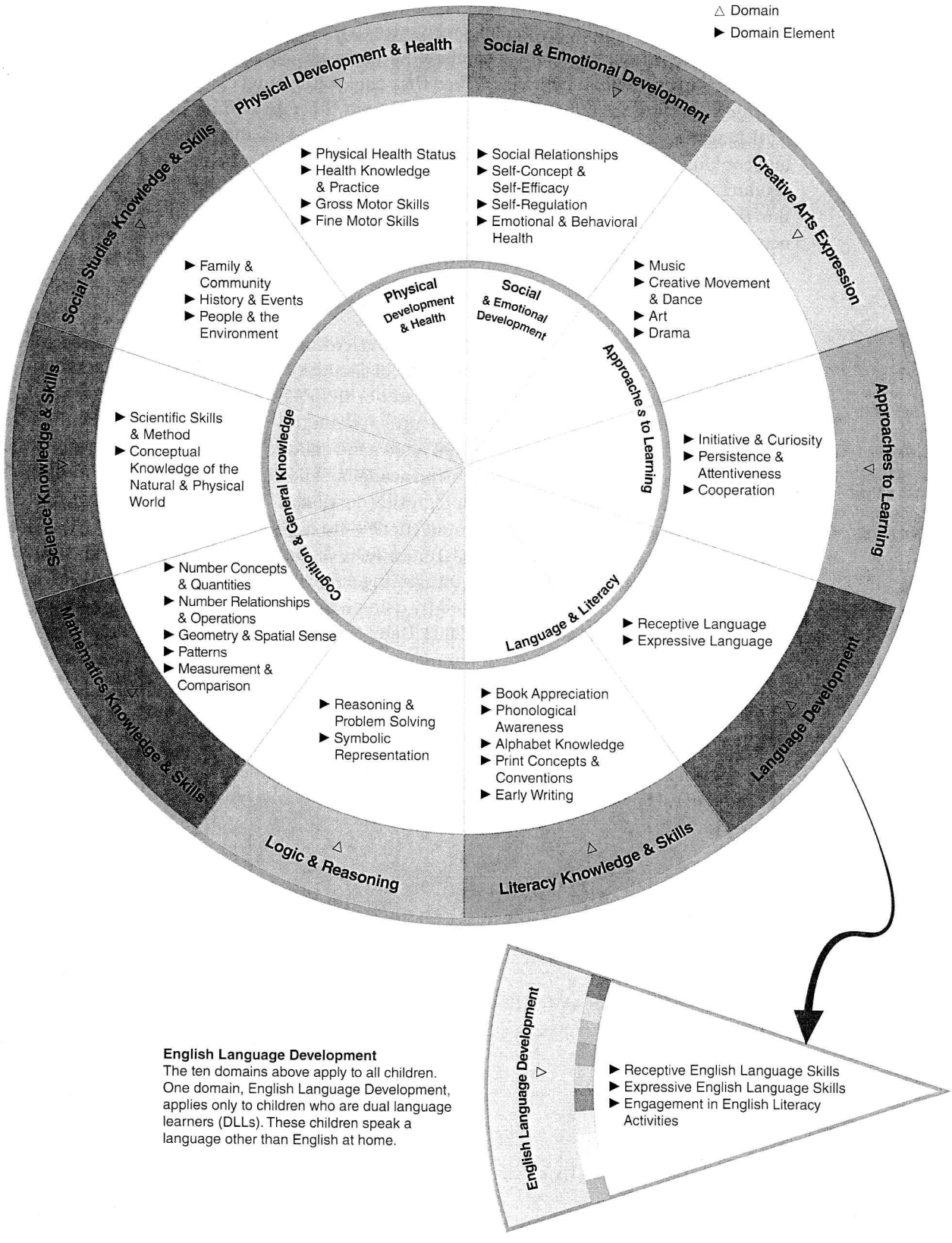


Figure 3-3 The Head Start Child Development and Early Learning Framework is used to guide curriculum and plan teaching and learning experiences.

3-2 Integrated Curriculum

Experienced early childhood teachers recognize that they are in fact teaching important content from the various academic disciplines and have always done so, but that this content is integrated in curriculum activities. When they cook with young children in the classroom, for example, they are teaching math as they count out the cups of flour indicated on the recipe card, language and literacy as they read the recipe card and use the vocabulary of measurement and cooking, science as they point out the changes in the batter being stirred and the finished product they will eat, social skills of group participation, and many other things, all integrated into the single activity (see Figure 3-4). Teachers in the primary grades also recognize that projects and theme explorations allow children opportunities to use the skills they are being taught.

The concept of integrating curriculum comes in part from considering the integrated nature of development—what happens in one aspect of development, such as physical development, inevitably influences development in other domains, such as social or emotional (Bredekamp & Rosegrant, 1995). **Integrated curriculum** includes the various subject matter disciplines—such as science, mathematics, social studies, the arts, technology, and literacy—in common related activities or projects, rather than as separate branches of knowledge. Integrated curriculum allows children to form meaningful mental connections without artificial separations. Integrated curriculum allows the child to function fully using all domains while pursuing topics of interest and using academic knowledge and skills acquired within a meaningful context. The purpose of integrating curriculum is to make that knowledge more meaningful to young children. Integrated curriculum experiences allow for individual learning styles and multiple intelligences (Gardner, 2000; Campbell, Campbell, & Dickinson, 2003).

Integrated curriculum
Curriculum where learning takes place through projects where many threads of knowledge and skills are used, rather than separating into distinct academic subjects.

Various approaches are used for integrating curriculum in early childhood classrooms, but generally, curriculum is integrated by using a project approach (Chard, 1998a, 1998b; Katz & Chard, 2000; Helm & Beneke, 2003; Helm & Katz, 2010), or a general theme approach, developed through the process of connection called webbing, as introduced later in this chapter. *The Creative Curriculum for Preschool Children* (2010) refers to studies as the meaningful way to integrate curriculum content. What all these approaches have in common is the emphasis on building from children's interests and real-life experiences, offering a concrete



Figure 3-4 Cooking is an example of curriculum that integrates math, language and literacy, science, and social skills in a single activity.

context of activities to associate learning in a significant way, and offering children opportunities to apply skills and knowledge to meaningful questions and problems. Being able to study a topic in depth, over a period of time, allows children to develop a true understanding. There are multiple means of engagement, of representation of children's growing understanding, and of action and expression (Beneke & Ostrosky, 2013). Lilian Katz once said that we tend to underestimate children's intellectual abilities. In-depth projects recognize that children are indeed capable of complex learning, when it is meaningful and matched to their learning style.

There are a variety of related benefits to learning through integrated curriculum.

- Integrated curriculum provides coherence for children's experiences and permits optimum construction of meaning. They learn knowledge through meaningful content and skills as they are needed for use in the context of the project activity, rather than concentrating on discrete and separate—and often meaningless to them—skills.
- The isolation of curriculum areas from one another does not allow children to understand how to apply the knowledge in broadly relevant ways. Learning principles of numeracy through math lessons only does not help children understand the uses of math in everyday life. Instead, understanding how many cards to make if we're inviting all of our parents for a picnic is a relevant math problem that allows children to apply knowledge in the context of their activity.
- Integrated curriculum allows children to learn through activities in large time blocks, rather than having to endure numerous fragmenting transitions as teachers shift from a lesson in one discipline to a lesson in another. (Now we'll finish our language lesson; next, we'll work on our math.) Having to physically and mentally shift attention wastes time and disrupts attention.
- The time and opportunity for children to engage in the repeated activities needed for real learning and mastery is gained when teachers do not feel pressure to "cover the curriculum," which often leads to rushing children on to new topics and lessons before they have had enough time to become self-motivated and integrate their ever-expanding knowledge. Integrated curriculum often leads to deepening interest in and exploration of related ideas, allowing children opportunities to revisit and extend their learning. In the discussion of the Reggio Emilia approach found in Chapter 4, you will learn how that example of excellent early childhood programs relies on using projects that often extend over months, with children growing in understanding as the work continues.
- Internal motivation to learn is a result of involvement over time in projects and activities of interest.

When teachers separate knowledge and skills into the discipline areas that make sense to adults only, they often have to rely on external motivators (stickers, test grades) to motivate children for whom the subject matter seems less relevant (adapted from Bredekamp & Rosegrant, 1995).

Perhaps the most encouraging development is the expansion of integrated curriculum upward beyond the preschool, to change the way subject matter is taught to older children (Hurless & Gittings, 2008). Curriculum from many subject areas can be achieved through integration around projects related to themes of interest to children.

3-3 The Cycle of Planning

How, then, do teachers plan for developmentally appropriate curricula? Planning is not an activity separate from teaching that teachers engage in occasionally to meet the requirements of their directors or supervisors. For example, in some programs, lesson plans may need to be submitted by Thursday afternoon for the following week so that supervisors can be certain

Becoming a Reflective Practitioner

Curriculum Planning

Many teachers feel overwhelmed by the process of planning. What experiences have you already had with curriculum planning? What was helpful to you as you planned, and what challenges did you find? As you consider the concept that planning is embedded into both the daily life of the classroom and all interaction between teachers and children, does this help with some of the challenges?

that the planning requirement is being met. This often means that many teachers are hurriedly filling in lesson plan blanks during Thursday naptime to meet the deadline. Plans made in this way are likely not made thoughtfully and purposefully. Frequently, teachers fall back on ideas from the past or copy something from one of the available teacher resource books on their shelf. Such lesson plans are usually based on general knowledge of children and general goals for their learning. The chances of meeting all children's needs and program goals with such a system are rather haphazard.

Rather, developmentally appropriate planning is part of an ongoing cycle that occurs in the context of teachers' daily interactions with children in their classrooms. The cycle consists of the following:

- Learning about individual children and the whole group through a system of observation, regular note taking, and documentation.
- Reflecting on the observations and documentation, and assessing where each child is in relation to predetermined goals and objectives, including those that have been determined by others, such as state guidelines, standards, educational systems, and community expectations.
- Learning about children's interests, experiences, and questions through focused attention.
- Deciding on strategies, materials, and experiences that would move children toward meeting the goals and objectives in the context of meaningful activity.
- Observing to determine the outcomes to evaluate the effectiveness of the plans, adding new ideas from these observations and assessments.

See what this cycle looks like in Figure 3-5. The cycle of planning allows teachers to use the three sources of knowledge to make developmentally appropriate decisions, as discussed in Chapter 1: (1) knowledge of age-related characteristics; (2) knowledge of strengths, interests, and needs of individual children; and (3) knowledge of social and cultural contexts in which children live to ensure that learning experiences are both meaningful and relevant.

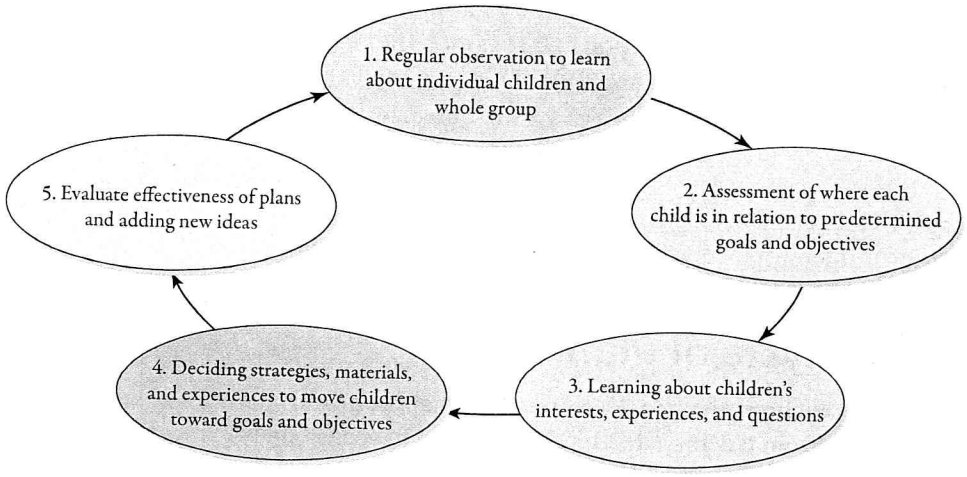


Figure 3-5 The cycle of planning.

Planning is thus embedded into the daily life of the classroom and into all the interactions between teachers and children. Let's consider each component of the cycle separately, as teachers plan curriculum to support children's learning and development.

3-3a Systematic Observation and Note Taking

In the following chapters, you will find much discussion about creating appropriate learning environments for children that nurture them in all developmental domains. The physical arrangements of the interest areas in the classroom, the time schedule, and the specific materials and activities that are made available are all factors that allow teachers to find the time and opportunity to regularly observe children throughout the day. Here are some ways that the classroom arrangements and management can give teachers opportunities to observe:

- Allow children to get their own materials and initiate their own activities. This frees teachers to move about the room to watch and interact with individuals in various interest areas.
- Provide **open-ended materials** for creativity, exploration, and construction, so that teachers do not have to have eyes and hands busy providing assistance and direction.
- Create clear and separate work spaces for children—with systems that control numbers in various activities—to avoid being drawn into frequent conflict resolution.
- Provide materials that allow children of various abilities to use them successfully, at their particular skill level.
- Provide large time blocks for children to get engaged in activities, so that teachers do not get caught up in managing too many **transitions**.
- Have clear cleanup systems and other opportunities for children to participate in classroom responsibilities so that teachers are not busy at every moment.
- Plan a schedule that gives opportunities to interact with individuals and small groups, as well as the whole group.

Open-ended materials
Materials that can be used in many ways, with no one restricted way to use them.

Transitions
Period of time between the ending of one segment of a schedule and the beginning of another.

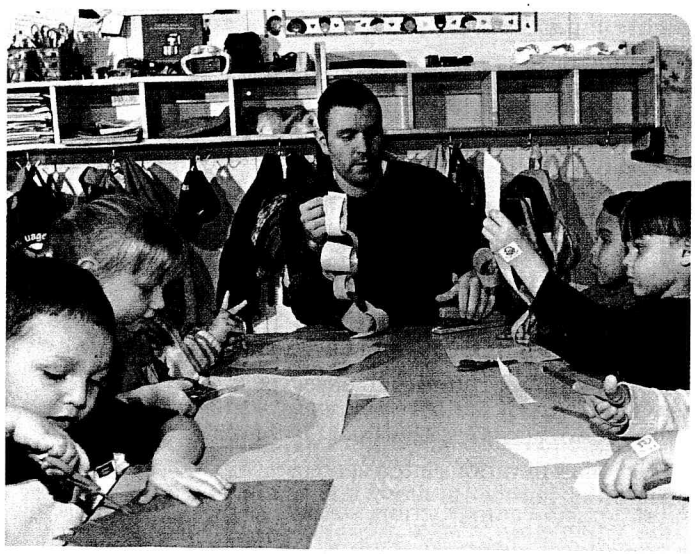
As teachers recognize the priority of creating opportunities for observation, they understand that creating the classroom environment is the best way to free their eyes and ears for paying attention to children. Although, by coordinating with coworkers or volunteers, teachers may be able to schedule formal observation times when they can focus exclusively on taking notes or using assessment tools, most teachers find that their best opportunities for observing come while they are busy interacting with children.

Let's consider just one example. When a teacher has structured a small-group time in the schedule, this allows him to watch and listen to just a few children at a time (see Figure 3-6a–e).

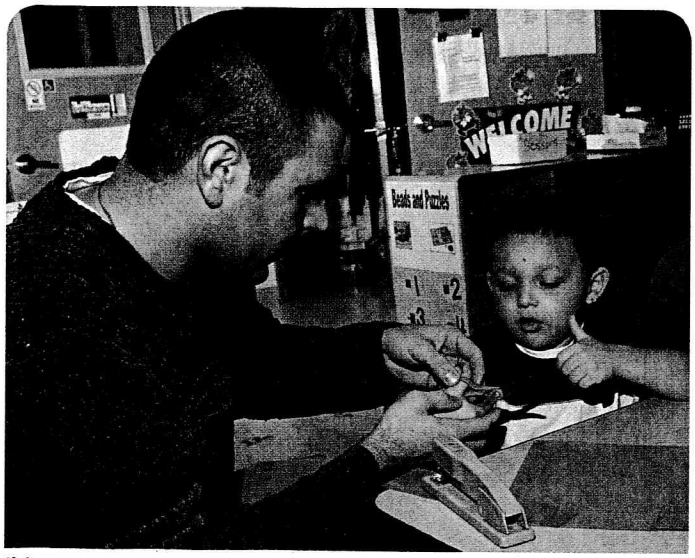
> On a particular day, the teacher has planned a small-group activity of mixing play dough. During that time, he notices that Crystal is enormously curious about how things change and understands ideas about measurement; that LaPorche remembers that flour is also used in baking bread from the story "The Little Red Hen" that was read last week; that Rodney is able to focus his attention exclusively on this activity, as opposed to games during whole-group activity; and that Damon is still having a hard time with waiting for a turn. This, and more, information is important to note down, to get the current status of each child's abilities. Observation has occurred during the planned schedule and activity. Teachers watch how children use materials, their social interactions, and differences in complexity and change in children's play. They are always mindful of the content outlined by the standards they want to meet.

See more about observation techniques and reminders for objectivity and description in Chapter 15.

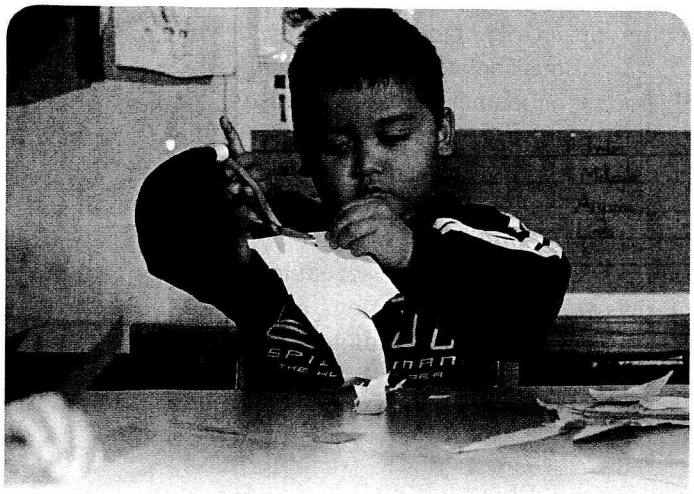
Observation requires note taking. Interesting as all this information from the children in the small group is, it will not be useful (or even remembered) in the long run unless it is



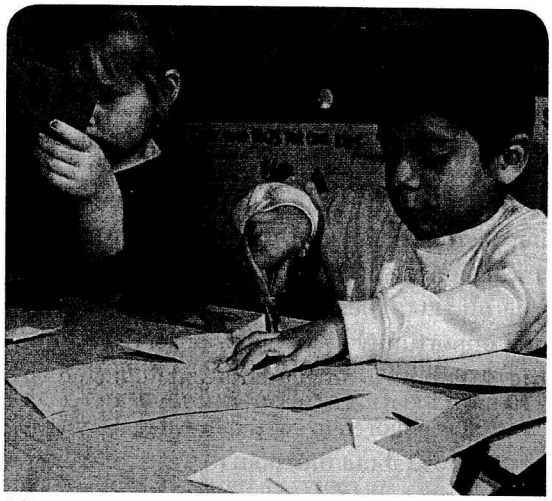
(a)



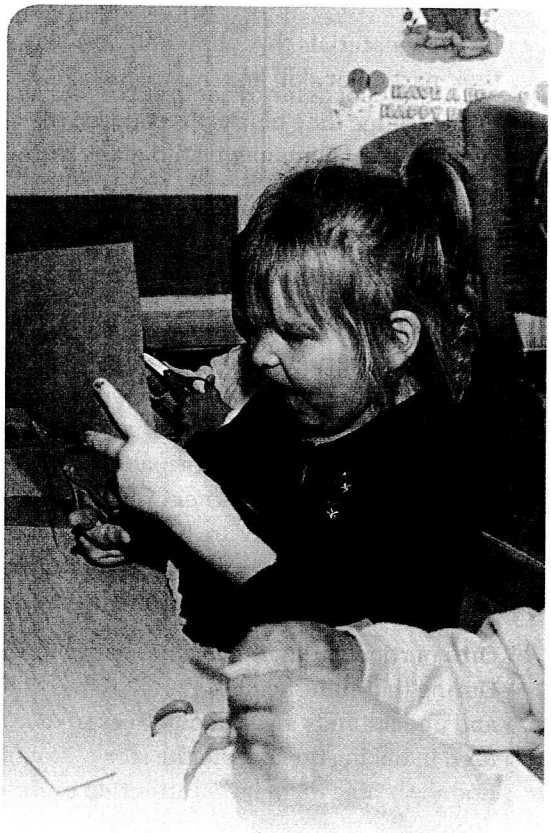
(b)



(c)



(d)



(e)

Figure 3-6 (a–e) When a teacher plans a small group activity (a), he can observe who needs his assistance (b), who has difficulty holding scissors (c and d), and who has mastered the skill (e).

written down. Teachers must develop methods of making quick notes that can later be organized into a more comprehensive system. Even just recording one or two words will allow the teacher to flesh out the observation in later recording. Here are some ways that teachers find effective for quick note taking while children are busy:

- Carry a pencil and pad of sticky notes or file cards in a pocket for making a brief note.
- Post a clipboard and pen in every interest area for quick jottings.
- Prepare labels with each child's name to carry on a clipboard and fill in as opportunities present. This has the advantage of making sure that all children will be noticed.
- Take a quick digital picture. Although this has not recorded any words, it may be enough to bring the incident back to mind for later documentation.

At the end of a day, a teacher will have numerous notes on different children. The key, then, is to have an efficient system for collecting and organizing this information. Many teachers find that it is useful to have an accordion file folder or loose-leaf notebook with a section for each child. Others use computer files. This allows for observations to be added throughout the year. Further subdivisions may be made into sections for physical skills, social and emotional development, cognitive and concept development, creativity, language and literacy development, and numeracy and math concept development. When the teacher sits down to organize the observations, he or she just has to make sure that the details are complete, including the date, and then place the sticky note or the file card in the appropriate place. A system that has pages or sections for each of the developmental domains allows a quick check to see which children need particular attention, as the teacher has not yet accumulated observations in that particular area.

Some observations will involve more than one child or more than one developmental domain. The teacher can quickly make copies of the observation to file accordingly. Observation goes on in this way on a daily, regular basis.

Observations may be noted in a shared written or online journal used by all classroom teachers. Teachers may write notes in a large, conveniently placed notebook. When there are several teachers who work with the children in a classroom, this may become not only a form of communication but also a source for reflection, dialogue, and shared thinking (Stacey, 2009).

In addition to observations, teachers may collect samples of work. Similar samples of drawings or writing samples, collected over a period of time, can be used to document growth and learning. Sometimes teachers have the children write their names or draw a self-portrait each month, to note progress. These can be added to the observations to make a complete portfolio for that child, used not only for assessment and planning but also for sharing information with families.

As an example, from the play-dough small group, the teacher added these notes to the children's folders (see Figure 3-7).

3-3b Assessment

Every month or two, the teacher reads through the accumulated observations to assess individual needs and progress toward benchmarks. The objective observations, collected over time, add up to a picture that can be written as a summary of where the child is in each aspect of development and learning at this particular time. The specific goals and objectives that have previously been defined in the curriculum framework provide the vehicle for assessing learning. In other words, teachers summarize the child's abilities and skills, and then see how these measure up with progress toward the final goals.

This information then allows the teacher to individualize planning, with the particular goals for that child in mind. Ideas for what content to teach and how to teach it are linked to these individual goals. Assessment is like the process of pausing along a journey to see

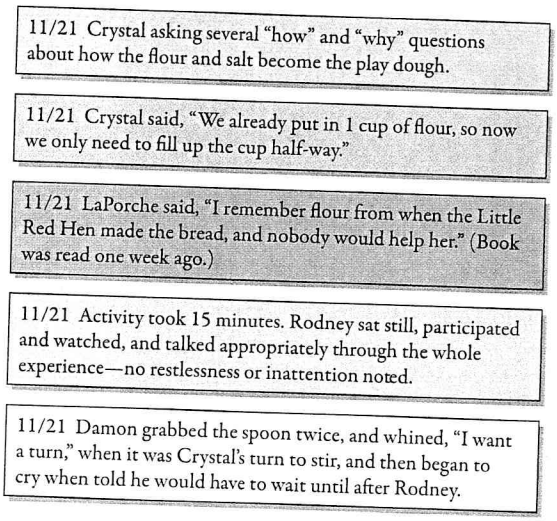


Figure 3-7 Sample observation notes. All of these notes are filed in the appropriate sections in each child's notebook.

what progress has been made in relation to what the final destination should be. Assessment involves reflection and interpretation. As one teacher put it, "If we don't know where we want to go, how will we know how to get there, or how close we are getting to the end?"

Performance-based method
Method of evaluation and assessment that relies on observing children during daily activities, rather than artificial testing situations.

Some widely used curricula have clearly defined objectives and goals that teachers can use as a developmental assessment tool. The Work Sampling System® (WSS) includes ongoing observations, progress reports, and developmental checklists (Meisels & Atkins-Burnett, 2000). There is a Work Sampling System® for Head Start. Head Start teachers are now required to use the Head Start Outcomes Framework as a guide. The emphasis on outcomes should not be seen as preparing children for a "test," but as specific guidance to help all early childhood teachers collect information on children's progress and therefore be able to improve the quality of learning experiences for children. The information collected is used for program development purposes and for documenting children's learning.

Effective Curriculum Planners:

- Think through their actions.
- Cultivate a mind-set of receptivity.
- Seek the child's point of view.
- Notice the details to discover more possibilities.
- Share conversations following the children's lead.
- Support children's connections with each other.
- Take action to build on children's strengths.
- Challenge children to go further in their pursuits.
- Explore children's theories for deeper learning.
- Invent new ways to meet requirements.
- Expand possibilities for prescribed curriculum.
- Take risks to try new things.

Read more about these, and other, ideas in *Learning Together with Young Children: A Curriculum Framework for Reflective Teachers*, by *Deb Curtis and Margie Carter* (2008), St. Paul, MN: Redleaf Press.

In some other tools, there is overlap with these domains. HighScope has a Preschool Child Observation Record organized around the key developmental indicators (Hohmann & Weikart, 2002). The Teaching Strategies Gold Assessment System (identifying thirty-eight goals and objectives in social/emotional development, physical development, cognitive development, and language development) is available in print form, as well as in an online system that allows early childhood programs to show progress on the group of children, as well as on the individual (Heroman, Burts, Berke, & Bickart, 2010). You will read more about these two systems in Chapter 4.

All these assessment tools use **performance-based methods**; that is, teachers watch children busy in the activities of daily life, rather than create artificial testing situations. They all involve strategies for collecting and recording information about children's progress in the various developmental domains. Many of the elements involve specific skills, as well as general approaches to learning

Let's go back again to our play-dough example. For each of the children, the teacher has accumulated many examples in all the sections of his files, indicating abilities and progress in all developmental domains. During his planning period one day, he sits down to go through the specifics and make brief summaries. Among the notes he makes under cognitive development for Crystal, he writes: "Crystal shows great curiosity, asking specific questions. She understands one-to-one correspondence and how many parts are in a whole."

For Damon, part of his summary under social/emotional development reads: "Damon continues to have difficulty when having to wait for a turn and shows frustration with his classmates frequently."

The assessment summary sheets help identify current strengths and needs. From these assessment summaries, teachers can move toward planning appropriate experiences for each child in the group (see Figure 3-8).

3-3c Planning Strategies to Move Children Forward

Because teachers are challenged with planning for individuals and the group as a whole, the next step in the planning cycle is to list all the needs identified on the individual summary sheets. In essence, this means identifying all the children who may need more help with fine motor experiences, for example, or with letter recognition, or with learning social skills or specific self-help skills. This list then helps teachers consider what kinds of experiences, materials, and learning activities can be planned to allow children to enhance specific knowledge and abilities. Thus, the teacher is planning curriculum that may appeal to all children because of what he understands about the characteristics of an age group in general; in addition, he has specific children in mind that may particularly benefit from the plan. Because children have choices of an array of experiences, he makes the plans particularly appealing to those he wants to encourage to participate, as part of his individualized plan. On the general weekly lesson plan, teachers often note the initials of the children they particularly want



Figure 3-8 Teachers use notes to discuss assessment summaries, set goals, and plan appropriate curriculum.

to support and encourage in an activity, to remind themselves of the planned focus for their interactions.

> Remembering that Damon is listed on his class summary sheet as one of several children who particularly needs help with concepts of turn taking and cooperative social interaction, the teacher plans an art activity where children may work on a box construction with a partner. On the day in question, he encourages Damon to partner with Ricardo, who is an easygoing child. He interacts with the boys as they cooperate on their box construction, commenting on their joint efforts. Damon is pleased with the positive recognition and follows Ricardo's lead in waiting for the pot of red paint they want to use. Other children enjoyed the box construction activity as well, but the teacher noted on his summary sheet that he had carried out a plan to help Damon enhance his social skills.
>
> With Crystal in mind, another plan was to make pizza, cutting up the whole pizza into enough slices so that each child could have one. The teacher wanted to nurture her interest in numbers and whole-part relationships, and felt this activity would do so appropriately.

Individualizing plans helps teachers work in a coordinated way, linking their goals and objectives, their assessments of individual children, and their daily and weekly planning.

This same cycle of planning for individualization is used to build appropriate curriculum for infants and toddlers, as well as older children. Caregivers observe infants and toddlers to note where they are in acquiring the abilities that indicate developmental milestones in fine and large muscle control, and in sound and language production. They then assess the baby's progress in the continuum of developmental attainments. They observe the baby's preferences in sensory exploration and then provide appropriate materials and experiences that will help these youngest children strengthen and practice emerging skills and move toward their next accomplishments.

More formal assessments may also be part of the cycle of planning. We will talk more about assessment in Chapter 16.

3-4 Advantages and Disadvantages of Theme Planning

Theme planning
Organization of activities and materials around a particular concept.

The approach of having an organizing theme for planning has some real advantages. **Theme planning** has long been a method of planning used by many teachers, offering an array of activities built around a central idea. One advantage of theme planning is that a related web of experiences allows children to make their own meaningful mental connections. When children find a common thread around much of their play and work, they are able to make linkages between individual experiences to construct concepts.

Theme planning may offer a variety of means of exploring a concept via different methods and media; if a particular activity does not interest or fit the specific learning style of a child, other methods may be used to explore the same idea.

Another advantage is that theme planning can allow for integrated learning experiences where children have the opportunity to learn and develop skills in several domains at once. This is why theme planning is usually a positive step in broadening the curriculum in primary classrooms.

Themes also allow children to immerse themselves in topics that deeply interest them. Play and projects centered on a particular theme may last weeks, or even months, depending on sustained attention. Theme planning may also allow families to become involved in these learning activities, as families share resources and reinforce learning activities at home.

Still another advantage is that themes provide a method to support teacher organization and thinking around a particular topic. The best kinds of brainstorming and creative thinking can result when teachers are trying to web related ideas and activities to help children explore themes. Developmentally appropriate planning occurs as teachers identify and sustain children's themes.

On the other hand, theme planning at its worst can narrow the focus of children's learning in very inappropriate and restrictive ways that are to be avoided. Traditional theme planning revolves exclusively around adult decisions about what children need to learn and how they can learn it. Teachers predetermine what direction the curriculum will take and what learning will result from it. Adults decide what body of knowledge is appropriate for the children and when and how they will teach it. There is no question that adults have the "big picture" because of their knowledge about children in general and their understanding of what children need to learn and develop in curriculum areas; however, relying only on adult perspectives omits the important component of children's initiative and interests.

Traditional theme planning works from a defined time frame for each unit. Frequently, teachers plan the calendar year in advance, deciding on the theme for each week before the learning year even begins. Thus, teachers are commonly able to describe in September their unit themes for February (for example, Valentine's Day and Community Helpers, including a week each for police officers and considerations of safety, firefighters, and medical people). Similarly, April may bring theme units on Easter, planting seeds, flowers, and baby animals. There is no shortage of popular preschool topics and cultural holidays.

When the time frame is decided so far in advance, teachers feel an urgency to stay on schedule, moving the children on as soon as the activities for the week have been completed. But such defined time frames fail to leave space for responding to children's blossoming interests and their need to revisit topics and move on to deeper levels of understanding. How could it be possible for teachers to always know in advance what topics would interest a particular group of children and for how long?

Another danger with narrowly sticking to specifically defined themes is that this can exclude other interests. It is not so much that teachers say arbitrarily that another subject introduced by the children cannot be followed at the time. Rather, they may exclude other topics because their own planning for the week tends to preclude openness to other contributions. Thus, children's ideas tend not to carry enough weight to justify deviating from the theme topic. Having put the effort into creating a theme plan, it is hard for teachers to let go of the plan and to include children's ideas or teachable moments (see Figure 3-9).

Having developed theme units, some teachers fall into the trap of recycling them on an annual basis, bringing out dusty boxes and lesson plans and going through them with the next group of children. This method of curriculum planning—called "embalmed" by Elizabeth Jones because it was once alive but is now quite dead—leads to teachers who go through the motions, bored with the repetition. The themes become merely topics to be "covered."

Children are interested in the events occurring around them, and many of these are the cultural or religious holidays whose messages are boomed from the television and shopping mall and are alive in most homes and communities. Deciding how to use the best elements of holidays for genuine, child-centered curriculum versus merely echoing the popular culture is part of the thoughtful decision-making process for teachers.

> Does this theme planning have a pertinent context for the children? Does it reflect their real lives or interests? How do topical themes such as holidays, dinosaurs, colors, or letters of the week relate to early learning standards? Meaningful outcomes for children can only happen with intentional thinking on the part of the teacher. They do not occur when teachers habitually reach into their box of favorite activities. (Curtis & Carter, 2011)



Figure 3-9 One disadvantage of theme planning is that it may be hard for teachers to let go of their plans to follow children's interests.

Some teachers, recognizing the conflict between the constraints of teacher-dominated plans and children's desires to pursue particular interests, create lesson plans to post on the wall, but then ignore them in favor of child-initiated play. This is an essentially negative process, because the amount of teacher effort that goes into creating useless plans could be better spent puzzling over the next steps to support and deepen children's spontaneous interests and to link activities to assessment and goals. Still others believe they should give up planning and simply follow the lead of children—what Elizabeth Jones calls "accidental/unidentified curriculum." When things just happen and no one follows up, many good starting points for curriculum are missed. Unfortunately, this planning method, or lack of method, does not permit the deepening of questions and richness of experience that support constructivist learning. Neither of these alternative actions is helpful.

The question is: Where should the organizing themes come from?

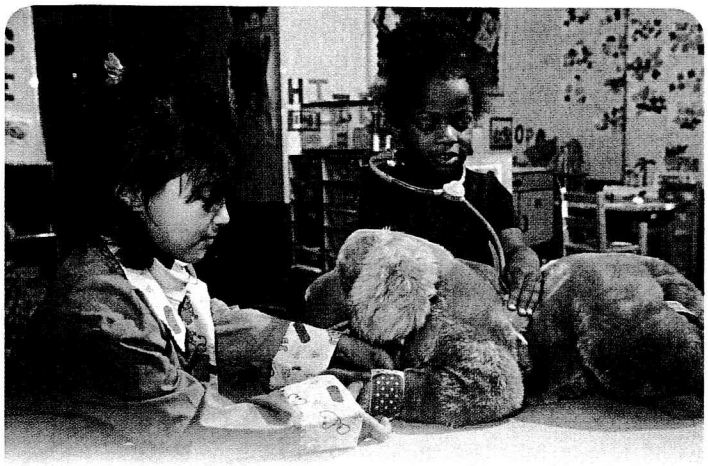


Figure 3-10 Teachers use children's deep interests and questions to plan activities, such as this veterinary office.

3-4a Children's Interests as a Basis for Meaningful Curriculum

For children to become truly engaged in their explorations and play, the planned materials and activities must be of compelling interest to them. Thus, an important component of the planning cycle is for teachers to learn about the questions and experiences that are particularly engaging for the individual children within the group.

When teachers change their focus from deciding on themes arbitrarily, and instead move to observing the children's own deep interests, explorations, questions, and curiosity (see Figure 3-10), they free themselves and the children to follow authentic topics of interest, exploring them as deeply as the children's developmental abilities allow. This

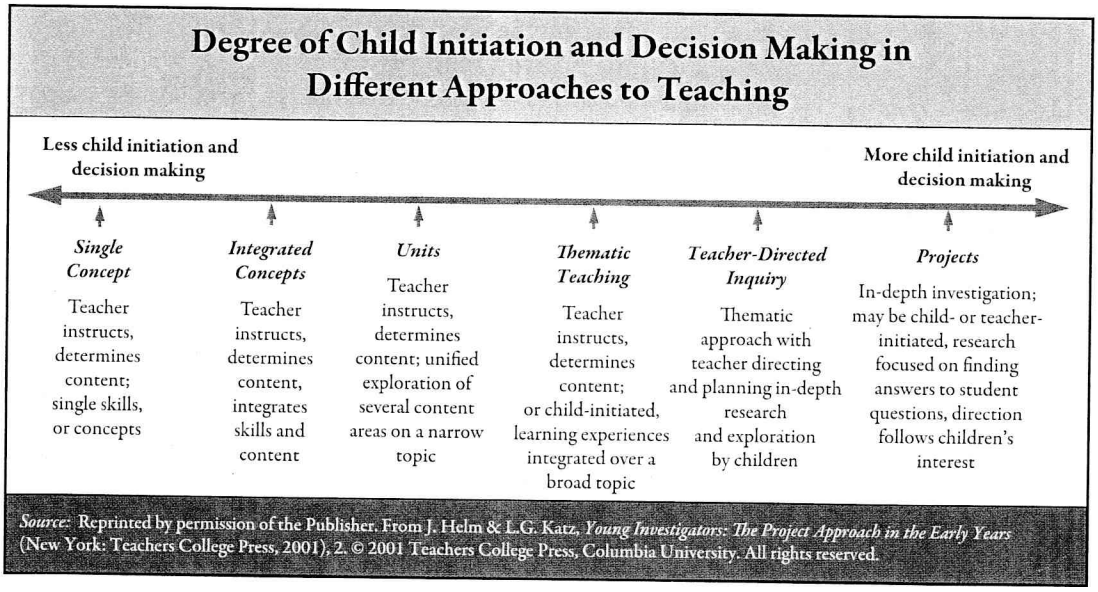


Figure 3-11
There are varying degrees of child initiation and decision making as teachers choose different approaches to planning.

matches with what we know about how children learn best. Children learn when they are self-motivated to explore questions that are meaningful to them—when they find things to be "uncovered." Note in Figure 3-11 the varying degrees of child initiation and decision making in different approaches to planning. This brings us to a consideration of emergent curriculum.

3-5 Emergent Curriculum and the Project Approach

In early education today, you will hear the term **emergent curriculum**. Emergent curriculum describes the kind of curriculum that develops when exploring what is "socially relevant, intellectually engaging, and personally meaningful to children." The basic idea is that organic, whole learning evolves from the interaction of the classroom participants, both children and adults. "As caring adults, we make choices for children that reflect our values; at the same time, we need to keep our plans open-ended and responsive to children" (Jones & Nimmo, 1994, p. 3).

Emergent curriculum
Learning activities that develop from following the interests and interactions of the classroom participants.

In emergent curricula, both adults and children take initiative and make decisions. This power to impact curriculum decisions and directions means that sometimes authentic curriculum is also negotiated between what interests children and what adults know is necessary for children's education and development. In other words, children's interests and questions can become the organizing theme for planning, and within that framework, teachers are able to plan the activities that embed the early learning standards and curriculum requirements (Gronlund, 2006).

With emergent curriculum, there is a cycle that involves careful watching and listening to children's interests and play; reflection on what is happening; and thoughtful responses to support children's ideas, questions, and thinking (Stacey, 2011). Emergent curriculum is never built on children's interests alone; teachers and parents also have interests worth bringing into the curriculum. The values and concerns of all the adults involved help the classroom culture evolve.

The curriculum is called emergent because it evolves, diverging along new paths as choices and connections are made. It is always open to new possibilities that were not thought of during the initial planning process (Jones & Reynolds, 2011).

The basis, and ongoing process, of emergent curriculum is observation of children's interests, experiences, and activities. By carefully observing and listening to children, teachers get cues about their questions, knowledge, skills, and interests. Planning after observation is focused on finding activities and materials that will lead children to sustain deeper interests and construct new understandings.

Emergent Curriculum is:

- Framed by the teacher, allowing for collaborations between children and teachers, giving everyone a voice.
- Responsive to children, allowing teachers to build on children's interests.
- Flexible, because curriculum planning is constantly developing, instead of being done well in advance.
- Facilitated by the teacher, who takes what is seen and heard, and provides opportunities for children to dig deeper and construct further knowledge.
- Represented by various forms of documentation, enabling children's learning and teachers' thinking to be made visible.
- Theoretically supported by the work of Dewey, Piaget, and Vygotsky.

—Adapted from Stacey, 2009. *Emergent curriculum in early childhood settings: From theory to practice.* St. Paul, MN: Redleaf Press.

Children collaborate with teachers in discussing and planning the next steps for investigation. Teachers, continually involved in watching children's responses to their experiences, puzzle over additional learnings that might be found in new ideas or materials. The best planning for emergent curriculum comes after the fact, as teachers consider children's responses and anticipate the next directions. One teacher describes the challenges of planning in emergent ways as "responding and anticipating, following and initiating" (Pelo, 2011, p. 159). Teachers follow the children's lead and then introduce new activities to sustain their interests and deepen their explorations—a subtle balancing act that requires genuine responsiveness and attention to more than just the teacher's goals.

Where do ideas for emergent curriculum come from? Jones and Nimmo (1994) identify a number of sources:

- *Children's play, comments, and questions.* Different children have different interests. For example, a child is playing out going on a camping trip after summer vacation; another keeps talking about his baby brother's lack of teeth.
- *Adult interests and passions.* For example, a parent wants to introduce the children to composting; a teacher enjoys finding bird nests.
- *Things, events, and people in the environment.* (See Figure 3-12.) For example, the hill at the bottom of the playground leads to exploring the force of gravity. A visit to a neighbor's garden becomes an experiment in watching the growth of vegetables over time or leads to exploring what earthworms do in the soil.
- *Developmental tasks.* The tasks to be mastered at each developmental stage require a lot of practice for skills and social-emotional issues (see Figure 3-13a and 3-13b). For example, a lot of opportunities to use scissors; plenty of space to jump; a curriculum that helps children explore friendship.
- *Family and cultural influences.* For example, a Jewish family offers to introduce the class to Chanukah traditions; a visiting grandmother tells stories of her childhood.
- *Issues that arise in the course of living together day to day.* For example, discussions about fair ways to use the new computer, or finding ways to assign classroom chores (see Figure 3-14).
- *Serendipity, or what just happens.* For example, a heavy rainstorm creates new gullies in the playground; caterpillars arrive in the spring.



Figure 3-12 Curriculum may come from opportunities to explore things in the environment.



(a) (b)

Figure 3-13 (a & b) Curriculum may come from children's own developmental interests, such as working puzzles or developing self-help skills like serving food.

- *Curriculum resource materials.* Although these are not teachers' primary sources of curriculum, they often give ideas that can be adapted to the setting, the children's interests, or the teacher's style. For example, a teacher may find activities related to firefighters, after she has discovered her children's interest in this topic.
- *Values held for children's learning in school and the community.* For example, a class visits the nursing home on the corner; children discuss making holiday gifts for others.

These are just some beginning points to pursue in depth to find children's themes. This is a redefinition of theme planning (Curtis & Carter, 2011). In child-centered theme planning, teachers identify the themes emerging from the children's play and life experiences and then translate those ideas into materials and activities to provoke curiosity in and exploration of the new ideas and questions that children keep generating. Good planning allows for well-prepared starting points for children's play and exploration. Good planning then requires teachers to stand back and ask what comes next as they watch children's interactions with materials and activities. In uncovering the child's developmental goals and objectives, teachers have a specific direction to plan for. This thoughtful consideration inevitably leads to the next plans.

As teachers thoughtfully supply a variety of experiences and media for children to explore, the sustained activities may develop into long-term projects (Chard, 1998a, 1998b; Katz & Chard, 2000; Helm & Beneke, 2003; Lewin-Benham, 2006; Helm & Katz, 2010; Beneke & Ostrosky, 2013; Bentley, 2013). These are called "studies" in *The Creative Curriculum®* (Dodge, Colker, & Heroman, 2010). In projects and studies, teachers and children together concentrate on exploring subjects deeply.



Figure 3-14 Curriculum may be learning to be part of a community, such as doing classroom chores.

Good projects provide opportunities to work in many curriculum areas, such as science, math, social studies, communication, and the arts. "It is, in fact, easier to incorporate print, math, or science concepts into an investigation that is intensely engaging for the children because they are then intrinsically motivated to write, draw, and think deeply about their work" (Stacey, 2011, p. 9).

Projects are the vehicle for truly integrating curriculum and allowing many kinds of knowledge and skills to develop. As such, projects are especially meaningful for creating

Family Communication

Curriculum Choices

Dear Families,

Some of you have asked questions about what curriculum we use in our preschool classroom. The answer is rather more complicated than just giving you a name. The approach we use is what is called "emergent curriculum." Let me explain what this means. Because we know that young children are most engaged when they find activities and questions that interest them, we pay close attention to their interests by listening to their conversations, watching their preferred activities, and listening to your accounts of activities at home. We then decide which topics and activities might interest a number of the children and begin to explore these by providing materials and experiences that might support deepened learning about the subject.

At the same time, we are mindful of the learning standards for young children that have been adopted in our state, so we are continually selecting activities that will help children move toward achieving those benchmarks of learning and development. You might say that we are weaving together the mandated learning expectations with the particular interest of this group of children to find activities and experiences that will satisfy both. While this means we are frequently flexible in our planning, and changing as we determine the children's involvement with learning, it does not mean that anything goes. We are quite intentional in our decision making, which is focused on children's development and achievement as a basis for determining next directions.

We recognize also that families have particular interests, and your ideas are welcomed to add to the mix. We will keep you informed of children's interests and enjoyed activities, so you can follow up as you would like at home.

In this classroom, curriculum is a living thing that makes our learning both pleasurable and productive. Thanks for your interest, and let's continue talking about this.

Your classroom teachers

Professional Resource Download

appropriate curriculum in the primary grades, although also occasions for deepening learning in the preschool, and even with toddlers. Every piece of emergent curriculum doesn't necessarily develop into such projects; teachers carefully follow the direction of children's interests and help them move on to new ideas when the time seems right. "Through this process, the curriculum keeps emerging and the teacher, together with the children, keeps learning" (Jones & Reynolds, 2011, p. 109).

Emergent curriculum is dynamic, always developing, never completely predictable. Its very organic process, growing from real actions and interactions, keeps both children and teachers highly motivated and learning. It is important to realize, however, that emergent curriculum is not just "whatever happens, happens." Rather, it is as highly structured as a teacher-directed approach. The difference is that its structure does not come from preset curriculum plans, but from knowledgeable teacher responses to children.

3-5a Emergent Curricula and Standards

The question asked by many teachers today is how they can use the concept of planning emergent curriculum, while reconciling it with the demands to meet specific learning standards.

One thing that teachers can do is called **backtracking**, which means that they consider all the important play and learning experiences that have gone on in the classroom projects, and see which of the standards have been met by the activities. This process connects the emergent curriculum and standards after the fact. Generally, teachers are mindful of the standards as they guide the children through their projects and studies. As the children's work is finished, teachers can then identify the specific skills, knowledge, and abilities that were used during the experience. This allows teachers to be accountable for the required curriculum while supporting children to learn in very appropriate activities.

Backtracking
Term used to indicate the process of analyzing and interpreting activity after it has occurred, to evaluate learning tasks and skills involved.

Observing and note taking, as well as evaluating lesson plans, help teachers assess children's progress toward standard goals, achieved through activity and engagement in the explorations that interest them. Obviously, a first requirement for this kind of assessment is a thorough familiarity with the standards and an understanding of their language that can be easily translated into the meaningful activity of the classroom.

Teachers also use the standards framework to plan intentionally. A teacher who plans to make water play with a variety of objects available is providing an enjoyable and appropriate experience for the children, and one that may spark their interest for further exploration. But she is also planning to observe how many of them grasp the concepts of sinking and floating, to see how much progress has been made toward the goal, under Scientific Thinking and Invention in the standards, of "identifying, discriminating, and making comparisons among objects by observing physical characteristics."

It should be noted that families have important roles to play in helping teachers with developing and carrying out curriculum. The first role is to understand and support the teacher's efforts in developing curriculum that may not appear established, and therefore not comfortable to families concerned about their children's learning. As teachers communicate their goals for children and their enthusiasm for the active learning process, families will come to understand that specific objectives will still be met, though perhaps in a less scripted way. Teachers, then, have a major obligation to communicate with families in specific ways to describe the learning process and results.

Another role is for families to become active in the dialogues about their children's interests and learning style. Families have firsthand knowledge that can be shared with teachers in collaborative partnerships.

Still another role is for families to help identify and supply resources for project work. With their community connections, families may provide important ideas to add to the planning process. They may themselves become resources, as well as add materials from home.

As teachers document the children's work, parents will catch the enthusiasm of the explorations and may themselves become involved, strengthening all learning possibilities.

3-6 Strategies for Planning for Emergent Curriculum

As teachers begin to understand the appropriateness of emergent curriculum, some key activities can aid the planning process. Remind yourself about these activities by looking again at Figure 3-5.

3-6a Observation and Reflection

Observation of children busy at play and work is the heart of uncovering the questions and interests of children's learning and the skills and knowledge they already have. We have already discussed the importance of observation for assessing where children are in relation to predetermined goals and objectives. Note that recording descriptive data about children at play guides teachers in responsive planning.

In reflecting on observations, teachers should ask: What did I see and hear, specifically? What would I call this experience for the child? What does this child know, and does the child know how to do? What does this child find frustrating or puzzling, meaningful or challenging? How does this child feel about herself or himself? What is the child trying to do, in play or exploration? What experiences, knowledge, or skills are present to build in? What questions, inventions, or problems are being encountered? What might help next, from me or from peers? (Curtis & Carter, 2011).

Answers to these questions help teachers define children's self-chosen themes and uncover the curriculum that has already begun. Finding the answers to questions about children's play also helps teachers identify the learning activities that might best sustain the children's explorations. Observation is an ongoing process that continues as teachers plan and provide for the next steps (see Figure 3-15).

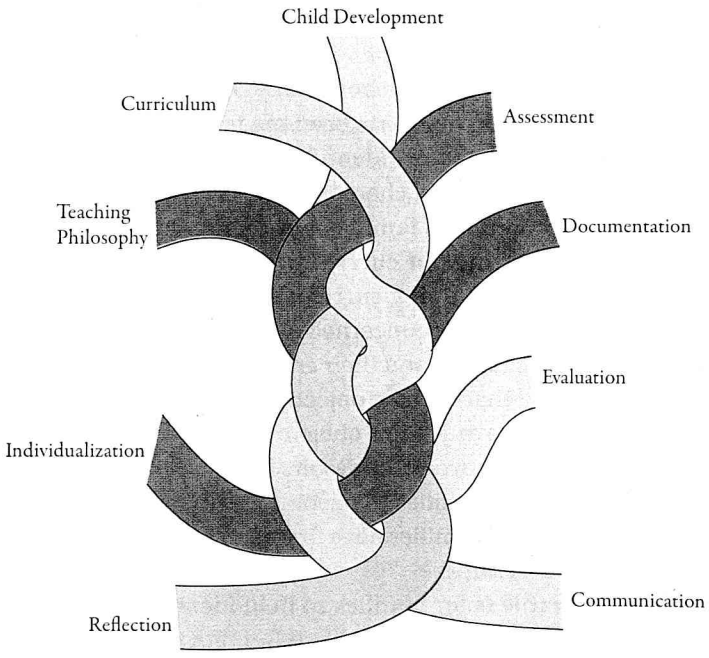


Figure 3-15
Teachers integrate knowledge of child development, individual children, and standards as they create, evaluate, document, and communicate curriculum. No strand can be missing.

The following sample observation illustrates the teacher's process of identifying themes and issues to plan for:

> From the teacher's notebook: Jenny and Ramon are playing in the sand. Ramon pats the sand firmly into the pail and turns the pail over. The sand falls out. He seems disappointed, then refills the pail, pushing even harder this time. Again he turns the pail over. The sand falls out again. Next he grabs Jenny's bucket and begins to fill it. Jenny says, "No, Ramon" and grabs it back. Ramon struggles to get it again, saying, "I want to use this bucket so the sand won't fall. This is the one I had yesterday."
>
> Interpretation: The sand in the sandbox was wet yesterday following a rain, and the children were able to create molds when they filled their pails and upended them. Ramon thinks the ability for the sand to hold its shape is connected with a particular pail, rather than the consistency of the sand. He plans to test out this idea, but is frustrated because someone else has the pail. He grabs rather than asks. Jenny knows how to assert herself against Ramon.

After observing Ramon's interest and question, the teacher can plan subsequent experiences to help Ramon explore the properties of wet and dry sand, other substances that allow molds and imprints, and so on. By thinking about individual children's interests, questions, and needs, teachers can plan activities to specifically target individual children (Buell & Sutton, 2008). Thinking about the possible experiences that might support further related exploration is often accomplished by a process known as *webbing.*

3-6b Webbing

Creating a web involves brainstorming about where a particular exploration might go and listing the potential related connections that could be made. One thing leads to another, one idea to the next, like a big spider web. A web always includes more possibilities than can be followed before other interests move the curriculum into other directions, as well as ideas that are ruled out due to lack of interest, lack of appropriateness for a particular group, or lack of appropriate resources or experiences. A web is also open to other additions as children and families become involved in discussion and activities, and new ideas occur along the way. The web helps teachers remain open to possibilities and begin preparing materials and planning for activities that might give opportunities for learning. A web is a tentative plan, a starting place to begin trying ideas, paying attention to what happens, evaluating, and moving on with further activities (Jones & Nimmo, 1994).

The function of the web is not to create an elaborate set of teacher-planned activities—the "curriculum plan for the month"; rather, it serves as a starting place for teachers to focus their thinking. As one teacher said, "I see this initial web more as a guidebook for traveling, with reminders to 'Be ready for . . . ,' 'Be sure to spend some time at . . . ,' and 'Bring along. . . .' This web would not be a map marked in red to be followed unwaveringly" (Pelo, 2011, p. 159). Webbing allows teachers to be creative and playful in their planning, rather than just logical and linear. For example, a web to show the teacher's thinking about learning related to Ramon's ideas in the sandbox might look like Figure 3-16.

These webs represent the teacher's thinking about possible developmental learning and content, as well as the potential activities and materials listed on the web. This is an important way for teachers to negotiate between following the children's interests while ensuring that they are supporting their progress toward the defined learning goals and objectives of the standards. Sometimes teachers find it useful to separate these two parts into activity webs (the what, when, and how of potential plans) and content webs (the why or possible outcomes), so that they can check that all aspects of development and required knowledge or skills are being covered. This thinking process is also important when teachers are trying

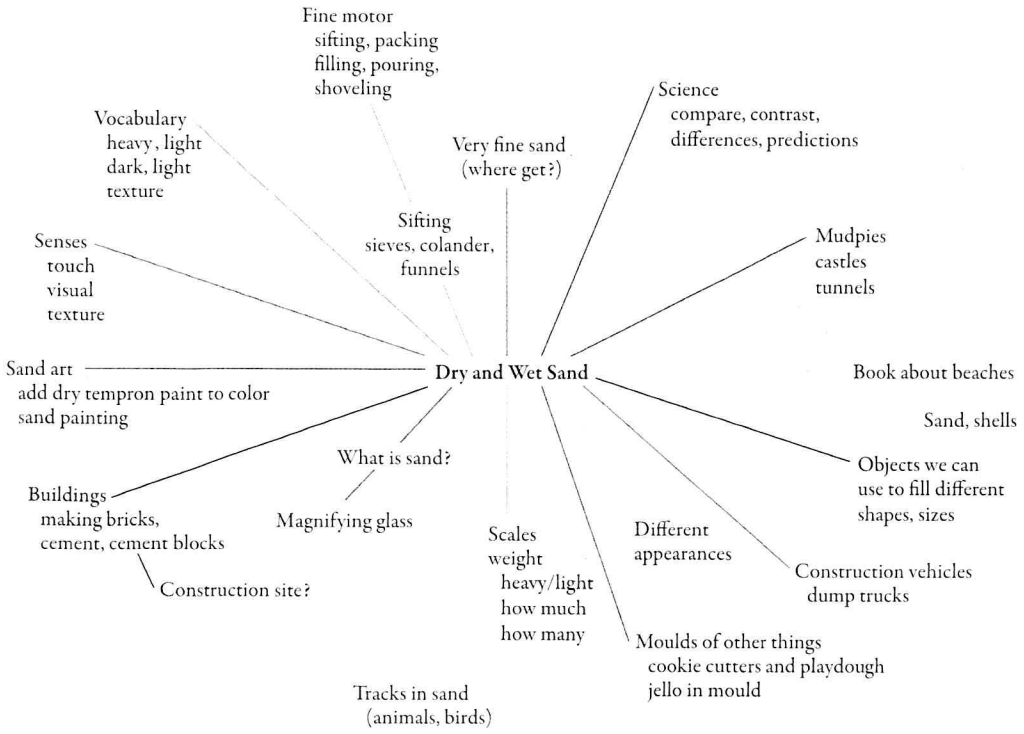


Figure 3-16
A teacher's web to consider curriculum possibilities in exploration of wet and dry sand.

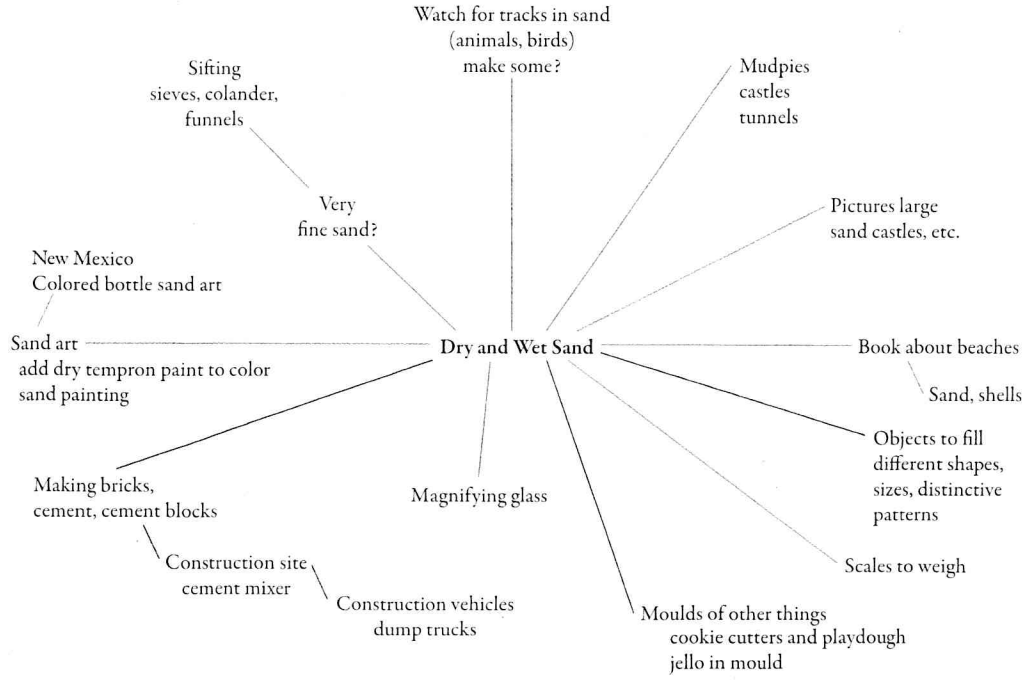


Figure 3-17
A web to consider possible activities.

to document children's progress for parents. Figure 3-17 shows an activity web for the sand and water explorations, while Figure 3-18 shows a content web. (A similar web could be used after the fact, to identify the goals achieved, as discussed previously with the concept of backtracking.)

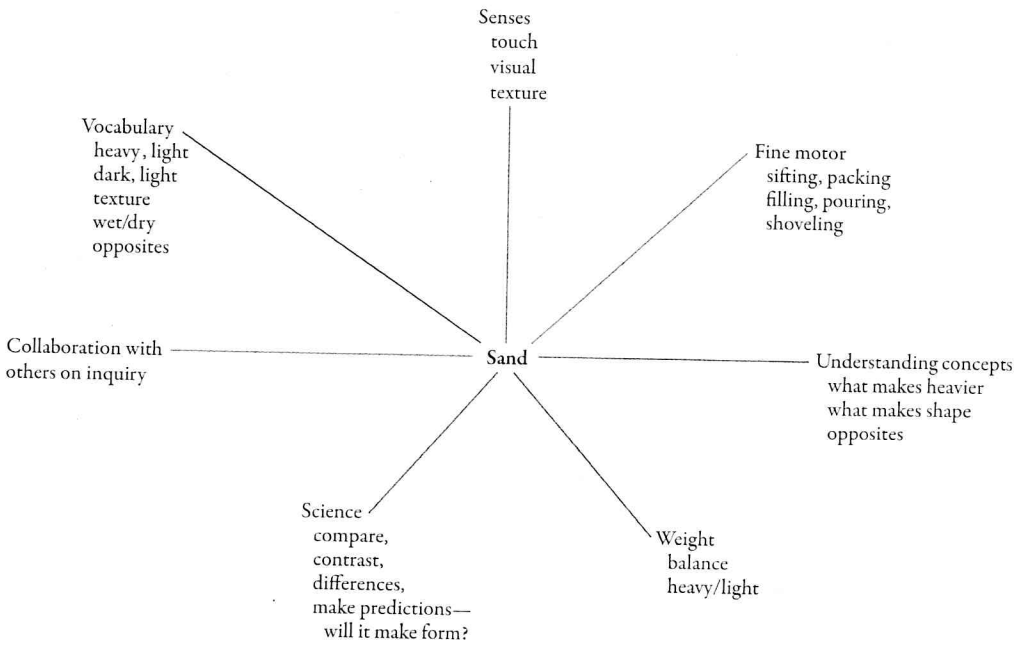


Figure 3-18
A web to consider how potential learning might meet standards, which could be used either before or after the fact.

3-6c Provisioning the Environment

After some preliminary thinking with the webs, the teacher continues to plan. The first step in planning to carry out a child-centered curriculum is to provision the environment. (These stages of planning are described in Curtis and Carter [2011] and Stacey [2009].) Selecting a focus from the activity web, teachers carefully set up the environment with materials and activities chosen to help children explore a given theme. Teachers may create a provocation, which is an event or experience designed to spark interest. Teachers then observe carefully to see what the children do with the materials provided, what themes and experiences they talk about and represent in their play, and what they seem to question or understand. In this way, teachers get ideas for additional props and materials.

3-6d Planning to Sustain and Enrich the Exploration

The next step is planning to sustain the exploration. Further observations will help teachers realize the new ideas, solutions, and answers that children are coming up with, or other materials that could extend the experience. The third step is planning to enrich the play by adding still more new materials that suggest or support new ideas.

3-6e Representing the Learning Experience

As a final step, teachers plan materials and opportunities for children and teachers to represent the learning experience. As children are given varieties of media and encouraged to represent their thinking and experiences, they expand their symbolic thinking and representation skills. This is planning for the literacy component within the classroom. Teachers also plan for ways to represent the children's learning to others, including the children themselves and their parents. This documentation may include: samples of children's work at various stages of the project; photographs or digital demonstrations telling the story of the work in progress; comments written by the teacher; and transcriptions of children's discussion and explanations about the activity (Seitz, 2008).

Documenting learning experiences helps teachers understand where they have been in the collaborative learning and planning and gives them ideas for where they might go next. It also helps children remember and understand the process of their learning and gives parents concrete representations of their children's growth in learning. The better the documentation, the more visible the evidence of the teacher's thinking and planning, which forestalls the complaint that developmentally appropriate curriculum is spontaneous, left up to the children's desires. Documentation, then, shows accountability, extends the learning, and makes the learning visible (Seitz, 2008). As Parnell and Bartlett (2012) point out, smartphones and tablets are changing documentation in early education classrooms.

Documentation also may lead to dialogue with other adults—teachers, coworkers, and families. Such dialogue often stimulates brainstorming to make additional and enriching connections. The process of reflection in emergent curriculum generates creativity.

These steps in planning to create a developmentally appropriate, child-centered curriculum are well illustrated in the teachers' planning in the Reggio Emilia schools in Northern Italy and those who follow their approach (see Chapter 4).

Consider these planning steps in action.

> Kim, a preschool teacher, provisioned the dramatic play area in her preschool classroom with several baby dolls and related baby paraphernalia, such as diapers, powder, and baby bottles. This provisioning was in response to a number of conversations and experiences with children in the class whose mothers were pregnant or had small babies.
>
> The teacher observed the children playing parenting roles and listened carefully to their conversations. As she heard the young players discuss the need to bathe their babies before putting them to bed, she added a baby bathtub and some plastic bath toys. Learning expanded with carefully planned activities, such as looking at the children's baby photos, clothes, and baby books their parents had made; reading books about babies; visiting one of the newborns at home; and visiting the infant room in the child care center. Thus, the interest in this play was sustained for another period.
>
> Other conversations led to ideas for adding other materials to further enrich the play. One child had accompanied her mother to the pediatrician when the baby was given a checkup; subsequently, some of the young mothers began to play taking their babies to the doctor for their shots. The teacher then added doctor's office props. A later addition was a small potty-chair; the teacher heard one of the children commenting that "the doctor always had to check the baby's pee."
>
> Other medical equipment was added to expand on ideas about what doctors do, including weighing and measuring, which led to a classroom graph displaying children's current heights and weights, as well as one with their birth weights and heights, with information provided by their parents.
>
> Throughout this experience, children were busy talking about their ideas and feelings about small babies, others' roles in caring for them, what was needed for growth and development, and a multitude of other deepening understandings, including gender roles (yes, fathers could look after little babies!). The teacher planned and created a web after the completion of the learning cycle to illustrate its full complexity for the parents.
>
> Although all children in the classroom were involved in some of the activities planned for the whole group, such as visiting the infant room and reading the books about babies, some children were also interested in pursuing other questions. It is unusual for all children to be engaged in the same investigation at the same time, as they will have different interests (Stacey, 2011).

> During this time, perhaps as a result of seeing the baby books, several children began making books of their own. They spent several mornings in the writing center, using the book-making materials provided there. Meanwhile, other children, less interested in the baby theme, continued constructing elaborate block cities.

By planning and preparing the entire environment with items designed to attract interest, teachers find that children generate their own diverse ideas. While watching all the children at play, teachers may be planning for several separate strands of interest at the same time. In the classroom just described, the teacher kept the writing center richly provisioned, brought in some old books that children could take apart to examine the bindings, and established an author's corner. The block cities were enhanced with the addition of real building materials and picture books of city skyscrapers. The environment should be designed so that children can discover what interests them, rather than having to study what everyone else is working on.

3-6f Planning for Emergent Curriculum in Primary Classrooms

"Traditionally, elementary education has been characterized by prescribed curriculum, in which specialists rationally determine what first or fourth graders should be taught.... It relies on generalization rather than an individual teacher's creativity and attentiveness to individual learners" (Jones, 2012, p. 67). Standard curriculum may be the enemy of teacher thinking, allowing instead "linear planning and assessment that is responsive to bureaucratic needs" (Jones, 2012, p. 67) in large educational systems. Indeed, the more standardized the curriculum, the more likely that more children will fall behind, with their individual educational needs unmet.

Teachers planning appropriate curriculum for primary-age children understand that real learning only occurs when both teachers and children are truly engaged, motivated to pursue answers to their own questions. "Motivation fuels learning: it is the positive energy that carries the learner through the curriculum" (Wien, 2008, p. 16). Deep investigations result when teachers focus on children's interests, "leaving a space, or creating an opening in the teacher's agenda, in which something unexpected might appear" (Wien, 2008, p. 25).

> It requires the capacity to take that interest and expand it into activities for the entire classroom. It is expansive in that it opens out into more, and inclusive in that it wraps children's interests into the official curriculum. (Wien, 2008, p. 25)

Goldstein and Baum (2014) suggest a three-step approach for teachers in public school contexts who want to support children's active engagement in meaningful learning while meeting their state standards for the core curriculum:

1. Develop a knowledge base that includes understanding the law, and their state's content standard, as well as specific district policies and their own principal's stance. This gives teachers the information with which they must comply.
2. Use the required content as a starting point, but go on to create curriculum that coincides with children's interests. They suggest substituting, supplementing, and enriching the basic content. Adjusting the pace to meet individual children's needs also allows classes to explore topics more thoroughly. Cover as many standards as possible within an individual activity or project.
3. Become adept at showcasing children's engagement in meaningful learning. Develop language for talking about decisions and learning. Communicate continually with your principal, colleagues, and families.

There is no doubt that teachers framing an emergent curriculum approach in their elementary school classrooms can teach standardized curricula in ways that allow children

to become stronger participants in pursuing their own interests, reaching higher levels of thinking and engagement. In today's environment of pressurized curricula focused on end-of-grade testing, this takes teachers courageous enough to believe that sustained inquiry and deep involvement in learning processes may actually contribute to children doing well. Brown (2010) said, "Play isn't the enemy of learning; it's learning's partner." Hyson agrees: "Play is not a break from learning, but a pathway toward learning" (Hyson, in Wood, 2014). As Wien puts it, moving away from the linear lists of expectations in standardized curricula may free teachers to embed it in richer, more integrated processes such as emergent curriculum, where learning can be made visible through documentation, instead of measured on tests. "Emergent curriculum is a route by which to restore connectivity in education" (Wien, 2008, p. 158).

As one teacher said (Wien, 2008, p. 108), this may challenge the conventional definition of teaching, so it no longer means just transmitting knowledge, but rather, becoming a careful observer and listener, providing flexible amounts of time, and provoking children's thought processes through higher-level questions, while adding content to the classroom to support thinking and representing those thoughts. Read several excellent first-person accounts of teachers in the primary grades using an emergent curriculum approach in Wien (2008), Jones, Evan, and Rencken (2001), and Wood (2014).

Teachers who choose to create developmentally appropriate experiential learning in elementary classrooms need to be brave and confident, and find support with other like-minded teachers. They also need to be able to articulate clearly their philosophy, methods, and demonstrable results to administrators and families.

3-7 What about Planning Forms?

Following this discussion of planning for emergent curriculum, it is probably evident that the traditional, Monday-to-Friday fill-in-the-time-block planning form usually is not very useful. These forms are usually required to demonstrate to principals, supervisors, and licensing inspectors that teachers are thinking about the activities they provide for children. Intentionality is a desirable goal indeed. Every bit as much, if not more, thought is required of teachers who plan in response to children's issues and interests. But as teachers write notes to plan that type of curriculum, they are generally writing after observation of play and adding new ideas as they go along. Therefore, they need to create forms that allow for more open-ended exploration, more tentativeness, and addition of ideas as they become appropriate.

Such an open-ended lesson-planning form allows for the additional ideas the children provide, as well as the materials their parents might contribute as they become aware of interests. It also allows for evolving ideas and interests rather than limiting children and teachers to preplanned activities. Stacey (2011) gives an example of a four-column format with spaces for (1) observation; (2) teacher's reflection; (3) responses such as invitations, conversations, activities, or projects; and (4) follow-up observation. A flexible planning form might also look like the one in Figure 3-19.

A flexible planning form documents emerging interests and the additions made to the environment to support those interests. Rather than spending hours trying to make artificial connections between themes before the fact, this plan offers a starting place, with additions to follow as the play develops. The burden for planning is still on the teacher, but the interaction with children in the classroom informs every aspect of the work. It is authentic, joyful work, involving all those who read it—parents, supervisors, other teachers, and licensing consultants, alike—in the organic life of the classroom. This kind of planning form allows teachers to enjoy planning again, rather than dreading the need to fill in all the blanks before the Thursday deadline.

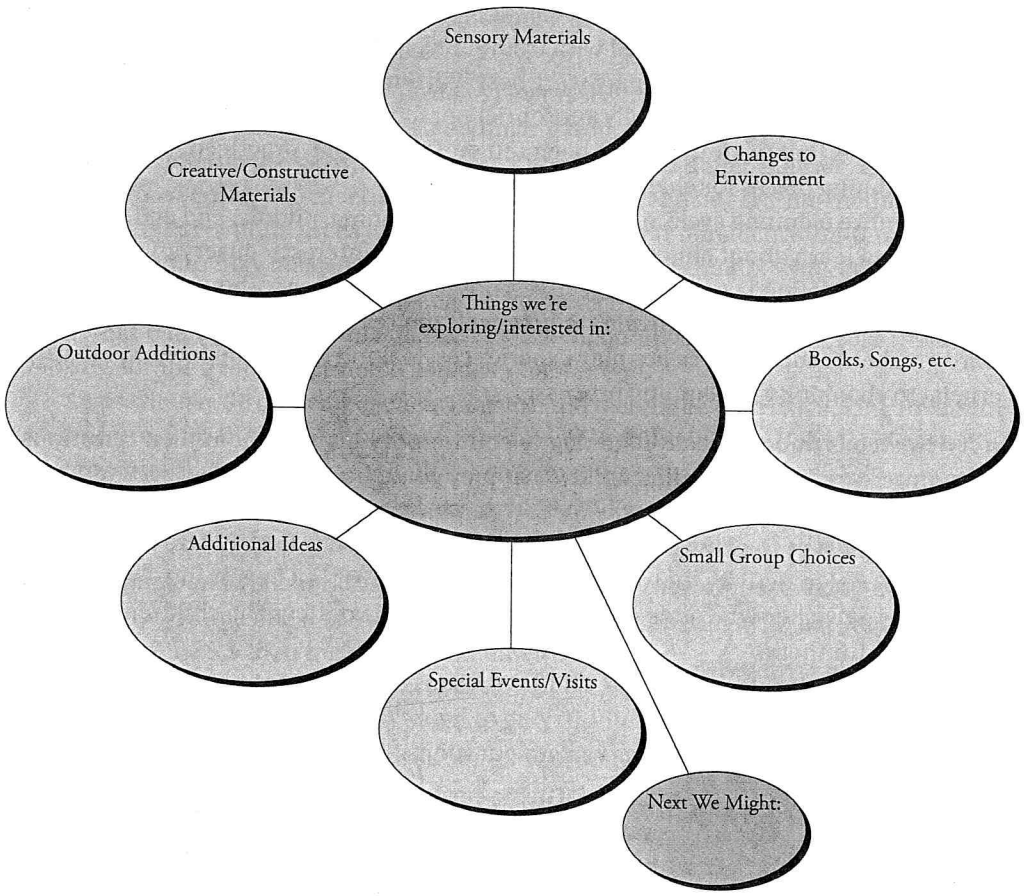


Figure 3-19
A flexible planning form allows teachers to respond to observed interests and needs.

Many teachers who want to move to more developmentally appropriate methods of planning often hesitate because the old form suggests a particular planning mode. They fear their supervisors will not accept changes that reflect different approaches. When a class of college students approached local licensing consultants to ask if change in the form was acceptable, they were surprised to receive encouragement rather than a negative response. The supervisors were pleased to see that so much thought was going into work with children. These supervisors' main interests were evidence of a knowledgeable concern for developing the children's understanding and skills and the presence of a rationale for classroom plans. Thus, teachers should not let the fear of change limit the flexibility of their planning methods.

DIVERSITY CONSIDERATIONS

Perspectives on Change

The concept of change is something that may be difficult or not, depending on the cultural understanding of what it means to adapt or be flexible. Sometimes teachers describe actually feeling disequilibrium, because they are less sure of themselves in responding to the need for flexibility in curriculum. Some cultural experiences support adaptive behaviors and some do not. Has your own cultural background prepared you to be comfortable instituting changes in your personal or professional life? If not, what can you do about this awareness?

3-8 Changing the Planning Process

For teachers who have been involved with traditional, teacher-dominated planning, changing to more child-centered methods may start best with small steps. Often when new teachers, educated in ideas of developmentally appropriate practice, begin working in schools, they are dismayed to find that what they have been taught is not being practiced. These ideas might provide beginning places for change.

In the entire planning cycle, observation is the beginning, middle, and end of the process: observation to learn about children's abilities, skills, and interests; observation to determine progress toward defined goals and objectives; observation to learn about children's ideas and questions; and observation to evaluate how well the teacher's plans have moved children toward greater learning and richer play experiences. Making regular opportunities to observe is crucial to changing the planning process:

1. A first step is to begin really listening to children, trying to find out their questions and interests. Tape-recording children at play could be useful to play back later. Vivian Paley has given early childhood educators an important model of what adults learn when they listen to children and then reflect on what they have heard. Planning just one material or activity that would support the interest is a beginning. An example of this is a teacher who adds more markers when she notices the children's engaged activity with them.

   Sometimes really listening to children means reflecting not only on what they are saying, but on what they are doing, trying to figure out why. Their play may indicate nonverbal interests in exploring certain questions.

2. Teachers accustomed to traditional theme-based planning may try to find themes from events in the children's lives rather than a preplanned schedule for the year. The teacher who planned the activities involving babies after the birth of siblings was finding the topic for the theme in such an event.

3. Try leaving the end of a theme open in terms of time frame. When the time frame is open, teachers do not feel pressure to move children on to the next topic too quickly before their exploration and learning have been satisfied. By not planning to end a theme unit on a Friday, but continuing the materials and activities over to the following week, teachers may find children using the materials in more complex ways. Time is given to revisit and make play and learning more complex.

4. Notice how children use materials in various areas of the room. Adding more materials can enhance involvement and stimulate further exploration. Planning for the environment opens up teachers' thinking, rather than planning to teach isolated concepts. For example, a teacher who is planning to add additional sensory materials to the creative area is not as focused on a concept as on children's open-ended use of the materials. The teacher who plans to enrich the block area with real building materials and pictures of their use is stimulating additional forms of construction, not worrying so much about teaching the concept of "tallest," though the concept may well be learned as children expand their block-building.

5. Watch what developmental tasks children are practicing. Focusing on the separate domains, and children's progress within each, allows teachers to consider the activities and materials that can support growth. For example, the teacher who notices the children's developing fine motor skills plans to offer several new implements to the writing center, such as hole-punchers and stencils. The teacher who watches burgeoning cooperative play adds props to the dramatic play center that support several related roles.

6. Children's interest may be extended in new directions. For example, the children playing at taking their babies to the doctor were supported in a new direction when the teacher

added medical props. Children who have been exploring planting seeds and their growth may get very interested in the cooking experiences the teacher plans as a natural outgrowth of their watching foodstuffs grow.

7. Teachers working in classrooms burdened by prescriptions of state curricula and learning standards may find the idea of moving from teacher-dominated planning difficult to contemplate. So much material must be covered that they feel all the planning must go toward meeting objectives. However, the integrating method of planning for curriculum areas and objectives under the umbrella of long-term projects or theme studies may make it possible to satisfy the requirements while still exploring topics of interest to children and teachers. You may read examples of such projects in Harris and Fuqua (1996), Helm and Beneke (2003), Booth (1997), Wien (2008), and on the websites for the Project Approach listed at chapter end.

   As previously discussed, teachers may use the technique of backtracking to identify the objectives for the standards that were met while children have been involved in long-term projects that integrate curriculum. This means that, after the project is complete, teachers can go back over what children actually did in their project work, isolating the individual skills and knowledge acquired in appropriate studies.

8. Brainstorming and collaborating with another teacher may support changing the planning process. The richness of ideas that come through thinking with another person may help teachers widen their focus and move from narrow theme planning. Emergent curriculum grows from reflection and dialogue. The process of change has emotional significance, as well as complex problems to overcome that need planning and support. Working with a colleague can help.

These small steps toward planning for more developmentally appropriate curriculum may move teachers in important directions. Learning to plan a child-centered curriculum is a growth process. In her excellent article describing a classroom project that allowed the children to collaborate with the teacher on emergent curriculum, Booth (1997) describes the steps she took and what she learned to do differently the next time. For example, she learned to include more consultation with the children at the beginning of projects and in the planning webs, to slow down to involve the children in all steps of the project, to allow children's curiosity to open up whole new areas of investigation, and to observe "more deeply what children are trying to understand or accomplish and planning in terms of challenges I can provide to further their efforts" (Booth, 1997, p. 82). Beginning the process of planning for developmentally appropriate curriculum allows teachers to grow and experience their own creativity as well (see Figure 3-20).

This kind of planning for curriculum is not an easy process, but it is exciting, offering dynamic opportunities for learning and growth for teachers as well as children. Deb Curtis (2011) compares it to learning to swim in the ocean—understanding the nature of waves by spending quite a bit of time with your body immersed in the experience.

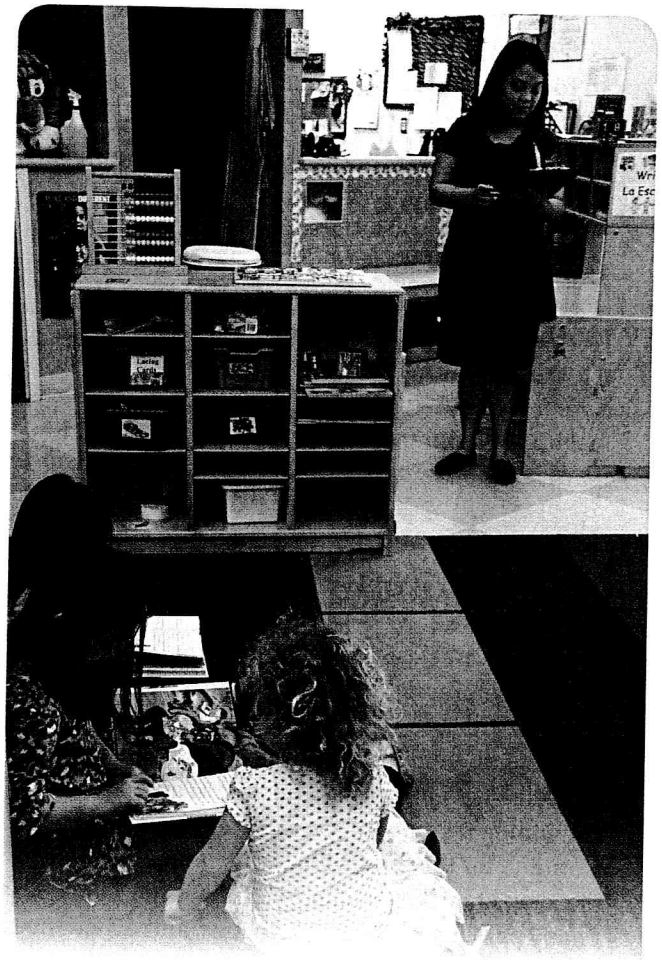


Figure 3-20 Effective curriculum planning is a dynamic process that involves much teacher knowledge and skill.

> You have to be able to anticipate what's going to happen and follow the lead of the waves, but at the same time remain totally observant and aware of what's happening with all the elements at each moment. You can never really be in control or change the waves. You just learn to understand how to respond to them. (Curtis in Curtis & Carter, 2011)

Responding is what planning for developmentally appropriate curriculum is all about.

Summary

1. Planning developmentally appropriate curriculum involves a cycle of teacher activity that includes:
   - Observation and note taking.
   - Reflecting and assessing children's progress toward specific developmental goals and objectives.
   - Observing and reflecting to learn themes of children's interests.
   - Identifying strategies, materials, and experiences that will support children's progress.
   - Evaluating the effectiveness of plans and starting the entire cycle over again.
2. Professional organizations have published position statements on curriculum that emphasize whole-child development and active learning, with teachers employing a variety of strategies to help children progress.
3. Theme planning for long-term projects may be useful for children and teachers. This focus allows both children and teachers to organize their thinking and to experience the repetition needed for learning. Teachers must be mindful of not getting bound too closely to the plans or of not using children's interests as the focus for the themes.
4. Emergent curriculum refers to the curriculum on themes that are meaningful in children's lives, which is negotiated by children and adults in a particular environment. Webbing refers to the brainstorming process that identifies potential related activities for learning.
5. Teachers plan through observation, provisioning the environment to sustain and enrich learning activities and to provide opportunities to represent learning cycles.
6. Teachers may have to develop new planning forms that provide for flexibility in following the children's lead.
7. Taking small steps away from teacher-dominated planning may make the planning process more developmentally appropriate.

Think about It Activities

1. Obtain several lesson-planning forms from teachers in your community. As you and your classmates analyze them, see if the forms support developing curriculum to follow children's themes.
2. Working with a partner, brainstorm and develop beginning planning webs, both activity and content, for the topic of babies, similar to the theme developed by the teacher in this chapter. Think of as many possible materials, activities, and experiences as you can that could support preschool children's learning about the topic. On your content web, see how much learning would be possible in the activities you thought of. Are you finding learning in all domains of development?
3. Walk with a partner around the building in which your class meets. List all the things you see in the environment that might intrigue a group of young children enough that a teacher could plan related materials and activities to extend their interest.
4. Generate a list of all the activities you enjoyed as a child. Share this list with a small group. Create a master list on chart paper and post it. Now generate a list of all the things you enjoy doing and/or are interested in as an adult; compile a master list. Do you find activities that could form the basis for planning some experiences for children?

Questions to Assess Learning of Chapter Objectives

1. Describe several key indicators of developmentally appropriate curricula, as defined by the various position statements.
2. Describe the planning cycle, identifying the various components.
3. Identify advantages and disadvantages of traditional theme planning.
4. Discuss what is meant by emergent curriculum. Identify sources of ideas for emergent curriculum.
5. What is meant by webbing as a planning method?
6. Discuss considerations in adopting a planning form.
7. Identify several first steps teachers could take in moving from teacher-dominated planning to more child-centered approaches.

Apply Your Knowledge: Case Studies

1. A beginning teacher complains to you that he just can't fit observation into his classroom schedule. Discuss with him some of the classroom arrangements that would support teacher availability for observing and recording information on individual children.
2. Together with an experienced coworker, watch children working and at play for a period of time. Then use the concept of backtracking to identify specifics from your state's early learning standards.

Helpful Websites

- Search the Project Approach website, under the direction of Sylvia Chard, professor emeritus of early childhood education at the University of Alberta, for information, project examples, and resources.
- On the NAEYC website, read the position statement on curriculum and assessment, as well as others on reading and mathematics. Click on Publications, and then click on Position Statements on the left sidebar.
- The Illinois Early Learning Project offers information on the Project Approach, including project examples and links to various resources.