

Core Knowledge Sequence

Content and Skill Guidelines for Preschool



Core Knowledge[®]



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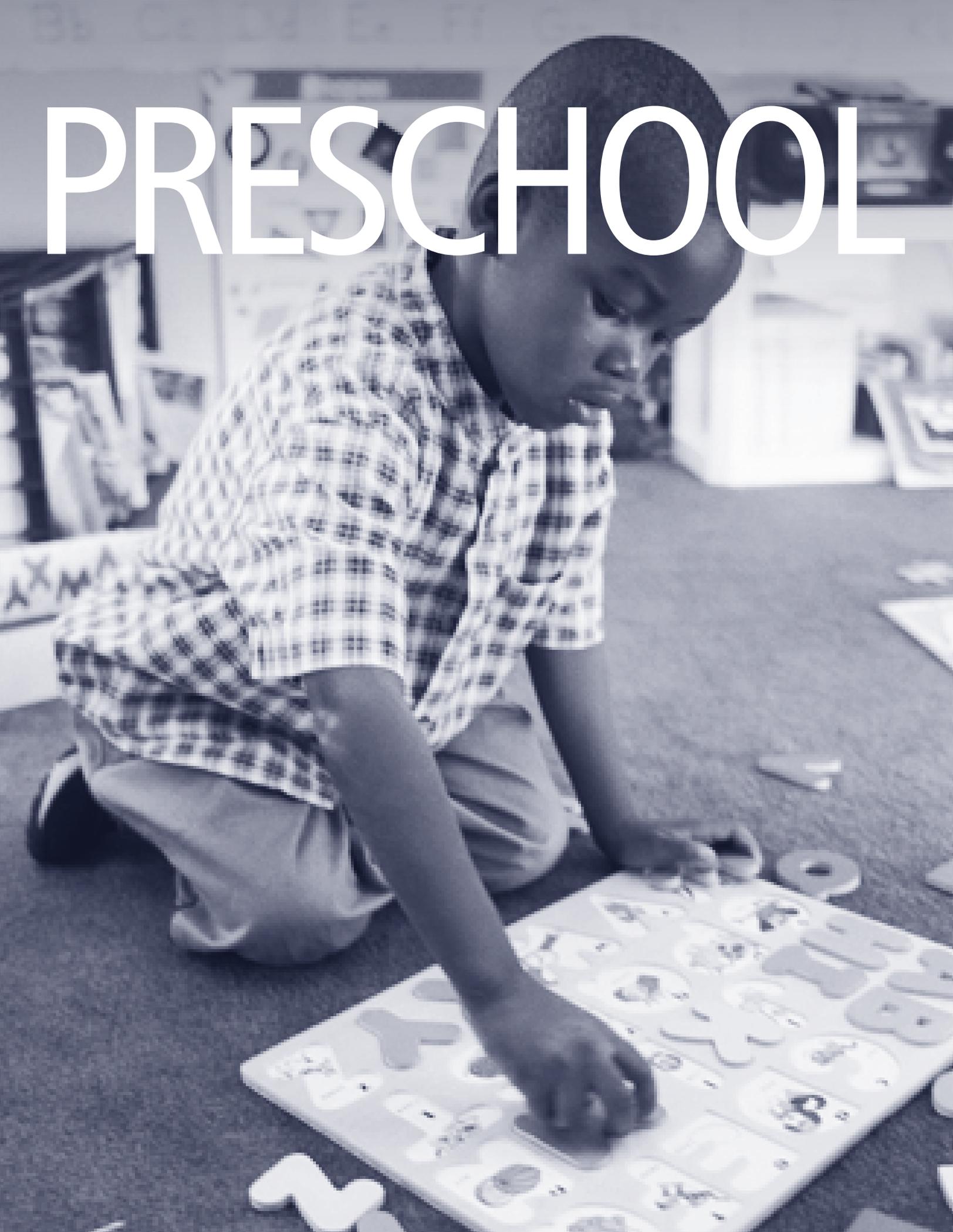
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PRESCHOOL



Overview of Topics

Preschool

The skills and knowledge in the *Core Knowledge Preschool Sequence* are designed to correlate with the *Core Knowledge Sequence* for grades K–8. The *Preschool Sequence* provides a solid, coherent foundation for the content that children will encounter in kindergarten in a school following the *Sequence* for grades K–8.

The entire *Preschool Sequence* is printed on the flip side of this publication.

Movement and Coordination

- I. Physical Attention and Relaxation
- II. Gross Motor Skills
- III. Coordination
- IV. Group Games
- V. Using the Body Expressively

Social and Emotional Development

- I. Autonomy
- II. Social Skills
- III. Work Habits

Language

- I. Oral Language
 - A. Functions of Language
 - B. Forms of Language
- II. Nursery Rhymes, Poems, Fingerplays and Songs
 - A. Memorization Skills
 - B. Listening
 - C. Developing a Sense of Rhyme
- III. Storybook Reading and Storytelling
 - A. Listening to Stories
 - B. Participating in Stories
 - C. Story Schema
 - D. Book and Print Awareness
- IV. Emerging Literacy Skills in Reading and Writing
 - A. Print Awareness
 - B. Print Structure
 - C. Phonemic Awareness
 - D. Fine Motor Skills

Visual Arts

- I. Attention to Visual Detail
- II. Exploration and Creation
- III. Art Appreciation

Music

- I. Attention to Differences in Sound
- II. Imitate and Produce Sound
- III. Listen to and Sing Songs
- IV. Listen to and Move to Music

Mathematics

- I. Patterns and Classification
- II. Geometry and Measurement
- III. Numbers and Number Sense
- IV. Computation
- V. Money

History and Geography

- I. Orientation in Time
 - A. Vocabulary
 - B. Measures of Time
 - C. Passage of Time (Past, Present, Future)
- II. Orientation in Space
 - A. Vocabulary
 - B. Actual and Representational Space
 - C. Simple Maps
 - D. Basic Geographic Concepts

Science

- I. Human Characteristics, Needs and Development
- II. Animal Characteristics, Needs and Development
- III. Plant Characteristics, Needs and Development
- IV. Physical Elements (Air, Water, Light)
- V. Introduction to Magnetism
- VI. Seasons and Weather
- VII. Taking Care of the Earth
- VIII. Tools

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The Core Knowledge Preschool Sequence

WHAT IS THE *CORE KNOWLEDGE PRESCHOOL SEQUENCE*?

The *Core Knowledge Preschool Sequence* is a set of model guidelines describing fundamental competencies and specific knowledge that, for children from three to five years of age, can provide a solid, coherent foundation for later learning in kindergarten and beyond.



EXCELLENCE AND FAIRNESS

The *Preschool Sequence* is offered as another practical step toward the Core Knowledge Foundation's goal of promoting greater excellence and fairness in early education. Internationally, the most successful educational systems teach a core of knowledge in the early grades. Only by explicitly specifying the competencies and knowledge that all children should share can we guarantee equal access to those competencies and knowledge. In our current system, disadvantaged children especially suffer from low expectations that often translate into “waiting until they are ready” and watered-down curricula.

When expectations are made explicit, however, disadvantaged children, like all children, are exposed to a coherent core of challenging, interesting competencies and knowledge. This background not only provides a foundation for later learning, but also makes up the common ground for communication in a diverse society.

INTENDED USE OF THE PRESCHOOL SEQUENCE

The *Preschool Sequence* is intended to guide the planning of experiences and activities for preschool children by offering a coherent progression of skills and knowledge in the following areas:

Physical Well-Being and Motor Development

- Movement and Coordination

Social and Emotional Development

- Autonomy and Social Skills

Approaches to Learning

- Work Habits

Language

- Oral Language
- Nursery Rhymes, Poems, Fingerplays and Songs
- Storybook Reading and Storytelling
- Emerging Literacy Skills in Reading and Writing

Knowledge Acquisition and Cognitive Development

- Mathematical Reasoning and Number Sense
- Orientation in Time and Space
- Scientific Reasoning and the Physical World
- Music
- Visual Arts

“LANGUAGE OF INSTRUCTION” IN THE *PRESCHOOL SEQUENCE*

It is almost impossible to overemphasize the significance of early language development and its impact upon nearly all other aspects of development. For this reason, the *Preschool Sequence* addresses language skills not only in the “Oral Language” chapter but throughout the *Preschool Sequence*.

Research in language development reveals that children need to hear language, specific words or vocabulary, grammatical features, and so on, before making it their own. When children hear certain words or phrases used repeatedly, they first acquire an understanding of the word or phrase; with repeated exposure in different situations, they will eventually begin using those same words and phrases in their own speech. Thus it is especially important that preschool children hear the language and vocabulary typically used in school to talk about specific subjects and content.

For this reason, The *Preschool Sequence* includes in each discipline a subsection called “Language of Instruction,” which lists terms that knowledgeable and competent individuals generally use to talk about the particular subject. While not comprehensive or exhaustive, the lists provide a starting point, a suggested sampling of the precise vocabulary to which young children should be exposed.

It is important to stress that the word lists are not intended for use in isolated drill or memorization. These are not terms that the children are expected to memorize or necessarily use at this time in their own speech. At this stage, the aim for young children is exposure, that is, laying the foundation for understanding such language when it is used by others. As noted earlier, children need to hear a word used repeatedly in different situations before making it their own.

The lists are included to serve as a guide for teachers and caregivers as they interact and talk with children during the course of various activities. Such vocabulary may be incorporated in adult comments that describe what the child is doing (or, what the adult is doing, especially if he or she is modeling a behavior or approach). By using language in this way, adults demonstrate that experience can be represented symbolically by language. Furthermore, restatements in the form of questions, using the same precise vocabulary, will invite children to listen actively and begin to assimilate the language being used. More specific examples illustrating how to use the language of instruction terms in this way are included with each list.

SPECIFICITY AND READINESS

The *Core Knowledge Preschool Sequence* is distinguished by its specificity. It identifies those experiences, skills and knowledge that should be offered to all young children. Specificity is necessary as there is no evidence or guarantee that, in the course of early development, all children naturally and automatically acquire the specific knowledge and skills that provide the necessary foundation for future learning.

True, given certain minimal experiences, children naturally acquire certain rudimentary skills and knowledge. For example, barring exceptional physiological or environmental conditions, all children learn to talk. However, this initial capacity for language does not automatically, in and of itself, evolve into more sophisticated language. Acquisition of a diverse vocabulary, competence in understanding and using complex grammatical structures, as well as the ability to use language symbolically, depend heavily upon the opportunity to engage in particular language experiences.

Likewise, very young children naturally acquire certain basic math concepts, recognizing, for example, quantitative differences between groups of up to four objects. However, once again, this initial natural learning does not, on its own, evolve into more advanced competencies—for example, distinguishing and counting quantities greater than four, representing the quantities with specific number words (“four”) and symbols (“4”), and so on.

Readiness is not a general, all encompassing condition that simply happens naturally in the course of a child's development. Rather, children develop and achieve different levels of readiness in different content areas, based on particular experiences. A child is ready to learn new language skills on the basis of the language experiences already encountered and the skills he or she has already mastered; he or she is ready to learn certain knowledge and skills in math on the basis of the specific mathematical knowledge and skills already possessed.

Said another way, children build new learning on what they have already learned. An important component of these learning experiences is regular interaction with competent individuals who can bridge the gap between the child's existing knowledge and skills and those toward which he or she is striving.

A specific, explicit sequence of skills and knowledge, like the *Core Knowledge Preschool Sequence*, allows teachers, parents or other caregivers to guide a young child's development in an apprentice-like fashion, taking into account a child's particular competencies so as to offer those experiences that most closely match his or her present level, while providing the stepping stones to higher levels of competence and understanding. The child's current skills and knowledge become the starting place for new experiences and instruction, rather than a limitation or restriction.

DEVELOPMENT OF *THE PRESCHOOL SEQUENCE*

The *Core Knowledge Preschool Sequence* is the result of a long process of research and critical review undertaken by the nonprofit Core Knowledge Foundation. The resulting *Preschool Sequence* represents a synthesis of exemplary practice and experience, both in the United States and abroad.

We studied the many reports that have been issued in recent years—by groups such as The Carnegie Foundation for the Advancement of Teaching, The Carnegie Corporation of New York, and The Economic and Social Research Institute—that describe the current nature of early childhood experiences for the majority of American children.

We examined important new research in cognitive development, as well as how children learn. We also examined the many documents written by professional organizations, such as the NAEYC, and government task forces at the state and national level in response to the Goals 2000 challenge to ensure that by the year 2000, all children start school ready to learn.

We looked at specific preschool practices in the United States, including well-known models of early childhood education, such as Montessori, High/Scope and Creative Curriculum, as well as programs that use an eclectic approach.

We surveyed preschool practices of several other countries, including France, Japan, Korea and Italy. The exemplary practices of the French *ecoles maternelles*, publicly funded French preschools that are available to all children and have been in existence for over 100 years, were selected for in-depth study. We visited classes in order to identify the common practices and experiences offered to young children; and we examined the longitudinal research demonstrating the correlation between effective preschool experiences and their lasting, positive effects for children in all socioeconomic groups.

This wealth of information served as the basis for the development of an initial draft version of the *Preschool Sequence*. It is worth repeating that the programs and practices on which this draft was modeled have been empirically validated with millions of young children elsewhere in the world. (For detailed listings of specific references, see the "Bibliography and Resources" section.)

SPECIFICITY AND PEDAGOGY

While the *Preschool Sequence* specifies knowledge and competencies, it does not prescribe any single pedagogy or method. In particular, it is important not to confuse or equate the precision and specificity of the *Preschool Sequence* goals with an approach that relies exclusively on rote learning, isolated drill, workbooks or ditto sheets.

Children learn best by participating in meaningful activities that take into account their existing competencies. The knowledge and skills specified in the *Preschool Sequence* may best be thought of as end goals. To reach these end goals, teachers must start “where the child is,” identifying intermediate steps and activities that will, with practice over time, lead to the final goal. Often, given a child’s existing competencies, the initial and intermediate steps will appropriately focus upon activities that may be described as manipulative, hands-on, concrete activities: for example, practicing patterning skills using manipulative objects like colored beads or blocks. With appropriate guidance, these concrete, hands-on activities may be gradually transformed into more abstract, representational activities. In the patterning example above, children may next be asked to use manipulative objects to reproduce or continue a pattern represented on a design or pattern card; eventually, they move to an even more abstract level, omitting entirely the use of manipulative objects, representing and creating patterns on paper only. In sum, teachers need to use a variety of methods, strategies and materials to help children achieve the end goals described in the *Preschool Sequence*.

CRITICAL SKILLS

The skills of the *Preschool Sequence* have been differentiated into “critical skills” and “supplemental skills.” In an ideal world, in which preschool teachers had sufficient time and assistance, the teacher would evaluate all the *Preschool Sequence* objectives, i.e., both the critical and supplemental skills, on an ongoing basis for each child. However, given the present realities of most preschool classes, many of which are half-day programs, this would be an impossible task in many classrooms.

Therefore, certain skills have been designated as “critical skills.” These are the skills that are most important to assess for each child. These skills have been marked with the  icon throughout the *Preschool Sequence*. It is important to understand that, in terms of instruction, day-to-day classroom activities and experiences should still address both critical and supplemental skills. The distinction that is being made is with regard to assessment, not instruction: if time does not allow for the individual evaluation of all *Preschool Sequence* objectives, then, minimally, the critical skills should be assessed.

THE CORE KNOWLEDGE PRESCHOOL SEQUENCE AND TEACHER HANDBOOK

The *Core Knowledge Preschool Sequence and Teacher Handbook* provides in handbook format more details to support implementation of the *Preschool Sequence*. The “Using the Sequence” chapter of the handbook is included in this publication.

Teacher handbook chapters addressing each developmental domain of the *Preschool Sequence* include:

- The explicitly stated learning goals and skills for the domain
- Early childhood best practices for the domain
- Icons designating developmentally appropriate practices throughout the chapter
- Cross-curricular connections that demonstrate how skills and content from each domain can be presented and reinforced in conjunction with skills and content from other domains
- The language of instruction and specific oral language skills relevant to the domain

- Background knowledge and teaching ideas that support what teachers need to know to ensure that classroom activities and experiences meet the needs of individual children and address the content, goals, and skills necessary for children’s success
- Examples of scaffolding strategies specific to the domain
- Examples of assessment strategies specific to the domain, highlighting what to look for and when to look
- Lists of additional resources for both children and teachers

Other chapters in the handbook include:

- Parental Involvement and Communication
- English Language Learners
- Core Knowledge for Toddlers

Find out more about the *Core Knowledge Preschool Sequence and Teacher Handbook* at www.coreknowledge.org.

Movement and Coordination

Overview: This section describes motor and coordination skills, and related movement activities that extend and refine notions of body image and the body's capabilities. It also provides opportunities for enhancing time, space and language concepts, as well as social development (when activities are carried out with others).

The basic goals ask the child to stop and start movement according to a signal; maintain balance; move through space, with or without obstacles, in a variety of ways; throw and kick objects; and move cooperatively with others. These goals are achieved through a variety of tasks or traditional childhood games. The child is also asked to use the body to interpret music and to perform pantomimes.



GOAL: REFINE PHYSICAL ATTENTION AND RELAXATION

Level I

Level II

I-MC1.1 Stop and/or start movement in response to a visual or auditory signal.

I-MC1.2 Relax specific body muscles and/or the whole body, moving from a high activity level to a quiet, focused state.

GOAL: DEVELOP AND REFINE GROSS MOTOR SKILLS

Level I

Level II

I-MC2.1 Ascend and descend steps, alternating feet.

I-MC2.2 Maintain balance while changing body position without moving through space.

I-MC2.3a Maintain balance while walking forward on a wide bench or beam.

II-MC2.3b Maintain balance while walking forward, backwards and sideways on a balance beam, 10" wide or less.

I-MC2.4 Situate oneself within a space of defined boundaries, modifying body configuration and size to fit the space.

I-MC2.5a Move through space with or without obstacles—avoiding touching or bumping other individuals or obstacles—by crawling, walking, running, galloping, hopping (same foot and alternate foot) or jumping.

II-MC2.5b Move through space using various movements (e.g., ascending and descending, climbing, rolling, jumping, sliding, crawling, somersaulting, jumping) to surmount obstacles.

II-MC2.6 Move through space by completing a circuit or obstacle course, following arrows or the path indicated.



GOAL: DEVELOP AND REFINE EYE-HAND AND EYE-FOOT COORDINATION SKILLS

Level I	Level II
I-MC3.1a Throw or kick an object in the direction indicated.	II-MC3.1b Throw or kick an object with increasing accuracy at identified targets varying in height and distance.
I-MC3.2a Play catch with a bean bag, with a partner seated or standing 1.5 feet apart.	II-MC3.2b Play catch using a large ball, with a partner seated or standing 2.5 feet apart.
	II-MC3.3 Ride a tricycle.
	II-MC3.4 Maintain momentum on a swing by pumping legs.
I-MC3.5 Coordinate motor activity to carry out a goal with a partner or group.	

GOAL: PLAY GROUP GAMES

Level I	Level II
I-MC4.1a Play group games such as Farmer in the Dell, Follow the Leader, Hot Potato, London Bridge, Mother May I?, Ring Around the Rosie, Simon Says.	II-MC4.1b Play group games such as Duck, Duck, Goose; Drop the Handkerchief; Kitty Wants a Corner; Musical Chairs; Red Light-Green Light; Relay Race; Tag.

GOAL: USE THE BODY EXPRESSIVELY

Level I	Level II
I-MC5.1 Imitate the position or action of another person.	
I-MC5.2 Act out a simple pantomime.	
	II-MC5.3 Act out a nursery rhyme, poem or fingerplay.

LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
catch	quiet	act out	rules
climb	run	aim	sideways
dance	slow	backward	signal
fast	soft	balance	slide
jump	start	crawl	somersault
kick	stop	forward	speed
loud	throw	gallop	still
move	walk	hop	suspend
		imitate	target
		incline	tricycle
		interpret	pantomime
		ladder	play catch
		moving	pump legs
		obstacle	relax
		obstacle course	relay race
			roll

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Also: See Language of Instruction for Orientation in Space (positional words) and Autonomy and Social Skills (body image vocabulary).

Example: Use vocabulary from the Movement and Coordination section as follows:

Adult: I want to see how many different ways you can *move* down this (pointing) *incline*.

Who can show me one way to move down the *incline*?

Child rolls down incline

Adult: Good—you can *roll sideways* down the *incline*. What’s another way?

Child crawls down incline

Adult: Right—you can *crawl* down the *incline* on your hands and knees, etc.



Autonomy and Social Skills

Overview: The basic goals associated with this section focus on the development of those emotional and social skills that enable the young child to function independently within the social setting of the class group. These include developing a sense of who he or she is and his or her capacities, beginning with a sense of physical body image. The child will also learn those interpersonal, social skills essential to interacting with others, such as the “give and take” of being part of a group and the need to sometimes delay or defer his or her own immediate desires, given the demands of the group. These goals mark the beginning development of an individual who is independent and competent, able to assume responsibility for his or her actions within the context of the group.

GOAL: ESTABLISH A SENSE OF SELF AND PERSONAL RESPONSIBILITY

Level I

Level II

I-AS1.1 Recognize and respond to own first and last name, orally and in writing.

I-AS1.2 Orally provide first name and last name.

Internalize and conceptualize an image of one’s body

I-AS2.1  Name parts of the body: arm, ear, eye, face, finger, foot, hair, hand, head, leg, mouth, neck, nose, stomach, toe.

I-AS2.2a  Draw a simple line drawing (stick figure) of a person, such as a stick figure that includes a head (with eyes, nose, mouth), body, arms and legs.

II-AS2.2b  Draw a dimensional picture of a person that includes a head (with eyes, eyebrows, nose, mouth, hair), neck, body, arms (with hands) and legs (with feet).

Care for personal needs

I-AS3.1a  Practice good hygiene (use bathroom independently, wash hands, etc.), use appropriate table manners (feed self using fork, spoon and knife; appropriate use of napkin), put on clothing, etc.

II-AS3.1b Care for personal needs by dressing self independently (fastening clothing, using buttons and zippers).

Express one’s feelings

II-AS4.1 Identify and label the following emotions: happy, sad, angry, afraid, frustrated, confused.

II-AS4.2  Use acceptable methods of expressing anger.

**GOAL: FUNCTION AND WORK CONSTRUCTIVELY IN A GROUP SETTING USING
APPROPRIATE SOCIAL SKILLS**

Level I

Level II

Communicate with others

I-AS5.1a  Recognize and call classmates and teacher by name.

II-AS5.1b Recognize, call by name and indicate role of school personnel.

I-AS5.2  Greet adults as "Mr. (name)," "Ms. (name)" or "Mrs. (name)."

I-AS5.3 Acknowledge and return greetings and farewells.

I-AS5.4  Make requests and acknowledge attempts to meet requests politely.

II-AS5.5  Ask appropriately for help of an adult when needed.

I-AS5.6 Attend and listen while others speak during a group activity.

II-AS5.7  Interrupt a conversation between 2 people politely.

I-AS5.8  Wait turn to speak in a group.

II-AS5.9  Demonstrate observable listening behaviors.

Cooperates with others

II-AS6.1  Identify and follow classroom rules.

II-AS6.2  Offer assistance to another child.

I-AS6.3a  Carry out chores and responsibilities that contribute to the well-being and functioning of the group.

II-AS6.3b  Carry out certain chores that contribute to the well-being and functioning of the group.

I-AS6.4  Sit among other children during a group activity, remaining in own physical space.

II-AS6.5  Respect the personal belongings and property of others.

II-AS6.6  Take turns using toys and sharing materials.

I-AS6.7  With advance notice, stop when told and change activities, moving cooperatively to another activity.



GOAL: FUNCTION AND WORK CONSTRUCTIVELY IN A GROUP SETTING USING APPROPRIATE SOCIAL SKILLS

Level I	Level II
I-AS6.8a Follow rules for simple childhood games.	II-AS6.8b Follow rules for simple childhood games (board games and group circle games).
	II-AS6.9 Ignore inappropriate peer behavior. <small>Critical Skill</small>
	II-AS6.10 Accept consequences of actions. <small>Critical Skill</small>
	II-AS6.11 Attempt to solve problems or conflicts using words. <small>Critical Skill</small>
	II-AS6.12 Complete an activity or project in conjunction with another child or small group.

LANGUAGE OF INSTRUCTION

Teacher and Children	Teacher Only
<p>Body Parts</p> <ul style="list-style-type: none"> ankle arm back body cheek chest chin ear elbow eye eyebrow eyelash face feet finger forehead foot hair hand head heel hip knee leg lip mouth 	<p>Body Parts</p> <ul style="list-style-type: none"> part(s) <p>Social Skills</p> <ul style="list-style-type: none"> apologize interrupt
<ul style="list-style-type: none"> nail neck nose shoulder stomach teeth toe tongue tooth waist wrist <p>Social Skills</p> <ul style="list-style-type: none"> excuse me good morning good-bye hello hi Mr. Mrs. ms. no, thank you please sorry thank you yes, please you're welcome 	

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Also: See “Language of Instruction” for Orientation in Space (positional words) and Autonomy and Social Skills (body image vocabulary).

Example: Use vocabulary from the Autonomy and Social Skills section as follows:

Child: I made a picture.

Adult: Let’s see. What can you tell me about your picture?

Child: It’s me.

Adult: Ahh, you drew a picture of yourself. Can you tell me about the different *parts* of the drawing—the different *parts* of the body; what is this (points to *head*)?

Child: The *head*.

Adult: You drew a picture of a *head*. And where is your *head*? Point to your *head*. That’s right. Now tell me about the different parts of the *head* you drew. Where are the *eyebrows*? Are these the *eyebrows*?



Work Habits

Overview: The foundation for the manner in which children will later approach academic work in kindergarten and beyond is established, step by step, through the experiences and expectations that children encounter in play and activities at the preschool level. This section focuses on gently guiding children to develop a methodology for approaching different activities, to develop memory skills, follow directions, persist at a task, identify the materials and steps needed to carry out an activity, evaluate and correct their own work, and so on.

GOAL: DEVELOP MEMORIZATION SKILLS

Level I	Level II
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II-AS7.1 Memorize address, phone number and date of birth.

GOAL: DEVELOP INDEPENDENT WORK HABITS

Level I	Level II
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I-AS8.1a  Carry out single-step oral directions.

II-AS8.1b  Carry out multi-step oral directions that have been accompanied by preliminary demonstration.

I-AS8.2a Choose and use a toy or do an activity independently for a sustained period of time (at least ten minutes).

II-AS8.2b Choose and use a toy or do an activity independently for a sustained period of time (at least 20 minutes).

I-AS8.3 Return toys and materials to their proper location after use.

I-AS8.4 Work in an orderly, persistent fashion in completing a task, even if difficulty is encountered.

II-AS8.5 Organize and plan what is needed to carry out a project or task (with adult assistance as needed).

II-AS8.6 Describe and evaluate one's own work, identify and correct errors, refine work, with the assistance and feedback of an adult, when needed.

LANGUAGE OF INSTRUCTION

Teacher and Children	Teacher Only
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Independent Work Habits

- correct
- effort
- error
- follow directions
- independently
- materials
- mistake

- persevere
- responsibility
- tools

Memorization

- attention
- concentrate
- memorize
- remember

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Work Habits section as follows:

Child: Uh oh! The milk spilled. It’s a big mess.

Adult: Oops, there was an accident and the milk spilled. That’s okay—sometimes accidents happen. Sometimes we make *mistakes*—everyone does. But now there is a mess. Let’s see—what do we need to do with the mess? What do we need to do to fix or *correct* what happened?

Child: Clean it up.

Adult: That’s right. And when we make a mess or spill something, it’s our *responsibility* to clean it up—that means that it’s our job to clean it up. I’ll help you by getting the sponge for you and then you can be *responsible* for wiping up the milk (hands child the sponge). Do you know how to wipe up the milk or should I show you how to get started?

Language and Literacy

INTRODUCTION

It is almost impossible to overemphasize the significance of early language development and its impact upon nearly every aspect of future development. We live in a culture in which, in a very real sense, an individual's ability to "use language" is synonymous with the ability to think. Words and the way that they may be linked together in sentences to express and relate ideas provide the lens or filters through which we perceive, understand and analyze our world and experiences.

In identifying competencies that fall under the general category of language, it is useful to consider several different dimensions of language—the function versus the form of language; receptive vs. expressive language; and oral vs. written language.

Certain language skills fall under the function category, addressing the various purposes or ways in which language is used.

Language may be used as a form of discourse, a means of personal and interpersonal communication. Subcategories can be further identified:

- **Conversing**—carrying on a simple conversation
- **Asserting State of Being, Needs and Desires**—describing physical sensations, mental states or emotional feelings, "I want ..." or "I need ...," etc.
- **Narrating**—describing an object, person, event or experience
- **Explaining/Directing**—giving directions or instructions, often step by step
- **Expressing a Point of View/Imagining**—giving an opinion, pretending and assuming the role or perspective of another, making up a story

In addition, language may be used to symbolically represent concrete objects and actual experiences in order to organize, relate and analyze information—in short, for thinking.

Several subcategories include:

- **Predicting**—anticipating and saying what is likely to happen next
- **Relating Concepts/Thinking Logically**—giving opposites, sorting and classifying, relating cause and effect

Other language skills associated with the form of language are those that address the structure or the nuts and bolts of language. In addition to mastering the sounds and pronunciation of words, a skill that most young children will have accomplished in the early toddler years, preschoolers must also build:

- **Vocabulary**—acquiring increasingly precise and varied ways to express nuances of meaning
- **Syntax**—learning the grammar of language word order in a sentence; word endings to reflect singular and plural, past and present; and specific ways of connecting words and phrases that indicate different relationships, e.g., cause-effect, temporal, etc.

In addition, language may be characterized as receptive language (comprehension), or expressive language (production). Development does not necessarily proceed at a parallel pace between these two language dimensions. Generally, receptive language precedes expressive language. Said another way, children need to understand and comprehend language before being expected to produce language; for example, children need many opportunities to listen to narrative descriptions (in adult commentary, story books and so on) before they can be expected to produce narrative descriptions themselves.

Finally, language may be described as oral (spoken) language or written language, symbolically represented by various combinations of the letters of the alphabet in the form of written words and sentences. In terms of language development, the primary focus during the preschool years is, of course, on oral language development; however, it is also important to recognize that, given appropriate experiences, the initial foundation for written language development is also put into place at this time.

The four segments of the *Preschool Sequence* that follow address each of these language dimensions. While conceptually organized in four separate sections, Oral Language; Nursery Rhymes, Poems, Fingerplays and Songs; Storybook Reading and Storytelling; and Emerging Literacy Skills in Reading and Writing, the language skills in each section are closely interrelated, building upon and reinforcing the competencies found in the other sections.

To aid teachers and caregivers in seeing these interrelationships in language skills, the competencies in each section have been cross-referenced according to the various subcategories listed in this introduction.



Oral Language

Overview: The basic goals in this section focus on understanding and using spoken language through the development of basic conversational skills, as well as more complex discourse skills: clearly communicating one's needs; understanding or giving a verbal description of a person, object or experience; sequencing the events of a particular experience in chronological order; giving directions or explaining how to do something; offering a personal opinion; using pretend language; and so on. Children benefit from many experiences and opportunities to listen and talk in a variety of circumstances, moving from using language in strictly contextualized situations, referring to objects or events present in the immediate environment, to use decontextualized language, moving beyond the here and now. Language can then be used symbolically—to talk about the past, answer “what if” questions, link cause and effect, as well as to conceptually sort and classify. Additional goals in this section address mastering the form of oral language, both vocabulary and syntax.

While it is beyond the intended purpose of the *Preschool Sequence* to provide suggestions and activities on how to teach the listed competencies, it is particularly important in this section on oral language to emphasize the teaching of these skills within the context of learning opportunities, in the form of child-adult interactions and conversations, that present themselves continuously on a daily basis. The manner in which adults respond to children's utterances and subsequent opportunities offered for additional conversation and talk clearly influence children's language development.

Language research suggests that children benefit from:

- Frequent language interaction, with many opportunities to listen and talk
- Adult models of high quality talk that keep in mind children's need to first hear many “language examples” in order to build a receptive language base: use of a variety of vocabulary, including occasional “rare words” (multi-syllable words that might normally be considered “outside a preschooler's vocabulary”); use of a variety of syntactical forms such as complex sentences that relate ideas; talk that is informative and illustrates reflection and problem solving; etc.
- Adult responses that reflect and incorporate what the child has said but also expand upon his or her comments
- Adult comments and behaviors that invite further conversation on the child's part: a question, a pause (after a question, allowing several seconds of quiet time for the child to process the question), a rise in intonation of the voice, a facial expression (a glance in his or her direction, raising the eyebrows expectantly)
- Rephrasing of questions, in the absence of a response by the child, in a manner that gives hints about how to respond, moving from open-ended questions to those that offer a structured choice: “Where is the pirate going?” (no answer) “Is he going to look for the buried treasure or is he going to chase the other pirate boat?”
- Opportunities and invitations to use language in decontextualized settings—to talk about objects, events or experiences that are not part of the immediate environment:
 - “What did you do at grandma's house?”
 - “How did you make the pinwheel?”
 - “What are you going to do when you go on vacation?”
- Minimal use of directives (“Do this ...,” “Don't do this ...,” etc.)

I. FUNCTION

GOAL: UNDERSTAND AND USE NONVERBAL FEATURES OF COMMUNICATION

Level I	Level II
I-OL1.1a  Adapt the volume of one's voice to different settings and different purposes.	II-OL1.1b Understand and use intonation and emphasis to ask a question or express surprise, agreement, displeasure or urgency.

GOAL: UNDERSTAND AND USE LANGUAGE TO COMMUNICATE

Level I	Level II
Conversing	
I-OL2.1a  Carry on a dialogue or conversation with an adult, initiating comments or responding to partner's comments.	II-OL2.1b  Carry on a dialogue or conversation with a child of approximately the same age, initiating comments or responding to partner's comments.
I-OL2.2a Answer the telephone appropriately.	II-OL2.2b Carry on a simple conversation on the telephone.

Assert state of being, needs and desires

I-OL3.1  Express personal needs and desires verbally in a comprehensible manner.	II-OL3.2  Identify and express physical sensations, mental states and emotional feelings (happy, sad, angry, afraid, frustrated, confused).
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Narrate

I-OL4.1 Given a picture, individual object or person within view, indicate the object, person or picture that has been designated.	
I-OL4.2 Given a picture, individual object or person within view, describe the attributes of the object, person or picture so that someone else may identify it.	
I-OL4.3a  Sequence and describe three images of events or phases of a single event that have been experienced, occurring at temporally distinct times of the day.	II-OL4.3b  Sequence and describe three to five images of events or phases of a single event that have been experienced.
I-OL4.4a Describe an event or task that one is in the process of completing.	II-OL4.4b Describe an event or task that has already taken place outside the immediate place and time.
I-OL4.5a Describe an event or task that one has just experienced in the immediate past.	II-OL4.5b Describe an event or task that will take place.

Explain/direct

I-OL5.1a Give simple, single-step directions.	II-OL5.1b Give simple, multi-step directions.
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GOAL: UNDERSTAND AND USE LANGUAGE TO COMMUNICATE

Level I

Level II

Express a point of view and imagine

II-OL6.1 Express a personal opinion.

II-OL6.2 Assume a different role or perspective and express different possibilities, imaginary or realistic.

**GOAL: UNDERSTAND AND USE LANGUAGE TO THINK:
ORGANIZE, RELATE AND ANALYZE INFORMATION**

Level I

Level II

Predict

I-OL7.1 Answer "what will happen if..." questions.

II-OL7.2 Identify outcomes and possible causes.

Relate concepts and reason logically

I-OL8.1a  Pair pictures depicting opposites: big-little, cold-hot, dry-wet, full-empty, happy-sad, open-close.

II-OL8.1b  Name opposites: big-little, cold-hot, dry-wet, fast-slow, rough-smooth, full-empty, hard-soft, large-small, loud-quiet, on-off, open-close, tall-short, yes-no.

II. FORM

GOAL: UNDERSTAND AND USE INCREASINGLY VARIED AND COMPLEX VOCABULARY AND SYNTAX

Level I

Level II

I-OL9.1a  Point to/understand increasingly precise nouns related to the home, family and food.

II-OL9.1b  Point to/understand precise nouns related to the home, family, food, clothing, school, town/city, transportation and stores/services.

I-OL9.2a  Use increasingly precise nouns related to the home, family and food.

II-OL9.2b  Use increasingly precise nouns related to the home, family, food, clothing, school, town/city, transportation and stores/services.

I-OL9.3a  Point to body parts: arm, ear, eye, face, finger, foot, hair, hand, head, leg, mouth, neck, stomach, toe.

II-OL9.3b  Point to body parts: ankle, arm, back, body, chest, cheek, chin, ear, elbow, eye, eyebrow, eyelash, face, finger, foot, forehead, hair, hand, heel, hip, knee, leg, lips, mouth, nail, neck, nose, shoulder, teeth, toe, tongue, waist, wrist.

I-OL9.4a  Name body parts: arm, ear, eye, face, finger, foot, hair, hand, head, leg, mouth, neck, nose, stomach, toe.

II-OL9.4b  Name body parts: ankle, arm, back, body, chest, cheek, chin, ear, elbow, eye, eyebrow, eyelash, face, finger, foot, forehead, hair, hand, heel, hip, knee, leg, lips, mouth, nail, neck, nose, shoulder, teeth, toe, tongue, waist, wrist.

GOAL: UNDERSTAND AND USE INCREASINGLY VARIED AND COMPLEX VOCABULARY AND SYNTAX

Level I

Level II

I-OL9.5a	Understand increasingly precise verbs related to the five senses.	II-OL9.5b	Understand increasingly precise verbs related to eating, movement and the five senses.
I-OL9.6a	Use increasingly precise verbs related to the five senses.	II-OL9.6b	Use increasingly precise verbs related to eating, movement and the five senses.
I-OL9.7	Point to colors: black, blue, brown, green, orange, purple, red, white, yellow.		
I-OL9.8	Name colors: black, blue, brown, green, orange, purple, red, white, yellow.		
I-OL9.9a	Point to shapes: circle, square, triangle.	II-OL9.9b	Point to shapes: circle, square, triangle, rectangle.
I-OL9.10a	Name shapes: circle, square, triangle.	II-OL9.10b	Name shapes: circle, square, triangle, rectangle.
I-OL9.11a	Point to: more-less (fewer), one-four.	II-OL9.11b	Point to: any-some, all-none, more-less (fewer), most-least, many-few, equal, one-ten.
I-OL9.12a	Use quantity words: more-less (fewer), one-four.	II-OL9.12b	Use quantity words: any-some, all-none, more-less (fewer), most-least, many-few, equal, one-ten.
I-OL9.13	Point to sensory attributes: sweet-salty, loud-quiet, hard-soft, rough-smooth, hot-cold, wet-dry.		
I-OL9.14	Use sensory attributes: sweet-salty, loud-quiet, hard-soft, rough-smooth, hot-cold, wet-dry.		
		II-OL9.15	Understand increasingly precise vocabulary (adjectives-describing words).
I-OL9.16a	Demonstrate understanding of temporal words: today, before-after, now, first-last, day-night, current day, week.	II-OL9.16b	Demonstrate understanding of temporal words: today-tomorrow-yesterday, always-never-sometimes, before-after, now-immediate, first-last, beginning-middle-end, then-next, already, soon.
I-OL9.17a	Use temporal words: today, before-after, now, first-last, day-night, current day, week.	II-OL9.17b	Use temporal words: today-tomorrow-yesterday, always-never-sometimes, before-after, now-immediate, first-last, beginning-middle-end, then-next, already, soon.
I-OL9.18a	Demonstrate understanding of spatial words: in-out, in front of-behind, at the top of-at the bottom of, under-over, in a line/row, up-down.	II-OL9.18b	Show understanding of spatial words: there-here, in-on, in front of-behind, at the top of-at the bottom of, under-over, above-below, next to-in the middle of, near-far, inside-outside, around-between, up-down, high-low, left-right, front-back.
I-OL9.19a	Use spatial words: in-out, in front of-behind, at the top of-at the bottom of, under-over, in a line/row, up-down.	II-OL9.19b	Use spatial words: there-here, in-on, in front of-behind, at the top of-at the bottom of, under-over, above-below, next to-in the middle of, near-far, inside-outside, around-between, up-down, high-low, left-right, front-back.
I-OL9.20a	Use present and past verb tense.	II-OL9.20b	Use the future verb tense.



GOAL: UNDERSTAND AND USE INCREASINGLY VARIED AND COMPLEX VOCABULARY AND SYNTAX

Level I

Level II

I-OL9.21 Understand and use increasingly detailed, elaborated declarative sentences.

II-OL9.22 Understand and use complex sentences with clauses introduced by: because, if, as soon as, so that, while, before, after, who, that, when, (verb)-ing.

I-OL9.23 Ask or answer questions beginning with: who, what, where, when, why.

I-OL9.24 Ask or answer increasingly detailed, elaborated questions (other than those beginning with who, what, where, when, why).

I-OL9.25 Understand and use increasingly detailed, elaborated imperatives

I-OL9.26 Understand and use the negative forms of declarative sentences, questions and imperatives.

I-OL9.27a Combine simple sentences using "and."

II-OL9.27b Combine simple sentences using "but" or "or."

I-OL9.28 Use personal pronouns correctly, especially "I" when referring to oneself.

II-OL9.29 Describe oneself, home and immediate family.



II-OL9.30 Point to: large-small, wide-narrow, big-little, full-empty, tall-short, heavy-light, long-short, thick-thin.



II-OL9.31 Use size words: large-small, wide-narrow, big-little, full-empty, tall-short, heavy-light, long-short, thick-thin.



II-OL9.32 After listening to an oral description of a scene, recreate the scene in pictures.

II-OL9.33 Give a detailed, sequential explanation of how to do something so that the activity can be carried out by another person.

II-OL9.34 Understand adverbs, i.e., describing words.

II-OL9.35 Use adverbs, i.e., describing words: quickly, slowly, gently, softly, nicely.

LANGUAGE OF INSTRUCTION

Teacher and Children

Teacher Only

category	loud
conversation	opposite
describe	question
directions	quiet
explain	talk
group	whisper
in order	yell

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Also: Specific vocabulary for Teacher and Children is listed separately within other sections of the *Preschool Sequence*, such as Autonomy and Social Skills, Work Habits, Mathematical Reasoning and Number Sense, Orientation in Space and so on.

Example: Use vocabulary from the Oral Language section as follows:

Adult: Here are some pictures of different things. See—here’s a picture of an apple, an ice cream cone, a dress, a cookie, a pair of shoes, a jacket, a pair of pants and a hamburger. Some of these pictures “go together.” They belong to the same *group* of things; they belong to the same *category*. See—I can put the apple, the ice cream cone and the cookie all together in a *group*: they are all things that we can eat; they belong to the food *category*. Do you see another picture that belongs to the food *category*?

Child: (points to picture of the hamburger)

Adult: That’s right—we can eat an apple, an ice cream cone, a cookie or a ...? (points to picture of hamburger and pauses expectantly)

Child: Hamburger.

Adult: (nods) ...So they all belong to the food *category*. Here are some other pictures that belong to another *group* or *category*.



Nursery Rhymes, Poems, Fingerplays and Songs

Overview: The goals in this section introduce young children to nursery rhymes, poems, fingerplays and songs—listening to and keeping the beat, listening to and interpreting the simple words of a given selection with gestures and actions, as well as learning about rhyming words. In addition to the sheer enjoyment of listening to and repeating the rhythmic and musical combination of words, learning these selections provides skill and discipline in developing the ability to memorize and further extends children’s understanding and use of both the form and function of language.

By listening to and reciting these poems and songs, children have an opportunity to model and practice various oral language skills, including pronunciation, vocabulary and syntax. They can then build upon their familiarity with certain well known rhymes by experimenting with rhyming words. This competency, in turn, focuses attention on the sounds of language, a skill that will enhance later efforts in initial reading.

In addition to providing experiences with the form of language, these selections introduce children to hearing some more formal written language. The language of the “little stories” of these poems and songs differs from contextualized language of daily conversations. Their brevity makes them an ideal transition to the narrative language of storybooks.

GOAL: DEVELOP MEMORIZATION SKILLS

Level I

I-NR1.1a  Memorize and recite with others a simple nursery rhyme, poem or song

Level II

II-NR1.1b Memorize and recite independently a simple nursery rhyme, poem or song.

GOAL: LISTEN TO NURSERY RHYMES, POEMS, FINGERPLAYS AND SONGS AND RESPOND WITH APPROPRIATE GESTURES

Level I

I-NR2.1  With hands and/or feet, clap or tap the beat of a familiar rhyme, poem or finger play.

Level II

I-NR2.2a  Perform previously taught hand and body gestures associated with a familiar rhyme, poem or fingerplay.

II-NR2.2b Interpret and act out through pantomime a nursery rhyme, poem or fingerplay using one’s own original gestures and movements.

GOAL: DEVELOP A SENSE OF RHYME

Level I

Level II

II-NR3.1 Using familiar rhymes, poems or songs, finish a recitation that has begun with the correct rhyming word.

II-NR3.2 Using familiar rhymes, poems or songs, indicate several possible rhyming words (other than those included in the actual rhyme) to finish the recitation.

See list of recommended Nursery Rhymes, Poems, Fingerplays, and Songs in Appendix V.

LANGUAGE OF INSTRUCTION

Teacher and Children

Teacher Only

author	refrain
beat	repeat
clap	rhyme
echo	rhyming word
fingerplay	song
pantomime	tap
poem	title
recite	verse

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Nursery Rhymes, Poems, Fingerplays and Songs section as follows:

Adult: Listen to this nursery *rhyme* while I recite it—it has *rhyming words*:

To market, to market, to buy a fat pig (emphasis on pig)
Home again, home again, jiggety-jig. (emphasis on jig).

Pig and jig are *rhyming words*. Try to say or echo the *rhyming words* with me:

To market, to market, to buy a fat (pause—child and adult together): p...ig
Home again, home again, jiggety (pause—child and adult together): j...ig.

Did you hear the two *rhyming words*? pig and ...

Child: jig.

Adult: That’s right—pig and jig are *rhyming words*. Now listen while I *recite* another *verse*—there are some other *rhyming words*:

To market, to market, to buy a fat hog (emphasis on hog)
Home again, home again, jiggety-jog. (emphasis on jog), etc.



Storybook Reading and Storytelling

Overview: The goals of this section focus on the language skills that children acquire when given the opportunity to hear the language of storybooks. In listening to and talking about stories that are read aloud, children build both listening and speaking skills. They are introduced to new vocabulary and formal written syntax, ways of linking and relating ideas. They also refine skills in:

- **Narrating:** understanding and describing illustrations, understanding and describing the setting, characters and events of stories and so on
- **Predicting:** telling what will happen next in a story or suggesting a possible alternative ending
- **Imagining:** telling their own stories, either based on illustrations or creating a story using their imagination.

In addition, early experiences with books also lay the foundation for concepts and skills that children will later use as they begin to read and write. They learn about book format—the arrangement of covers, pages, individual printed words and letters—and they gain insight into the elements of a story—setting, characters, the pursuit of a goal or the resolution of a problem in a sequential series of events—an understanding that is instrumental for reading comprehension.

GOAL: LISTEN TO STORIES READ ALOUD

Level I		Level II	
I-SR1.1a	Attend and listen to illustrated picture books with simple story lines.	II-SR1.1b	Attend and listen to picture books with story lines (30 minutes), as well as books of other genres, such as nonfiction (15 minutes).
I-SR1.2	Hold a book correctly, turning the pages in accordance with the story being read aloud, from beginning to end.		
I-SR1.3	Find the illustration, or object within the illustration of a book, that is being described.		
I-SR1.4a	Answer who, what and where questions about a read-aloud.	II-SR1.4b	Answer who, what, where, when and why questions about a read-aloud.

GOAL: PARTICIPATE IN STORIES READ ALOUD

Level I		Level II	
I-SR2.1	Describe an illustration.		
I-SR2.2	Provide or join in repeating the refrain in books with repetitive phrases.		

GOAL: DEVELOP A NOTION OF “STORY SCHEMA”

Level I		Level II	
I-SR3.1a	“Retell” a story that has been read aloud, including characters, a beginning and an ending.	II-SR3.1b	“Retell” a story that has been read aloud, including character(s), setting (time, place), the plot (central idea) of the story, the sequence of events and an ending.
I-SR3.2a	Sequence illustrations of three story events.	II-SR3.2b	Sequence illustrations of three to five story events.
I-SR3.3a	“Read”/tell a story using a wordless picture book.	II-SR3.3b	“Read”/tell a story based on the illustrations of a book with text that has not been read aloud previously.

GOAL: DEMONSTRATE AN AWARENESS OF BOOK AND PRINT (WRITTEN LANGUAGE) ORGANIZATION

Level I		Level II	
I-SR4.1	Identify previously read books by the title and cover.	II-SR4.2	Attend and listen to books with minimal or no illustrations (15 minutes).
		II-SR4.3	Predict events in a story, i.e., what will happen next.
		II-SR4.4	Provide a story ending consistent with other given story events.
		II-SR4.5	Make up and tell a story.
		II-SR4.6	Point to the title of a book; the top, middle, or bottom of a page; the beginning of a book; where to start reading a book; the order that words are read on a page; the end of a book; a word; and a letter.
		II-SR4.7	Use cover and illustration cues to locate those books that pertain to a particular topic or might answer a topical question.
		II-SR4.8	Point to words that begin with the same letter as own first name.

See list of recommended Stories in Appendix V.



LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
after	middle	at last	letter
bottom	next	author	page
end	once upon a time	beginning	read
first	top	character	refrain
finally	then	cover	retell
		events	title
		illustration	write
		illustrator	word
		in order	

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Storybook Reading and Storytelling section as follows:

Adult: Do you remember that yesterday we *read* the story, *The Red Balloon*? Today, we are going to look at the *illustrations* in *The Red Balloon*, the pictures. I want you to *retell* the story of *The Red Balloon*. We’ll look at each *illustration in order* and you’ll tell me what was happening in the story. Here’s the first *illustration*—tell me about the *characters*—who you see in the picture—and what was happening.

Child: This is Pascal and, etc.



Emerging Literacy Skills in Reading and Writing

Overview: This section builds on the language skills described in the preceding sections. The competencies described here go beyond oral language skills to early reading and writing skills. The goals ask children to add to their prior experiences with printed words in books by recognizing print in the daily environment and some ways it is used: to identify, to name or label (food, toys, streets, stores, etc.), to make lists, to report events, to give directions, to communicate messages, etc.

The section focuses on the relation between oral language and print. The goals ask children to associate specific familiar spoken words, such as their own names or names of familiar objects, with specific written words. Children then go on to recognize that the distinct marks that make up each word are letters in our alphabet. Children learn that these letters have names through such means as singing the alphabet song. They learn to identify and name the specific letters in their own names.

A crucial part of learning to read is developing phonemic awareness, the understanding that individual sounds are associated with individual letters and combinations of letters. To help children begin to develop phonemic awareness, the goals in this section ask children not only to refine their visual recognition of print but also to attend to the spoken sounds of language (for related topics, see the clapping and rhyming skills described in Nursery Rhymes, Poems, Fingerplays and Songs). Children are asked to take apart and put together smaller and smaller units of sound, from individual words in a sentence, to syllables in words, to the beginning sounds in individual words.

The goals here also include the skills needed to produce print, that is, to write. At first, children are asked to perform manual activities that enhance both hand-eye coordination and small muscle control of the hand and fingers. They learn the proper way to hold a writing implement, as well as a variety of small designs and strokes that will eventually be combined to form letters. They are also asked to write their own names.

I. FUNCTION

GOAL: DEVELOP AN AWARENESS OF WRITTEN MATTER/PRINT IN EVERYDAY SURROUNDINGS AND ITS MANY USES

Level I		Level II	
I-EL1.1	Identify different examples of print in the environment.		
I-EL2.1a	Dictate a caption for a drawing or photograph.	II-EL2.1b	Dictate a simple letter, invitation or thank you note.
I-EL2.2	Collect objects using an illustrated list (pictures labeled with words).		
I-EL2.3a	Use a simplified schedule of daily activities, depicted in pictures and words, to describe the order of events for the day, i.e., which are the first and last activities.	II-EL2.3b	Use a simplified, illustrated schedule of activities to indicate which activity preceded and which will follow an activity.
		II-EL2.4	Use a simplified, illustrated telephone listing.
		II-EL3.1	Represent "in written form" people, objects, events or activities, derived from one's personal experience or imagination.

GOAL: DEVELOP AN AWARENESS OF WRITTEN MATTER/PRINT IN EVERYDAY SURROUNDINGS AND ITS MANY USES

Level I	Level II
	II-EL3.2 Dictate a description to accompany one’s drawing of people, objects, events or activities, derived from one’s experience or imagination.
	II-EL4.1 Follow a simple, illustrated recipe.
	II-EL4.2 Assemble a simple object or craft following illustrated directions.
	II-EL4.3 Represent “in written form,” following an actual experience: directions for a recipe or craft or scientific observation of events or experiments.

II. FORM

GOAL: DEVELOP AN AWARENESS OF THE STRUCTURE OF PRINT

Level I	Level II
I-EL5.1 Recognize the initial letter of one’s first name. 	
I-EL5.2 Recognize the written form of one’s first name. 	
	II-EL5.3 Write one’s first name, using uppercase and lowercase letters appropriately. 
	II-EL5.4 Sing the “Alphabet Song.” 
	II-EL5.5 Read the first names of other classmates or family members.
	II-EL5.6 Associate spoken and written language by matching written word labels with spoken words.
	II-EL5.7 Point to words as distinct units on a page of print. 
	II-EL5.8 Make beginning efforts to use invented, phonetic spelling to communicate in writing.

GOAL: DEVELOP PHONEMIC AWARENESS

Level I	Level II
	II-EL6.1  Segment a spoken sentence into separate, distinct words.
	II-EL6.2 Blend spoken parts of a compound word, saying a whole word.
	II-EL6.3  Blend two spoken syllables, saying the whole word.
	II-EL6.4 Given a sound and a choice of two words, choose the word that begins with the given sound.
	II-EL6.5  Give the beginning sound of a spoken word.
	II-EL6.6  Indicate the number of phonemes (one to three) heard in a real or nonsense word.
	II-EL6.7  Identify at least ten letters of the alphabet by name, especially those in the child's first name.
	II-EL6.8  Given a word, provide a rhyming word.
	II-EL6.9  Give the sounds of at least three letters of the alphabet, especially those in the child's own name.

GOAL: DEVELOP THE FINE MOTOR SKILLS AND STROKES USED IN WRITING

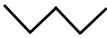
Level I	Level II
I-EL7.1 Perform activities requiring small muscle control.	
I-EL7.2 Produce written marks on both horizontal and vertical surfaces.	
I-EL7.3 Tear, fold and paste/glue paper.	
I-EL7.4 Color a simple drawing, staying within the lines.	

GOAL: DEVELOP THE FINE MOTOR SKILLS AND STROKES USED IN WRITING

Level I

- I-EL7.5a Draw and use as motifs:
- horizontal line 
 - vertical line 
 - point 
 - spiral 

Level II

- II-EL7.5b Draw and use as motifs:
- horizontal line 
 - vertical line 
 - diagonal line 
 - zigzag line 
 - circle 
 - spiral 
 - moon 
 - cross 
 - cane 
 - hook 
 - bowl 
 - bridge 
 - wave 
 - x 
 - star 

I-EL7.6 Draw horizontal and vertical lines between two end points.

II-EL7.7 Hold a writing instrument correctly between the thumb and index finger, resting it against the middle finger.

II-EL7.8 Trace and then draw independently the outlines of geometric shapes and irregular figures.

II-EL7.9 Write one's first name, using uppercase and lowercase letters appropriately.

LANGUAGE OF INSTRUCTION

Teacher and Children

Teacher Only

SPECIFIC WRITING

STROKES

- bowl
- bridge
- cane
- circle
- cross
- diagonal line
- hook
- horizontal line
- loop
- moon
- point
- spiral
- star
- vertical line
- wave
- x
- zigzag line

MISCELLANEOUS

- ABCs
- alphabet

- capital letter
- color within the lines
- connect the dots/points
- curved line
- design
- dictate
- directions
- grid
- initial
- letter
- line
- lowercase letter
- outline
- print
- read
- sound
- straight line
- title
- trace
- uppercase letter
- word
- write

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Note: For clarity in working and communicating with young children, some descriptive terms should be consistently used in describing the individual writing strokes listed on page 32. The specific terms selected have no intrinsic value; the arbitrary names on page 32 are but one possibility. Undue effort should not be expended in teaching these terms to young children as part of their speaking vocabulary. However, when formal writing instruction in letter formation begins (for example, when the child learns to write his own name), the same names may be used by the teacher in describing these strokes as the various component elements of individual letters.

Example: Use vocabulary from the Emerging Literacy section as follows:

Adult: I’m going to draw some *points*. Here are two points. I want you to *connect these points* with a *straight line*. Can you start at this *point* and, with your finger, show me how you would *connect these points* using a *straight line*?

Child: (traces line)

Adult: Good. You made a *straight line* with your finger. Here’s a piece of string. I’m going to hold one end of the string on one *point*. Can you use the rest of the string to make a *straight line* to *connect the two points*?

Mathematical Reasoning and Number Sense

Overview: Young children seem to be naturally drawn to touching, manipulating and examining the objects they find around them. The goals of this section build upon this curiosity and desire to explore. In the context of experiences with concrete objects and then with pictures, the child is asked to recognize similarities and differences, classify objects and shapes, recognize/create patterns in sequences of objects and make comparisons among objects, using simple measurement skills. He or she is also asked to quantify small groups of objects, to count and to demonstrate a basic understanding of addition and subtraction as “putting together” and “taking away.” In each instance, the child is asked to move from the concrete experience to representing knowledge symbolically using mathematical language, such as “more than,” “less than,” “longer,” “shorter,” number words (“three” and “four”), numerical symbols (“3” and “4”), and so on.



GOAL: SORT AND CLASSIFY OBJECTS OR PICTURES OF OBJECTS

Level I	Level II
I-MR1.1a  Identify pairs of objects as the same or different, with different pairs varying in gross details.	II-MR1.1b Identify pair of objects or pictures as the same or different, with different pairs increasingly similar, varying only in one or more minor detail(s) and with images becoming more abstract and symbolic.
I-MR1.2a  Given a sample object/picture and verbal description of the selection criteria, sort objects/pictures according to a single criterion: Sort objects by color.	II-MR1.2b Classify by color.
I-MR1.3a Given a sample object/picture and verbal description of the selection criteria, sort objects/pictures according to a single criterion: Sort objects by shape.	II-MR1.3b Classify by shape.
	II-MR1.4 Given a sample object/picture and verbal description of the selection criteria, sort objects/pictures according to a single criterion: Sort by size (small-medium-large).
	II-MR1.5 Given a sample object/picture and verbal description of the selection criteria, sort objects/pictures according to a single criterion: Sort by function.
I-MR1.6 Indicate whether an object belongs to a given collection.	
	II-MR1.7 Classify by size.
	II-MR1.8 Classify by function.
	II-MR1.9 Classify by other conceptual categories.
	II-MR1.10 Verbally label the single common attribute or characteristic of a group of objects or pictures.
	II-MR1.11  Verbally label the difference or criteria used for classification of several groups of objects or pictures.

GOAL: SORT AND CLASSIFY OBJECTS OR PICTURES OF OBJECTS

Level I

Level II

II-MR1.12 Select an object or picture according to a description that includes two properties.

II-MR1.13 Use the criteria along the horizontal and vertical axes of a double entry table to complete the interior squares of the table.

GOAL: DUPLICATE AND CONTINUE LINEAR PATTERNS

Level I

Level II

I-MR2.1 Duplicate a pattern of six to ten objects in which one property is alternated.

I-MR2.2 Match objects arranged in a pattern with corresponding pattern card.

II-MR2.3 Continue a complex, two-color pattern of objects represented by a pattern card.

 I-MR2.4 Continue a given pattern of five objects, represented by actual objects or a pattern card, in which one property is alternated (color, size, shape).

II-MR2.5 Represent on paper "in written form" an alternating pattern of one property or a two-color pattern.

II-MR2.6 Create and verbally describe a pattern of concrete objects.

GOAL: PERCEIVE AND RECOGNIZE SHAPES AND SIZES

Level I

Level II

I-MR3.1a Complete puzzles of at least ten interlocking pieces.

II-MR3.1b Complete puzzles of at least 18 interlocking pieces.

I-MR3.2 Match rectangular, square, circular and triangular shapes to outlines of the same configuration and size.

I-MR3.3a Given a collection of assorted shapes, sort and name the circles.

 II-MR3.3b Given a collection of assorted shapes, classify and name the circles, rectangles and triangles.

II-MR3.4 Find examples of circles or rectangles in everyday objects.



GOAL: USE SIMPLE MEASUREMENT SKILLS AND SERIATE OBJECTS

Level I	Level II
	II-MR3.5 Divide one item into approximately equal pieces for two people.
	II-MR3.6 Compare pairs of objects: length (long-short).
	II-MR3.7 Compare pairs of objects: height (tall-short).
	II-MR3.8 Compare pairs of objects: large-small, thick-thin, wide-narrow.
	II-MR3.9 Compare pairs of objects: volume (full-empty).
	II-MR3.10 Compare pairs of objects: mass (heavy-light).
	II-MR3.11 Compare pairs of objects: temperature (hot-cold).
	II-MR3.12 Use an arbitrary tool of measurement to compare the length and height of objects, using comparative vocabulary (longer-taller-shorter).
	II-MR3.13 Use a straight edge to compare the length and height of objects, using comparative vocabulary (longer-taller-shorter).
	II-MR3.14 Seriate at least three items by length, height or size in ascending or descending order, using comparative vocabulary (longest-shortest, tallest-shortest, largest-smallest).

GOAL: QUANTIFY GROUPS OF OBJECTS

Level I	Level II
I-MR4.1a  Recite the number sequence, 1–4.	II-MR4.1b  Recite the number sequence, 1–10.
I-MR4.2a Compare two groups of no more than four objects per group and use quantitative vocabulary to describe the groups (more than, less than, the same as).	II-MR4.2b Compare two groups of no more than six objects per group and use quantitative vocabulary to describe the groups (more than, less than, same as).
I-MR4.3a Demonstrate one-to-one correspondence with concrete objects, up to four objects.	II-MR4.3b Demonstrate one-to-one correspondence with concrete objects, up to six objects.
I-MR4.4a Construct a collection of objects so that it has the same number of objects as another group, up to four objects.	II-MR4.4b Construct a collection of objects so that it has the same number of objects as another group.
I-MR4.5a  Count groups of objects with up to four items per group.	II-MR4.5b  Count groups of objects with up to six items per group.
I-MR4.6a Given an oral number, create a group with the correct number of objects, up to four objects in a group.	II-MR4.6b Given an oral number, create a group with the correct number of objects, up to six objects.
I-MR4.7 Name the quantity/amount for one to four items.	

GOAL: QUANTIFY GROUPS OF OBJECTS

Level I	Level II
<p>I-MR4.8  Match numerals 1–4 with corresponding quantities.</p>	<p>II-MR4.9 Name the quantity/amount for one to six items</p>
	<p>II-MR4.10 Write numerals 1–6.</p>
	<p>II-MR4.11  Arrange or write the numbers 1–6 in sequential order.</p>
<p>I-MR4.12  Identify ordinal position for first and last.</p>	<p>II-MR4.13 Play a simple game that involves moving one’s marker the number of spaces shown on a single die.</p>
	<p>II-MR4.14 Organize and read quantitative data in simple bar graphs.</p>

GOAL: COMPARE WRITTEN NUMERALS

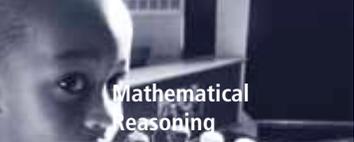
Level I	Level II
<p>I-MR5.1a Compare sets pairs of numerals, 1–4, to determine more and less or greater than and less than.</p>	<p>II-MR5.1b Compare pairs of numerals, 1–6, to determine more and less or greater than and less than.</p>

GOAL: DEVELOP AN UNDERSTANDING OF ADDITION AND SUBTRACTION

Level I	Level II
<p>I-MR6.1a  Illustrate the concept of “put together” and “take away” with sets of one to four objects, with four items being the maximum in any set.</p>	<p>II-MR6.1b  Illustrate the concept of “put together” and “take away” with sets of one to six objects, with six objects being the maximum in any set.</p>
	<p>II-MR6.2 Label the action of “put together” as adding and “take away” as subtraction.</p>
	<p>II-MR6.3 Add or subtract problems represented by numerals, 1–4, 4 being the largest numeral, using objects or pictures as needed.</p>

GOAL: IDENTIFY MONEY

Level I	Level II
<p>I-MR7.1a Identify and count up to four pennies</p>	<p>II-MR7.1b Identify and count up to six pennies.</p>
<p>I-MR7.2 Identify a one-dollar bill.</p>	
	<p>II-MR7.3 Identify a quarter.</p>
	<p>II-MR7.4 Indicate that one dollar bill has more value than a penny or quarter.</p>



LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
Classification different same	Measurement and Seriation cold empty first full heavy hot last light long(er) (est) middle narrow short(er) (est) tall(er) (est) thick thin wide	Classification classify color property sort the same as	light long(er) (est) middle narrow short(er) (est) tall(er) (est) thick thin wide
Quantities/ Counting all any equal fewer than larg(er) (est) less than more than none small(er) (est) some	Shapes circle rectangle triangle	Quantities/ Counting count how many number compare	Shapes corner cube curved line form outline pyramid round shape sphere square straight line
Money dollar quarter penny		Money bill coin money	Patterns pattern continue the pattern extend the pattern
Addition and Subtraction addition subtraction		Addition and Subtraction add put together subtract take away	Miscellaneous math mathematics
		Measurement and Seriation cold empty first full heavy hot last	

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Mathematical Reasoning and Number Sense section as follows:

Child: Look—I made two piles.

Adult: Let’s see what you did. Ah, you *sorted* the beads into two *different* piles or groups. (Pointing) Is this group the *same* or *different* than this group?

Child: (no response)

Adult: (Pointing) This group is d...

Child: ...*different*.

Adult: This group is *different* from this group. Can you tell me how they are *different*?

Child: This has red things and this has blue things.

Adult: Right—this group has red beads and this group has blue beads. You sorted the beads into two *different* groups according to their color. If I give you these other beads (pile of yellow and green beads), can you also sort them into two *different* groups according to their *color*?



Orientation in Time

Overview: The focus of this section is on the development of an inner sense of time; this orientation in time is essential not just as a referent point for future instruction in history, but also as another step towards personal autonomy, which requires that children be able to organize time, monitor behavior and independently accomplish given activities throughout the day, week and so on.

The child is asked first to organize and think about everyday experiences in regards to various indices of time: he or she is asked to classify experiences according to the time of day in which they occur, sequence events chronologically and begin to use standard measures of time, such as daily schedules and calendars. The child is also asked to consider the passage of time on a larger scale, developing a sense of the relationship of past-present-future, by sequencing events in his or her own life, considering the relationships within his or her own family, as well as sequencing stages within the life cycle. He or she is also asked to assume a historical perspective outside of his or her immediate experiences by examining familiar contemporary objects with similar objects from the past. Finally, the child is asked to represent these experiences symbolically, both with words and schematically in timelines and drawings.

GOAL: UNDERSTAND AND USE THE LANGUAGE OF TIME

Level I	Level II
<p>I-OT1.1a  Understand and use temporal words to describe day-to-day occurrences: today-tomorrow, before-after, now, first-last, day-morning-afternoon-evening-night, current day, week, weekend, once upon a time, finally.</p>	<p>II-OT1.1b Understand and use temporal words to describe day-to-day occurrences: today-tomorrow-yesterday, always-never-sometimes, before-after, now-immediately, first-last, beginning-middle-end, then-next, already, soon, during-while, etc.</p>
	<p>II-OT1.2 Use present, past and future tenses of verbs to describe day-to-day occurrences.</p>

GOAL: ESTABLISH REFERENCE POINTS IN TIME

Level I	Level II
<p>I-OT2.1  Classify and describe images of everyday activities according to the time of day with which they are associated: day-night, morning-afternoon-evening.</p>	
<p>I-OT2.2a  Sequence chronologically and describe three images of events or phases of a single event, occurring at temporally distinct times that have actually been experienced.</p>	<p>II-OT2.2b Sequence chronologically and describe three to five images of events or phases of a single event that have been experienced.</p>
<p>I-OT2.3a  Name the current day of the week.</p>	<p>II-OT2.3b Name the days of the week in sequence.</p>
	<p>II-OT2.4 Identify the days of the weekend.</p>
	<p>II-OT2.5 Name the day that was "yesterday" and the day that will be "tomorrow."</p>
	<p>II-OT2.6 Name the current month.</p>
<p>I-OT2.7  Identify the following by name: clock, schedule, calendar.</p>	

GOAL: ESTABLISH REFERENCE POINTS IN TIME

Level I		Level II	
		II-OT2.8	Name own date of birth (month and day).
I-OT2.9a	Use a schedule of daily activities represented in images to describe the order of events for the day.	II-OT2.9b	Use a simple, illustrated schedule of daily activities to indicate which activity preceded and which will follow the current activity.
I-OT2.10	Use a weekly calendar to locate and name the current day of the week.	II-OT2.11	Use a monthly calendar to locate and name the current day of the week.
		II-OT2.12	Use a monthly calendar to name the current month.
		II-OT2.13	Use a monthly calendar to locate own date of birth.
		II-OT2.14	Use a monthly calendar to identify a horizontal series of seven squares as representing one week.
		II-OT2.15	Use a monthly calendar to name holidays and special events marked by symbols.
		II-OT2.16	Use a timeline: year-long timeline to mark annual events.
		II-OT2.17	Use a timeline: century-long timeline to mark events across several generations.

GOAL: DEMONSTRATE AN AWARENESS OF THE PASSAGE OF TIME AND OF PERIODS OF TIME AS "THE PAST," "THE PRESENT," OR "THE FUTURE"

Level I		Level II	
		II-OT3.1	Sequence images depicting the evolution and completion of a project or undertaking over an extended period of time.
		II-OT3.2	Sequence and describe photos and/or drawings that represent a timeline of one's own life and experiences.
		II-OT3.3	Progression of the stages of development in the life of one person: Sequence and describe photos and/or drawings of a baby, school-age child, young adult, elderly adult.
		II-OT3.4	Generations within the context of family: Sequence and describe photos and/or drawings of a baby, school-age child, young adult, elderly adult.



GOAL: DEMONSTRATE AN AWARENESS OF THE PASSAGE OF TIME AND OF PERIODS OF TIME AS "THE PAST," "THE PRESENT," OR "THE FUTURE"

Level I

Level II

	II-OT3.5	Arrange photos and/or drawings of members of one's own family on a genealogical tree or diagram to represent three generations.
	II-OT3.6	Consider photos and/or drawings of activities associated with specific periods of life in reference to present age/stage of development and indicate verbally whether these are activities that may be part of past, present or future experiences.
	II-OT3.7	Match images of contemporary objects with like objects from past, indicating whether the objects belong to the "present" or "past."
	II-OT3.8	Distinguish objects of the more "recent past" from objects of the "distant past."

LANGUAGE OF INSTRUCTION

Teacher and Children

Teacher Only

References in Time	Teacher and Children	Teacher Only	References in Time	Teacher Only
after	last	time	century	adult
afternoon	later	today		age
already	long ago	tomorrow		babychild
always	March	Tuesday	Measures of Time	future
April	May	Wednesday	date	grow
August	Monday	week	timeline	old
before	month	weekend		past
day	morning	while		the future
December	never	year		the past
during	next			the present
evening	night	Measures of Time		remember
February	November	calendar		young
finally	now	clock		
first	October	schedule		
Friday	once upon a time	watch		
immediately	present			
in a little while	Saturday	Passage of Time		
January	September	a long time ago		
July	sometimes	change		
June	Sunday	long ago		
	then			
	Thursday			

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Orientation in Time section as follows:

- Child: (showing photos brought from home) This is me when I was little.
- Adult: Let’s look at them together. Can you tell me about each of these pictures that were taken when you were a *baby*?
- Child: This is me in my crib. I’m drinking a bottle. This is me too.
- Adult: What were you doing in that picture?
- Child: Don’t know.
- Adult: It looks like you were crawling on the floor.
- Child: Yeah—crawling. And this is me—outside.
- Adult: Ahh, you were going for a ride in the stroller. Who is this *adult*? Who is pushing the stroller?
- Child: Mommy.
- Adult: So when you were a *baby*, Mommy took you for a ride in the stroller? I’m glad you have these pictures of things that you did when you were a *baby*. They’re things that already happened—they’re things you did in the *past*. It’s fun to remember things you did in the *past*. Can you *remember* any other things you did in the *past* when you were a *baby*?
- Child: No.
- Adult: Here are some drawings of *babies* doing different things. Maybe, they’ll help you remember something you did in the past when you were a *baby* (pointing). How about this?
- Child: Diapers.
- Adult: When you were a baby, you wore diapers. That was something you did in the *past*. You don’t wear diapers now!

Orientation in Space

Overview: The focus in this section is on the development of a sense of orientation in space, which enables the child to situate himself or herself in space in relation to his or her physical movements, as well as provides a context and vocabulary for later instruction in geometry and geography. The child is asked to situate first his or her own body, and then objects, in three-dimensional space in relation to other objects, as well as to follow and give spatially referenced directions. He or she is asked to establish reference points in two-dimensional space, copying various grid-like designs and completing mazes. The child is asked to demonstrate an understanding of several basic geographic features, such as ocean, mountain, island and so on. Finally, he or she is asked to represent these experiences symbolically, both with words and schematically on maps and simple drawings.



GOAL: UNDERSTAND AND USE THE LANGUAGE OF SPACE

Level I	Level II
<p>I-OS1.1a Situate oneself in space or situate objects in relation to one another according to the indications given by spatial terms: there-here, in-on, in front of-behind, at the top of-at the bottom of, under, next to-in the middle of, near-far, around, etc.</p>	<p>II-OS1.1b Situate oneself in space or situate objects in relation to one another according to the indications given by spatial terms: here-there, in-on, in front of-behind, at the top of-at the bottom of, under-over, above-below, next to-in the middle of, etc.</p>
	<p>II-OS1.2 Follow or give oral, spatially related directions to move from one location to another within a familiar environment.</p>
	<p>II-OS1.3 Given oral, spatially referenced directions correlated to a picture in which different objects represent different "landmarks," trace the path described.</p>

GOAL: ESTABLISH REFERENCE POINTS IN ACTUAL AND REPRESENTED SPACE

Level I	Level II
<p>I-OS2.1a Reproduce a design, using parquetry blocks, mosaic toys or pegs, by placing the objects directly on top of a design card.</p>	<p>II-OS2.1b Reproduce a design represented on a pattern card using parquetry blocks, mosaic toys or pegs.</p>
	<p>II-OS2.2 Copy a tower or construction that has been made by another person using blocks of different shapes, colors or sizes.</p>
	<p>II-OS2.3 Match halves of symmetrical objects to make a whole.</p>
	<p>II-OS2.4 Color squares on a blank grid to reproduce designs represented on other grids.</p>
	<p>II-OS2.5 Continue a linear frieze-like pattern of symbols on a grid.</p>

GOAL: ESTABLISH REFERENCE POINTS IN ACTUAL AND REPRESENTED SPACE

Level I

Level II

II-OS2.6 Use simple coordinates to locate a point on a grid, in which points along one axis are designated by a symbol and points along the other axis are designated by a color.

II-OS2.7 Use the shortest route to go from the exterior to the center of a simple maze.

GOAL: USE SIMPLE MAPS OF FAMILIAR ENVIRONMENTS

Level I

Level II

I-OS3.1a On a simple map of a single room showing furniture arrangement, indicate one's own position with an "X."

II-OS3.1b Mark the location of specific objects, places, etc., as requested on a simple map of a familiar place.

II-OS3.2 Mark with arrows or other symbols a path that has been taken from one place to another on a simple map of a familiar place.

GOAL: DEMONSTRATE AN UNDERSTANDING OF BASIC GEOGRAPHIC CONCEPTS

Level I

Level II

I-OS4.1a  Identify these geographic features and environments by name in real life, photos or drawings: land, water, river, lake, ocean, farm, city.

II-OS4.1b  Identify these geographic features and environments by name in real life, photos or drawings: land, water, ocean, lake, river, farm, forest (woods), jungle, desert, city.

K-OS4.2 Name the city, state and country in which he or she lives.

K-OS4.3 Identify a map of the United States, indicating the location of his or her state.

K-OS4.4 Identify a map of the United States, indicating land and ocean areas.

K-OS4.5 Identify a globe by name, indicating land and ocean areas.



LANGUAGE OF INSTRUCTION

Teacher and Children

Teacher Only

Reference	on
Points in Space	outside
above	over
after	right
against	there
around	to the side
at the bottom	towards
at the corner	under
at the top	
away from	Maps
back	country
back-to-back	globe
before	land
behind	map
below	ocean
between	state
face-to-face	United States
far	
front	Geographic
here	Concepts
high	city
in	countryside
in a line/row	farm
in a circle	forest
in front of	island
in the middle	jungle
inside	lake
left	ocean
low	river
near	woods
next to	

Reference

Points in Space

design

directions

graph paper

grid

half

maze

path

pattern

place

route

space

whole

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Orientation in Space section as follows:

Child: Look what I made.

Adult: What did you make?

Child: I colored.

Adult: Yes, you made a very pretty *design* on the *graph paper*. In your *design*, did you use the same color or a different color for each little box?

Child: Different colors.

Adult: Your *design* is very colorful because you used a lot of different colors—each box is different. Danny made a *design* on *graph paper* today, too. Maybe tomorrow you can exchange *designs*—you can see if you can copy Danny’s *design* and he can try to copy your *design*.

Scientific Reasoning



Scientific Reasoning and the Physical World

Overview: This section introduces children to a systematic way of looking at, describing and explaining the world around them. Children should be given many opportunities for systematic observation and hands-on investigation of both the living and material world. Building on these experiences, children can progress from describing and explaining what is observed to making predictions based on these observations.

This systematic approach may be summarized as: (1) reflect and ask questions, (2) plan an activity and predict what will happen, (3) carry out the activity and observe what happens, and (4) report findings (words, drawings, displays, photos, etc.) and reflect on other related questions.

It is worth emphasizing that the final step, documenting and representing observations and findings, is an especially important part of this process. In so doing, children may be guided in making the important transition and connection between “hands-on” investigation to symbolic representation. At the preschool level, keep in mind that a “picture is worth a thousand words.” Reporting of observations may often be more readily accomplished through drawings completed by the children, selection and display of objects or photographs, in addition to verbal explanations. This representational step will also enhance young children’s appreciation of science as “telling the story about how nature works.”

The goals here ask children to describe key physical characteristics, needs and the basic life cycle of plants and animals, including man, as well as identify basic properties of water, air and light. They are also asked to demonstrate how to use a variety of everyday tools.

GOAL: DEMONSTRATE AN INITIAL UNDERSTANDING OF THE LIVING WORLD

Level I

Level II

Humans learn through the five senses

I-SC1.1  Identify and describe objects on the basis of specific properties discerned through the five senses.

Human bodies are made of many different parts

I-SC1.2  Name body parts: arm, ear, eye, face, finger, foot, hair, hand, head, leg, mouth, neck, nose, stomach, toe (Same objective as 3LD-LA-D1B and 3SD-AS-A3).

II-SC1.3 Identify the following organs and their function: heart, lungs.

II-SC1.4 Identify the sense and body part associated with the experience of certain sensations.

Humans need to do certain things to grow and stay healthy

II-SC1.5 Identify and describe basic needs: food, drink.

Humans need to protect themselves in different ways

II-SC1.6 Identify and describe basic needs: shelter, protection from temperature and weather.



GOAL: DEMONSTRATE AN INITIAL UNDERSTANDING OF THE LIVING WORLD

Level I

Level II

Humans go through different stages as they grow

II-SC1.7 Describe key physical characteristics (body parts and senses), development, needs and life cycle of humans.

II-SC1.8 Sequence photos and/or drawings of a baby, school-aged child, young adult and elderly adult to represent the life cycle.

Animals are living things

II-SC1.9 Care for, observe and record observations of an animal, noting key physical characteristics, development, needs and life cycle.

Animals live in many kinds of homes

II-SC1.10 Classify images of animals according to habitat or environment in which they generally live: lake/river, ocean, farm, forest (woods), jungle.

Plants are living things

II-SC1.11 Plant, care for and record observations of a plant, noting the parts of the plant, needs, development and life cycle.

GOAL: DEMONSTRATE AN INITIAL UNDERSTANDING OF THE ELEMENTS OF THE MATERIAL WORLD

Level I

Level II

Water

II-SC2.1 Observe, describe and record some basic properties of water, its presence and its effects in the physical world.

Air

II-SC2.2 Observe, describe and record some basic properties of air, its presence and its effects in the physical world.

Light

II-SC2.3 Observe, describe and record some basic properties of light, its presence and its effects in the physical world.

Seasons and weather

II-SC2.4 Observe, describe and record some characteristics of weather.

II-SC2.5 Observe, describe and record some characteristics of seasons.

GOAL: DEMONSTRATE AN INITIAL UNDERSTANDING OF THE ELEMENTS OF THE MATERIAL WORLD

Level I	Level II
Conservation	K-SC2.6 Identify and describe objects that can be recycled.
	K-SC2.7 Identify and describe some ways that resources and energy can be conserved (e.g., recycling, turning off the lights, turning off the water, etc.).
Magnets	K-SC2.8 Observe, describe and record the effects of magnets on various objects and other magnets.

GOAL: SELECT AND USE TOOLS

Level I	Level II
	II-SC3.1 Cooking: spoon, rolling pin, etc.: Select and use appropriate tool to complete a task.
I-SC3.2a Select and use scissors to cut straight lines.	II-SC3.2b Cut: Scissors: Select and use appropriate tool to complete a task.
	II-SC3.3 Join Paper: Stapler: Select and use appropriate tool to complete a task.
	II-SC3.4 Join Fabric: Needle and thread: Select and use appropriate tool to complete a task.
	II-SC3.5 Nail, join wood: hammer: Select and use appropriate tool to complete a task.
	II-SC3.6 Dig a hole: Trowel, shovel: Select and use appropriate tool to complete a task.
	II-SC3.7 Water a plant: Watering can, hose: Select and use appropriate tool to complete a task.

GOAL: DEMONSTRATE USE OF THE SCIENTIFIC REASONING CYCLE

Level I	Level II
	II-SC4.1 Demonstrate use of the scientific reasoning cycle.



LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
Animals	Plants	Animals	Material World
air	air	birth	ice
alive	alive	development	light source
animal	bulb	flow	liquid
blood	flower	growth	shadow
breathe	fruit	life cycle	solid
farm	grow	sense	state
forest	leaf	temperature	steam
grow	light	weather	
hearing	living		General
heart	plant	Plants	describe
jungle	roots	development	explain
lake	seed	growth	observation
living	stem	life cycle	observe
lungs	water	shoot	record
move		soil	report
ocean	Material World	sprout	predict
river	air	temperature	science
salty	alive	weather	
smell	light		Tools/Construct
sour	living		build
sweet	not living		construct
taste	sun		create
touch	water		tool
water	wind		utensil

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Scientific Reasoning and the Physical World section as follows:

Child: Oh, look—there are green things coming out of the dirt!

Adult: Ahh, you’re right! I see a little green *stem*. Look carefully—what do these two little things on the top of the *stem* look like?

Child: Other parts.

Adult: Yes, each one is a little *leaf*. Can you gently point to the *leaf* on each side of the *stem*?

Child: Here and here?

Adult: That’s right, those are the *leaves*. Now, where do you suppose the *stem* came from? How did it get here in the *soil*?

Child: (silence)

Adult: Do you remember what you *planted* in the *soil* a couple of days ago?

Child: A *seed*.

Adult: That's right. Look at the drawings you've made so far to *record* your *observations*. See, in the first picture, you drew a picture of the *seed* in the *soil*. Tell me about this next picture. What did you draw?

Child: It's the *seed* in the dirt. I'm giving it some *water*.

Adult: (pointing) What else is the *seed* getting in your picture?

Child: The *sun*.

Adult: Right. The *sun* and *water* made this green *stem* *grow* from the *seed*. Do you think it would be a good idea to draw another picture of your *observations* today?

Music

Overview: This section includes goals that focus both on listening to, enjoying and appreciating music in all its various forms, as well as producing music. Experiences in listening to and singing songs and fingerplays also provide opportunities to practice oral language skills. Music affords the opportunity to expand and clarify various concepts, such as “loud, soft,” “fast, slow,” etc. In addition, efforts that focus attention on discriminating differences in discrete environmental or musical sounds facilitate subsequent attention to phonemic awareness, awareness of the discrete sounds of language. Group musical experiences, performing or singing together, also offer the opportunity to practice social skills.

The basic goals of this section ask the child to listen to and identify sounds, indicate whether certain sound pairs are the same or different, imitate sounds and rhythm sequences, sing songs individually and with others and move interpretatively to music.



GOAL: LISTEN TO AND DISCRIMINATE DIFFERENCES IN SOUND

Level I

Level II

I-MU1.1 Identify the direction from which a sound originates.

I-MU1.2 Listen to and identify environmental sounds.



I-MU1.3a Listen to pairs of sounds that are either identical or grossly different and indicate whether they are the same or different.



II-MU1.3b Listen to pairs of sounds that are either identical or slightly different and indicate whether they are the same or different.

I-MU1.4 Indicate the number of sounds heard (up to four sounds).



II-MU1.5 Identify family members or friends by their voice alone.

II-MU1.6 Listen to environmental sounds presented sequentially as a “sound story” and describe the events in the context in which they are occurring.

II-MU1.7 Identify and associate sounds with the objects and instruments (rhythm band, piano and violin) which produce them.

II-MU1.8 Identify a selection of music as either vocal or instrumental music.

GOAL: IMITATE AND PRODUCE SOUNDS

Level I

Level II

I-MU2.1 Vocally or with musical instruments, produce sounds that are loud or soft and long or short according to verbal direction.

I-MU2.2 Vocally imitate isolated sounds produced by others, approximating intensity, duration and pitch.

GOAL: IMITATE AND PRODUCE SOUNDS

Level I	Level II
I-MU2.3a Imitate clapping pattern sequences of no more than three claps per pattern.	II-MU2.3b Imitate clapping pattern sequences of at least four claps per pattern that vary in tempo, number, length of pause between claps, etc.
I-MU2.4a Use musical instruments or other objects to imitate a sequence of no more than three sounds/ musical motif made by a single instrument or object.	II-MU2.4b Use musical instruments or other objects to imitate a sequence of three or more sounds made by more than one instrument.
I-MU2.5 Accompany a story or musical piece by introducing sound effects at the appropriate moment.	II-MU2.6 Accompany an adult by either clapping or using rhythm instruments to maintain the beat in a chant, song or other musical piece.

GOAL: LISTEN TO AND SING SONGS

Level I	Level II
I-MU3.1a Listen to, sing and perform children’s songs and fingerplays with others.	II-MU3.1b Listen to, sing and perform children’s songs and fingerplays individually or with others.
I-MU3.2a Sing a musical dialogue in which two or more groups answer one another.	II-MU3.2b Sing a round for two or more groups.

GOAL: LISTEN TO AND MOVE TO MUSIC OF DIFFERENT STYLES AND PERIODS

Level I	Level II
I-MU4.1 Move to music individually, interpreting and modifying movements according to the tempo, intensity and rhythm.	II-MU4.3 Move to music carrying out a sequence of choreographed steps or movements to music.
I-MU4.2 Move to music with a partner or group, performing very simple movements.	

See list of recommended Musical Works in Appendix V.



LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
different	piano	beat	repeat
fast	same	clap	rhythm
high	short	clapping pattern	rhythm band
listen	sing	composer	instruments
long	slow	copy	rhythm sticks
loud	soft	drum	round
low	song	fingerplay	sing
music	violin	imitate	solo
		instrument	sound
		instrumental	sound effects
		maracas	tambourine
		melody	triangle
		musician	verse
		orchestra	vocal music
		refrain	voice

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Music section as follows:

- Adult: *Listen*—I’m going to *clap* my hands—I’m going to make a *clapping pattern*.
Listen carefully. When I finish, I’m going to ask you to try to *copy* it. (clap pattern)
- Adult: Okay, I’m going to *repeat* the *clapping pattern*, but this time, you try to do it with me. (adult and child clap together)
- Adult: Now I’m going to make a new *clapping pattern*. *Listen* carefully. When I finish, I will ask you to *repeat* it by yourself.

Visual Arts

Overview: This section focuses not only on producing art, but also on examining and appreciating examples of various art forms. The use of various media and techniques provides rich opportunities for sensory exploration and manipulation, as well as the development of fine motor skills. In addition, through painting and drawing, children make their first attempts at graphic representation, a precursor to writing. The guided examination of works of art provides practice in focusing attention on visual detail, important for developing skill in discriminating visual differences in objects, images, print and letters, as well as appreciating basic elements of art. The further examination and discussion of works of art also afford rich opportunities for language development.

The basic goals of this section ask children to attend to visual details, identify images that are the same or different, create both representational and nonrepresentational art using various media and techniques, create art in the style of a known artist and examine and talk about selected works of art, including their own creations.



GOAL: ATTEND TO VISUAL DETAIL OF OBJECTS AND IMAGES

Level I		Level II	
I-VA1.1	Identify pairs of objects or images as the same or different.		
I-VA1.2a	Play games requiring matching of like images, such as lotto games.	II-VA1.2b	Play games requiring matching of like images such as domino games.
I-VA1.3a	Identify the colors red, yellow, blue, green, orange, purple, brown, black, white.	II-VA1.3b	Identify from memory the color of objects from nature, when not in view.
I-VA1.4a	Demonstrate memory of visual details by identifying what is different after a collection of objects is examined, removed from sight, altered and reintroduced.	II-VA1.4b	Demonstrate memory of visual details by playing "Concentration" type memory games.

GOAL: EXPLORE AND CREATE, USING VARIOUS ART FORMS, MEDIA, AND TECHNIQUES

Level I		Level II	
I-VA2.1	Tear: Use various tools and techniques in completing art projects.		
I-VA2.2	Paste: Use various tools and techniques in completing art projects.		
I-VA2.3	Use stickers: Use various tools and techniques in completing art projects.		
I-VA2.4	Fold: Use various tools and techniques in completing art projects.		
I-VA2.5	Tape: Use various tools and techniques in completing art projects.		
		II-VA2.6	Staple: Use various tools and techniques in completing art projects.



GOAL: EXPLORE AND CREATE, USING VARIOUS ART FORMS, MEDIA, AND TECHNIQUES

Level I		Level II	
I-VA2.7a	Cut straight lines: Use various tools and techniques in completing art projects.	II-VA2.7b	Cut: Use various tools and techniques in completing art projects.
		II-VA2.8	Sew: Use various tools and techniques in completing art projects.
I-VA2.9	Create drawings (nonrepresentational).		
I-VA2.10	Create paintings (nonrepresentational).		
I-VA2.11	Create prints (nonrepresentational).		
I-VA2.12	Create collage (nonrepresentational).		
I-VA2.13	Create sculpture (nonrepresentational).		
I-VA2.14	Create drawings (representational).		
I-VA2.15	Create paintings (representational).		
I-VA2.16	Create prints (representational).		
I-VA2.17	Create collage (representational).		
		II-VA2.18	Create sculpture (representational).
		II-VA2.19	Examine a work of art by a known artist and create a work "in the style of..." (Rhythm by Delaunay; Blue Hippo; Head of a Man by Klee; The Snail by Matisse; People and Dog in Sun by Miro; Broadway Boogie Woogie by Mondrian).
		II-VA2.20	Work with other children to create a collective work of art, such as a large group mural, collage, etc.

GOAL: DEVELOP AN APPRECIATION FOR ART

Level I		Level II	
		II-VA3.1	Look at and talk about works of art, describing details and "story" depicted, such as objects, people, activities, setting, time day/year, long ago/contemporary, etc. as well as the mood/feeling elicited.
		II-VA3.2	Describe one's own art work, explaining the materials and techniques used.

See list of recommended Works of Art in Appendix V.

LANGUAGE OF INSTRUCTION

Teacher and Children		Teacher Only	
art	paint	artist	mural
black	paste	brush	museum
blue	purple	chalk	original
brown	rectangle	collage	painter
circle	red	compare	painting
color	same	copy	print
cut	scissors	create	real
different	tape	creativity	remember
draw	triangle	curved line	sculptor
glue	white	detail	sculpture
green	yellow	easel	shape
orange		feelings	staple
		fold	straight line
		imaginary	tear
		imagination	technique
		line	title
		materials	tool
		mood	

Note: For a full discussion, please see the “Language of Instruction” section in the “Using the Preschool Sequence” chapter.

Example: Use vocabulary from the Visual Arts section as follows:

Adult: This is a picture of a *sculpture* that was *created* by the *artist* Edgar Degas. Can you tell me about this *sculpture*? What do you see?

Child: It's a person.

Adult: Uh huh, it's a *sculpture* of a person. What kind of person? Is it a man or woman? Or is it a girl or boy?

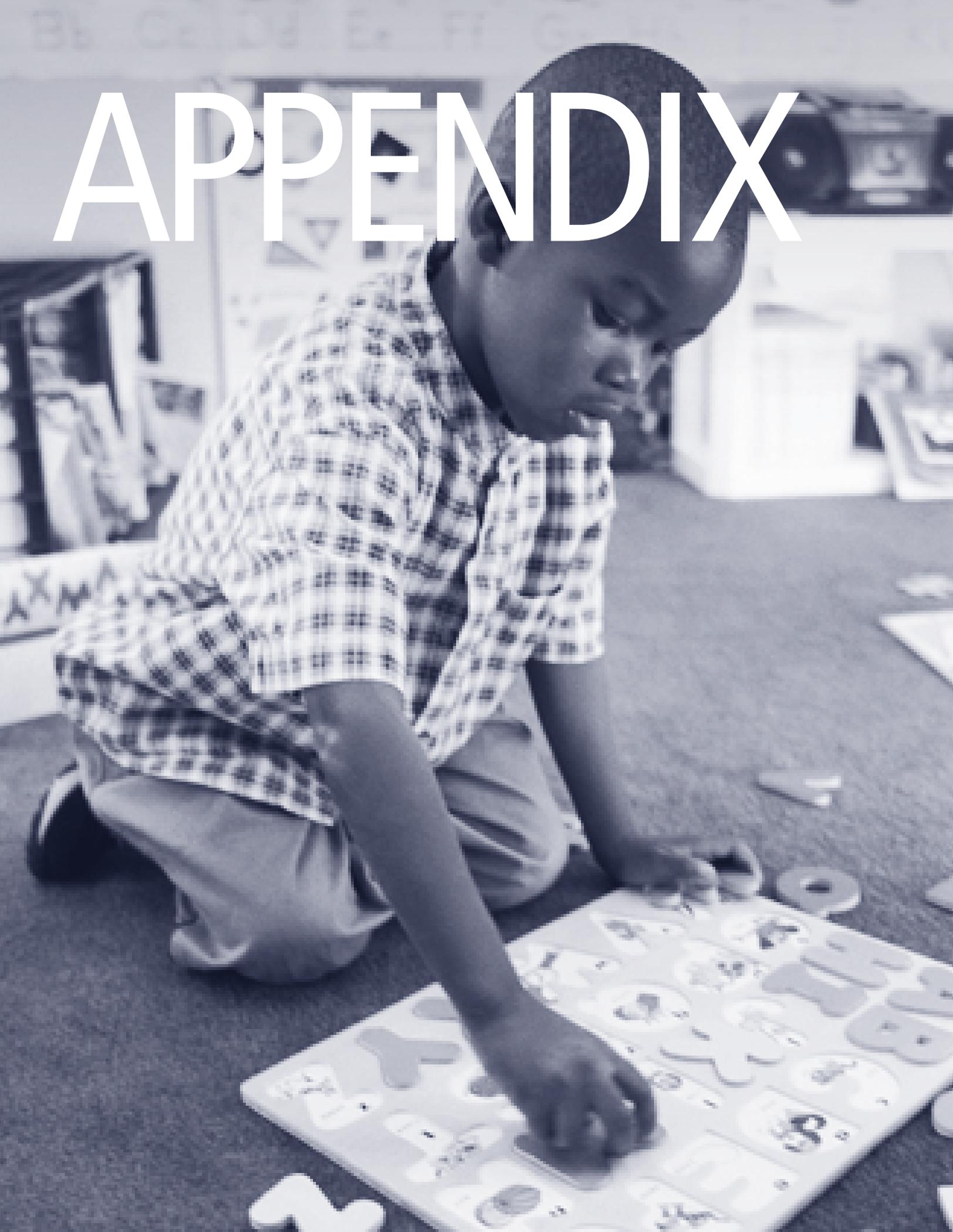
Child: It looks like a girl 'cause she has a pony tail.

Adult: So it's a *sculpture* of a girl. How is she dressed? Is she wearing regular clothes?

Child: No—she looks like she's wearing a funny short skirt

Adult: Yes, she is. She's wearing a special costume that's used for dancing, etc.

APPENDIX



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About This Book

The Core Knowledge Foundation has written this teacher handbook to help you teach the *Core Knowledge Preschool Sequence*. The skills of the *Preschool Sequence* and the content of *Teacher Handbook* are based on research and best practice in early childhood education. Throughout this book, the **DAP 01** icon is used to denote aspects of the *Preschool Sequence and Teacher Handbook* that illustrate developmentally appropriate practice. This numeric portion of this icon indicates the page within *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8* (Copple & Bredekamp, 2009) on which you will find a corresponding statement about developmentally appropriate practice.

In the sections that follow, you will be introduced to the other key elements of the handbook. Our purpose is not only to guide you through the handbook, but also to introduce you to some other significant resources and help you teach the *Core Knowledge Preschool Sequence* to your class.

Organization of the Handbook

Each section in the *Preschool Sequence* and *Teacher Handbook* begins in the same way. The following pages describe what you will find each section.

Subject Opener

Introduction

The introduction to each chapter provides an overview of key ideas or content in the chapter including the importance of the chapter content to the development of young children.

Best Practices

Three best practices are provided for each content area chapter. These best practices are informed by standards for, research regarding, and common practice in early childhood classrooms.

Chapter Sections

The Big Idea

The Big Idea documents the central idea of the section.

What Preschoolers Need to Learn

For each content area chapter or section, the learning goals from the *Preschool Sequence* are presented. These broad goals are comprised of one or more individual skills that are listed in the skills section of the chapter or section.

What Children Will Learn in Kindergarten

For each content area chapter or section a glimpse of topics that Core Knowledge teachers will cover in the kindergarten year is provided. Clear understanding of these kindergarten goals allows preschool teachers to support a smooth transition to kindergarten. Preschool teachers can clearly see, from this

Best Practices in Scientific Reasoning

- Start With the Here and Now**
We learn by connecting new information to what we already know. For preschool age children, knowledge is often bounded by the here and the now. They are just beginning to understand past, future, and things that are not “here.” Effective teachers focus scientific exploration on topics with which the children can easily relate (e.g., bodies of water geographically near them). Effective teachers recognize that topics beyond the “here and now” don’t allow for realistic hands-on exploration (e.g., dinosaurs).
- Science Is Not Magic**
A primary goal in science education is to provide children with a greater understanding of the world in which they live. Effective teachers help children develop an understanding of what is happening during scientific investigations. These teachers also foster an understanding of the predictability and consistency of scientific experiments and investigations are repeated. Using “magic” as an explanation for scientific processes does not further children’s understanding of an event. Scientific concepts involve unseen forces. During the investigation, teachers provide a foundation to support later learning by providing scientific facts, processes, and procedure in a concrete manner and can be repeated to

The Big Idea

Science requires a systematic approach to investigation and provides opportunities to introduce children to a variety of tools and their uses.

What Preschool Children Need to Learn

- Select and use appropriate tools
- Demonstrate use of the scientific reasoning cycle

What Children Will Learn in Kindergarten

- During Kindergarten, children will expand their use of the scientific reasoning cycle and study important scientists.

information, how knowledge and skills developed in preschool become the prior knowledge for continued learning in kindergarten. Careful consideration of the kindergarten goals also offers preschool and kindergarten teachers a unique opportunity to collaborate on joint projects with the older peers modeling skills and knowledge for younger children.

Language of Instruction

The words listed in this section include terms that knowledgeable and competent individuals generally use to talk about the particular subject. While not comprehensive or exhaustive, the lists provide a starting point, a suggested sampling of the precise vocabulary to which young children should be exposed. For information on how to use the language of instruction, see the *Oral Language* chapter.

Language of Instruction			
Teacher and Children			
act	plan	reflect	science
ask	predict	report	tool
Teacher Only			
analyze	describe	observe	record
construct	explain	observe	

Cross-Curricular Connections		
Oral Language I-OL9.1 Answer "what will happen if..." questions. II-OL9.2 Identify outcomes and possible causes. I-OL9.4a Describe an event or task that one is in the process of completing. II-OL9.4b Describe an event or task that one is in the process of completing.	Storybook Reading II-SRL3 Predict events in a story, i.e., what will happen next. III-RL3 Analyze <i>Ruby Redd</i> by K. Hirschman, Scholastic Core Knowledge Preschool Library.	Visual Arts I-VA2.1 through I-VA2.6 Use various tools and techniques in completing art projects. I-VA1.4a Demonstrate memory of visual details by identifying what is different after a collection of objects is examined, removed from sight, altered and reintroduced. II-VA1.4b Demonstrate memory of visual details by playing "Concentration" type memory games.

Cross-Curricular Connections

The cross-curricular connections tables provide suggestions of skills or content from other subject areas that align with the content or skills of the current chapter or section. The cross-curricular skills or content may be taught or reviewed in conjunction with the skills or content from the current subject area chapter. Children learn through a process of building schemas and connections based upon prior knowledge. Children can only build these schemas through connecting their current experiences with previous ones. In other words, prior knowledge is the base or foundation on which new knowledge is constructed. Effective teachers recognize when connections to prior knowledge can be made. These teachers use cross-curricular connections to present related information in a variety of situations and contexts.

At a Glance

The most important ideas from the chapter are listed in the *At a Glance* section.

Skills

The Skills section lists the *Preschool Sequence* skills for each content area. The skills are divided into two levels representing the approximate developmental abilities of three- to four-year olds (Level I skills) and four- to five-year olds (Level II skills). Level I skills appear in the left column, and level II skills appear in the right column. Within the skills table, the  icon is used to denote critical skills. Critical skills are the most important skills to assess, as they provide the best understanding of how children are progressing with the skills in the *Preschool Sequence*.

The skill numbering convention includes:

I or II, indicating level I and level II skills, respectively

Two uppercase letters, indicating the content area that includes the skill

A number, indicating the sequence or order of the skill within the domain

Some skills end in a lowercase letter, indicating that this skill has both a level I component and a level II component, *a* and *b*, respectively.

For example, the skill number **I-OL9.18a** is a level I oral language skill with a corresponding level II skill (II-OL9.18b).

Skills		Level I	Level II
Goal: Select and use tools			
		II-SC1	Cooking spoon, rolling pin, etc. Select and use appropriate tool to complete a task.
I-SC3.2a	Select and use scissors to cut straight lines.	II-SC1.2b	Cut scissors. Select and use appropriate tool to complete a task.
		II-SC3.3	Join paper, string. Select and use appropriate tool to complete a task.
		II-SC3.4	Join fabric, needle and thread. Select and use appropriate tool to complete a task.
		II-SC3.5	Nail, join wood, hammer. Select and use appropriate tool to complete a task.
		II-SC3.6	Dig a hole, shovel, shovel. Select and use appropriate tool to complete a task.
		II-SC3.7	Water a plant, watering can, hose. Select and use appropriate tool to complete a task.
Scientific reasoning cycle			
		II-SC4.1	Demonstrate use of the scientific reasoning cycle.

Introduction

Oral Language Skills

Oral language skills are the foundation for literacy and social skills. Although the *Oral Language* chapter includes a complete list of oral language, these skills cross all content areas. Development of oral language skills and vocabulary can be effectively addressed within the context of a variety of activities in all parts of the classroom routine and across all content areas. For this reason, a subset of oral language skills has been included in the chapters for each content area. These skills were chosen for their suitability or relation to the content area covered in each chapter.

What Teachers Need to Know

This section provides you with background information about specific subjects. Effective teachers recognize that the more background they have, the better able they will be to guide children's learning.

Teaching Ideas

Included in the margins of each chapter are teaching ideas and cross-curricular teaching ideas. The Core Knowledge Foundation does not require teachers to follow any particular teaching strategy when covering the topics in the *Preschool Sequence*. The teaching ideas in the margins presented are only suggestions.

Scaffolding

Scaffolding is a collaborative process between teacher and learner, with the teacher initially providing high support and direction for the novice learner, gradually decreasing assistance as the child gains greater mastery of a task. Strategies for scaffolding skills and content from the sequence are discussed in detail in the Scaffolding section of the *Using the Preschool Sequence* chapter. Relevant scaffolding examples are provided for each content area within the *Preschool Sequence*.

Assessment

Assessment takes place across all aspects of the daily routine and throughout all elements of the *Preschool Sequence*. Each content area chapter in this handbook provides suggestions for “what to look for” and “when to look” to assess skills from the content area.

Resources

At the end of each subject area section are lists of some books and other resources that may be useful in teaching the skills of the content area. The resources listed under “For children” are intended to be read aloud to children and made available to children through their own choice. The resources listed under “For teachers” are intended to provide teachers with examples and ideas for planning instructional activities.

Oral Language Skills in Investigation and Observation	
The goals in this chapter are well suited to addressing the following sample of oral language skills. For a complete list of the skills in the oral language domain, see the <i>Oral Language</i> chapter.	
Level I	Level II
I-OL.1.a <i>(Pres)</i> Carry on a dialogue or conversation with an adult, initiating comments or responding to partner's comments.	II-OL.1.b <i>(Pres)</i> Carry on a dialogue or conversation with a child of approximately the same age, initiating comments or responding to partner's comments.
I-OL.3.a <i>(Pres)</i> Sequence and describe three stages of events or phases of a single event that have been experienced, occurring at temporally distinct times of the day.	II-OL.3.b <i>(Pres)</i> Sequence and describe three to five stages of events or phases of a single event, that have been experienced.
I-OL.4.a <i>(Pres)</i> Describe an event or task that one is in the process of completing.	II-OL.4.d <i>(Pres)</i> Describe an event or task that has already taken place outside the immediate place and time.
I-OL.4.b <i>(Pres)</i> Describe an event or task that one has just experienced in the immediate past.	II-OL.4.b <i>(Pres)</i> Describe an event or task that will take place.
I-OL.4.c <i>(Pres)</i> Give simple, single-step directions.	II-OL.4.c <i>(Pres)</i> Give simple, multi-step directions.
I-OL.4.d <i>(Pres)</i> Ask simple, open-ended, "if...then..." questions.	II-OL.4.e <i>(Pres)</i> Identify outcomes and possible causes.
	II-OL.17 <i>(Pres)</i> Use temporal words (today, tomorrow, yesterday, always, never, sometimes, before, after, now, immediately, first, last, beginning, middle, end, then, next, happily, soon).

What Teachers Need to Know

Background

Preschool children do not always understand the concepts of living and non-living. They may consider all non-living things to be “dead,” or they may consider all things that move (e.g., cars, clouds, and video images) to be living. Living things can move, reproduce, and grow. Through science exploration, effective teachers ensure that young children understand the common characteristics of living things.

Human Characteristics, Needs, and Development

People are a special kind of animal called humans. Humans, like other animals, have needs. They need food, water and air. Humans have different body parts. These parts can see, hear, smell, taste, feel, and move.

...sound of a baby crying, the scent of popcorn popping, the texture of sand...everything young children can experience through their senses. Each of the five senses can be used to learn and expand their understanding of the world.

Scaffolding

Scaffolding strategies occur on a continuum with high support at one end, low support at the other end, and varying levels of support in between. Although the examples below demonstrate only high support and low support, effective teachers adjust support along the continuum to meet the needs of individual children.

Materials

Effective teachers vary the materials they use in order to tailor tasks and activities to meet each child's individual needs.

Concrete to Abstract

Use of concrete materials provides children with more support than use of abstract representations. The examples below illustrate how effective teachers meet the needs of individual children through manipulation of materials from concrete to abstract.

Concrete High Support

Use real classroom pets to allow children to care for, observe, and record observations of animals and plants. Use real classroom plants to allow children to care for, observe, and record observations of plants.

Abstract Low Support

Pretend to care for zoo animals during dramatic play. Set up the dramatic play area as a farm, garden center, or florist so that children can care for plants.

From Fewer Choices to More Choices

Provide children with more support than offering more choices. The examples below illustrate how effective teachers meet the needs of individual children through manipulation of the choices provided.

More Choices Low Support

Observe photos and/or drawings of a baby, child, young adult, and an elderly adult to represent the life cycle.

...making choices that have sense.

Assessment

What to Look For

During observations and investigations of living things and throughout other classroom activities, look for children to demonstrate a growing understanding of the characteristics of living things. Children should begin to understand the five senses and how each sense is used. Do children talk about what they taste at snack time? Do children talk about sounds and characteristics of sounds (e.g., loud, soft, long, short)? Do children use words to describe how things feel (e.g., hard, soft, bumpy, squishy)? Children should begin to recognize that not all living things move, that living things need water and air, and that living things grow. Do children participate in the care of classroom pets and plants? Do children talk about their needs (e.g., hunger, thirst, sleep)? Do children talk about their movement and imitate the movements of animals?

When to Look

Demonstrate an initial understanding of the living world: humans

Use real classroom pets, songs and fingerplays, observe whether children can name body parts. Use real classroom plants to allow children to care for, observe, and record observations of plants, including the sensory table, art, and real time. Use real classroom plants to allow children to care for, observe, and record observations of plants. Use real classroom plants to allow children to care for, observe, and record observations of plants.

Demonstrate an initial understanding of the living world: animals

Use real classroom pets, songs and fingerplays, observe whether children can name body parts. Use real classroom plants to allow children to care for, observe, and record observations of plants. Use real classroom plants to allow children to care for, observe, and record observations of plants.

Core Knowledge Resources for Preschool

In addition to this publication, the Core Knowledge Foundation offers a variety of resources for preschool programs and parents of preschoolers.

For Teachers

Core Knowledge Preschool Assessment Tool (CK-PAT)

The Preschool Assessment Tool (CK-PAT) is designed to measure and document the individual progress of children in Core Knowledge preschool programs. It enables teachers to enter data for each child and for each of the goals and objectives of the *Preschool Sequence*. Assessment strategies include direct observation, portfolio collection, and assessment activity probes, all with evaluation and rating criteria. The assessments meet the standards mandated by various state programs and by Head Start. Reports and graphs for individuals, the class, or the entire center or agency can be generated with the click of a button.

Preschool Assessment Kit

The Preschool Assessment Kit includes printed copies of the Preschool Assessment Tool and assessment activities from the rating criteria to assess each of the critical skills found in the *Core Knowledge Preschool Sequence*. The kit includes all materials and manipulatives needed for assessment.

Preschool Daily Schedule Cards

This set of nineteen colorful cards depicts daily activities in the preschool schedule designed especially for use by Core Knowledge preschool programs. Activities portrayed include arrival, breakfast, circle time, small group time, read-aloud, cleanup, outside play, lunch, rhythm and movement, and many more. Cards are printed on heavy-duty glossy paper for easy display.

The Stop and Think Songbook Social Skills CD

Fifteen lively and engaging original songs are designed to reinforce the *Stop and Think* approach and the Core Knowledge early childhood social skills. Songs include “Stop and Think,” “Listening,” “Using a Friendly Voice,” “Following Directions,” “Taking Your Turn,” “Answering a Question,” “Interrupting,” “Accepting Consequences,” “Using Brave Talk,” and “Asking to Share.” Lyrics included with CD.

The Core Knowledge Social Skills Posters

These fourteen durable full-color posters complement the *Stop and Think Songbook*. The front of each poster shows preschool children modeling specific social skills and lists the actions that are described in the songs. The back includes the lyrics of the corresponding song. Although designed for the Core Knowledge preschool program, teachers in early elementary grades have found the posters inspire good citizenship and social skills in their classrooms as well.

Core Knowledge Preschool and Kindergarten Music CD

Enlightened educators understand that a well-rounded instructional program introduces students to the masterpieces of art and music that are part of our shared cultural inheritance. Core Knowledge makes available carefully selected musical masterworks on CD for preschool and kindergarten teachers. The world’s greatest music, including quintessentially American masterworks of blues, jazz, and musical theater, are offered in a convenient set for use by teachers and students.

Knowledge Tree Preschool Kits

These kits, aligned with the *Core Knowledge Preschool Sequence*, are available exclusively through Knowledge Tree. The kits cover phonological awareness, read-alouds, oral language, math, science, social skills, movement and music, and visual arts. Attractively designed to add dramatic visual appeal to the classroom, the kits contain books, flannel boards, story cards, posters, magnetic boards, sound devices and musical instruments, play phones and play money, costumes, science tools, art supplies, and many other aids to teaching and learning. For more information, call 1-800-331-0994 or visit www.theknowledgetree.com.

Introduction

Scholastic Core Knowledge Classroom Preschool Library

This library, available from Scholastic contains 40 titles (2 copies of each) that support the content areas of the *Preschool Sequence* as well as popular thematic units for the preschool classroom. The teacher guide that accompanies the books includes extension activities for each book aimed at developing vocabulary, phonological awareness, print knowledge, concept development, and comprehension. For more information, call 1-800-724-6527 or visit www.scholastic.com/coreknowledge.

For Parents

What Your Preschooler Needs to Know: Read-Alouds to Get Ready for Kindergarten

Edited by E. D. Hirsch, Jr., and Linda Bevilacqua

If you are wondering how to get your child ready for kindergarten, this is the book for you. Beloved stories and favorite poems—“The Three Little Pigs,” the African folktale, “Why Flies Buzz,” Jack Prelutsky’s tongue twisters—and many, many more beautifully illustrated selections open new and wondrous worlds to children. Sidebars throughout the book help parents engage the child by suggesting questions to ask, games to play, and connections to make. This is the latest addition to the well-known series *What Your K through 6 Grader Needs to Know* that has sold over 35 million copies. Like other volumes in the series, it encourages children to explore visual arts, music, history, and science. In this single volume children will encounter in the midst of great fun, many of the cultural references and the background knowledge they will need for later reading success. Two accompanying activity books make this read-aloud anthology an even more valuable resource for ensuring that children have the nourishment they need at such a developmentally important stage.

What Your Preschooler Needs to Know Activity Books

Book 1 for Ages 3–4 and Activity Book 2 for Ages 4–5

Edited by Linda Bevilacqua and Susan T. Hitchcock

Why not make picking up toys a fun number game? Need a child-friendly muffin recipe to go along with “Do You Know the Muffin Man?” Can a visit to the grocery store provide your child a chance to practice speaking in full sentences? Can reading “Goldilocks” together become a way to develop predictive reasoning skills? Do practicing simple line strokes get little hands ready for writing? Can a treasure hunt for certain shapes and colors turn the dreaded museum visit into a delightful one? These colorfully illustrated books can answer these questions and many more. Each volume has 25 weeks of activities sequenced to relate to the stories, information, and skills presented in *What Your Preschooler Needs to Know*. The activities also align with the topics and skills covered in the *Core Knowledge Preschool Sequence* used in outstanding preschool centers across the country. Both books take an enjoyable approach to developing skills in the content areas of oral language, emergent literacy, math, science, social skills, music, visual art, and movement and coordination, but Level 2 has more emphasis on activities leading toward independence and autonomy.

Beyond the Teacher Handbook: Some Additional Strategies for Success

Although reading this book will provide you with the basic knowledge you will need to teach the *Preschool Sequence*, there are many other things you can do to improve your teaching of Core Knowledge. Here are a few strategies we’ve learned from successful Core Knowledge teachers and schools over the past decade:

Participate in Professional Development

The Core Knowledge Foundation provides a range of support services for those interested in implementing the Core Knowledge Preschool Program. Professional Development is available in a variety of options. Call the Core Knowledge Foundation to find out which option will work best for your school. A list of available professional development modules for Core Knowledge preschools appears on page xiii.

Collaborate with Resource Teachers

If you have resources teachers—art, music, physical education, media and technology specialists, special education or ELL teachers—work with them to enhance and connect their lessons and activities with the topics you are teaching. The most successful Core Knowledge schools are the ones in which the curriculum is implemented and supported by all key staff members. These schools frequently implement cross-curricular activities involving both classroom teacher and resource teachers targeting the same content and skills.

Get Parents Involved

Look for ways to get parents and caregivers involved. Core Knowledge is a popular curriculum with many adults, not only because it is academically rich, but also because it is very explicit. If you share the relevant sections of the *Preschool Sequence* and/or your yearlong plan with the adults at home, they will know what is happening at school and may be able to help you in various ways. Some may have knowledge of a particular subject that they would be willing to share with the children; others may be willing to assist the teacher with classroom activities or to talk with children at home about the topics they have been studying at school. The *Preschool Sequence* and yearlong plan, when shared, can become a link that enables parents, caregivers, and teachers to work together.

Involve Local Groups and Businesses

Businesses and other outside groups may be able to visit classes to talk about topics that relate to what they do, or they may be able to donate services or materials. One Core Knowledge school in Texas contacted a local tile company when the school was preparing to do a unit on mosaics. The tile company offered them thousands of bits of broken tile. The school got its mosaic materials for free, and the company got a tax write-off! With a little creativity you can accomplish a lot!

Visit the Core Knowledge Web Site

The official Web site of the Core Knowledge Foundation, www.coreknowledge.org, contains a wealth of information about Core Knowledge, as well as lesson plans, resources to build on, discussion forums, newsletters, and other teacher resources.

Attend the Core Knowledge National Conference

Held in the fall each year, the conference attracts several thousand Core Knowledge teachers who learn about Core Knowledge, attend lectures and workshops on topics in the Sequence, and share instructional units and lesson plans.

Available Professional Development

Getting Started

This unit introduces participants to relevant research and theory, gives an overview of Core Knowledge, and provides information on implementation of the *Preschool Sequence*. Some of the topics addressed include:

- similarities and differences between the Core Knowledge Preschool program and participant's own existing program.
- features of a well-organized physical classroom environment.
- features of a well-organized classroom schedule and routine.
- effective transition strategies.
- creation of complete lesson plans that incorporates the Core Knowledge goals and objectives, as well as address specific activities for large and small group instruction, read-alouds, and center time activities.

Introduction

Autonomy, Social Skills, and Work Habits

This unit introduces participants to relevant research and theory, identifies behavior management techniques, provides information on teaching social skills and conflict resolution to young children, and helps the participant put it all together. Some of the topics addressed include:

- factors that affect social competence.
- techniques for assessing children's autonomy, social skills, and work habits.
- successful group management techniques.
- steps of the *Stop & Think* social skills approach and how to best teach the program to young children. *Stop & Think* is a social skills training program developed by Project ACHIEVE.
- use of a "Peace Table" for conflict resolution.

Assessment and Planning to Address Children's Learning Needs

This unit introduces the participant to relevant research and theory, introduces and instructs the participant in use of the CK-PAT, and demonstrates effective assessment skills. Some of the topics addressed include:

- characteristics of effective assessment for instructional planning purposes.
- the assessment-instruction cycle.
- use of effective direct observation skills in completing anecdotal records.
- various assessment and observation tools, including: focus questions, checklists, webs, participation charts, activity probes, and portfolio collection.
- use of the CK-PAT to gather student data, generate various reports, and plan for individual students.

Using Children's Literature and Writing to Develop Language and Literacy Skills

This unit introduces participants to relevant research and theory, gives in-depth instruction on incorporating children's literature into the classroom, and provides the participant with skills for creating a print-rich environment. Some of the topics addressed include:

- techniques for assessing children's early literacy skills.
- steps used to teach a new nursery rhyme, poem, or finger play.
- steps of the STORY technique for reading fiction books to preschoolers; steps of the INFO technique reading non-fiction books to preschoolers; and how to conduct morning message and language experience activities with preschoolers.
- developmental stages of writing.
- methods for scaffolding and facilitating journal writing.

Phonological Awareness, ABCs, and More

This unit introduces the participant to relevant research and theory, provides critical phonological awareness activities, and provides instruction in the ABCs. Some of the topics addressed include:

- trends in reading achievement in NAEP data over the last ten years, as well as possible explanations for these results and critical preschool literacy experiences that support early literacy.
- techniques for assessing phonological awareness and letter knowledge.
- materials and activities using music and sounds to increase general sound awareness.
- materials and activities that build increasingly sophisticated phonological awareness.
- skills in rhyming, blending, and segmentation of words, identifying initial sounds, and counting phonemes.
- a sequence of steps, activities, and materials to teach letter names and sounds.

Oral Language Skills

This unit introduces the participant to relevant research and theory, identifies listening materials and activities, and provides the participant with a range of talking techniques and strategies. Some of the topics addressed include:

- current research findings concerning the stages of early language development, factors influencing early development, as well as the correlation of language competence to future academic success.
- techniques for assessing oral language skills.
- materials and activities to build receptive language skills.
- techniques, materials, and activities to build narrative, explanatory, and predictive language, as well as vocabulary.
- strategies for working with English language learners (ELLs).

Mathematics and Number Sense / Orientation in Time and Space

This unit introduces the participant to relevant research and theory and identifies and demonstrates how to plan and teach math to preschoolers. Some of the topics addressed include:

- research findings on young children's intuitive understanding of mathematical concepts and how this relates to classroom instruction.
- how preschoolers construct mathematical understanding.
- mathematics, time, and space goals and objectives of the *Preschool Sequence*.
- techniques for assessing mathematical, spatial, and temporal skills.
- materials and activities to develop mathematical reasoning skills.

Scientific Reasoning and Knowledge

This unit introduces the participant to relevant research and theory and identifies and demonstrates how to plan and teach science to preschoolers. Some of the topics addressed include:

- the steps of the scientific reasoning cycle.
- techniques for assessing scientific knowledge and reasoning skills.
- key concepts and background knowledge necessary to teach the science goals of the *Preschool Sequence* (human physical and sensory characteristics, needs, stages of development and life cycle; animal characteristics, needs, stages of development and life cycle; plant characteristics and parts, needs, stages of development and life cycle; air; water; light).
- the types of language, questions, and strategies to be used by the teacher during each phase of the scientific reasoning process.
- components of a coherent series of preschool science experiences/lessons, specifying activities and materials, on a selected science topic from the *Preschool Sequence*.

Movement, Coordination, and Music

This unit introduces the participant to relevant research and theory, movement and coordination activities, and methods for incorporating music into the classroom. Some of the topics addressed include:

- basic elements of movement.
- differences between free, modeled, and guided movement activities.
- techniques for assessing movement, coordination, and music skills.
- movement sessions that incorporate a variety of activities addressing the goals of the *Preschool Sequence*.
- materials and activities that use music and sounds to increase sound awareness and discrimination.

Introduction

Visual Arts

This unit introduces the participant to relevant research and theory, techniques for using a range of art media, and methods of talking about art. Some of the topics addressed include:

- developmental stages of children's drawings.
- techniques to document the development of children's art skills.
- techniques and activities using the following media: collage, painting, drawing, printing, sculpture, sewing.
- works of art and artists included in the *Preschool Sequence* and describe preschool level art activities that could be associated with each work of art.
- questions that can be used to encourage children to talk about their own art creations and the individual works of art in the *Preschool Sequence*.

Fine-tuning Your Core Knowledge Implementation

This unit introduces participants to strategies to enhance their implementation of the Core Knowledge curriculum. Some of the topics addressed include:

- research regarding preschool play experiences and their support for language and literacy development.
- guidelines for implementing a language- and literacy-rich dramatic play environment.
- elements of center time that can be adjusted to foster concept development and sequence goals, objectives, and skills.
- analysis of props and materials available at each center to determine how learning in each center can be enhanced.
- activities to extend learning within each center and strategies to informally assess children's progress during center time.

Leadership Training for Administrators of Core Knowledge Preschools

This unit is designed to provide preschool leaders and administrators with the knowledge and skills they will need to promote and sustain implementation of the Core Knowledge preschool program. Some of the topics addressed include:

- basic tenets associated with Core Knowledge as an educational reform model for preschool through grade 8.
- strategies for evaluating the progress of implementation of the *Preschool Sequence*.
- strategies for mentoring and providing support to teachers implementing the *Preschool Sequence*.
- preliminary findings about the effectiveness of the Core Knowledge preschool model and implications for one's own program.
- strategies for aligning the *Preschool Sequence* with state and other standards.
- potential obstacles to successful implementation of the *Preschool Sequence* and strategies for remediation of the obstacles.

How This Book Relates to the Sequence for Grades K-8

The skills and knowledge in the *Preschool Sequence* are designed to correlate with the existing Core Knowledge Sequence for Grades K-8. The *Preschool Sequence* provides a solid, coherent foundation for the content that children will encounter in kindergarten in a school following the *Core Knowledge Sequence for Grades K-8*.

In a few specific instances, the *Preschool Sequence* overlaps the content already in the Sequence for Grades K-8. Ideally, of course, all children entering kindergarten would come prepared with the kinds of experiences and knowledge described in the *Preschool Sequence*. But in reality this is not the case – thus, the occasional overlap. For your reference, please note that skills or knowledge in the *Preschool Sequence*, also included in the Sequence for Grades K-8, are identified here by a skill number beginning with K (for kindergarten skills) or a (#) next to content titles, with the number in the parentheses designating the grade level at which the material is included in the Sequence for Grades K-8.



Using the Preschool Sequence



- I. Getting Started
- II. Scaffolding Children's Learning
- III. Assessment and Planning to Meet Children's Needs

Throughout this handbook, we refer to “teachers.” In a Core Knowledge classroom, all adults present in the classroom on a regular basis are considered a teaching team. Whether or not their title is teacher, each of these adults teaches children. The contents of this handbook describe the things that effective teachers do to support children’s learning and development.

I. Getting Started

The Big Idea

The *Core Knowledge Preschool Sequence* is a set of model guidelines describing fundamental competencies and specific knowledge that, for children from three to five years of age, can provide a solid, coherent foundation for later learning in kindergarten and beyond.

At a Glance

The most important ideas for you are:

- The *Preschool Sequence* provides specific goals, skills, and content in the developmental areas of physical well-being and motor development, social and emotional development, approaches to learning, language and literacy, and knowledge acquisition and cognitive development.
- Intentionality and planning are hallmarks of a Core Knowledge preschool classroom.
- A curriculum plan guides lesson planning throughout the year.
- Lesson planning is based on a month-by-month curriculum plan and ensures that the skills of the sequence are each addressed.
- Lesson planning involves consideration of many things including assessment opportunities and outcomes, instructional grouping, cross-curricular connections, the language of instruction, and the daily routine.
- The classroom environment has physical and social components.
- High-quality classroom environments are language-, literacy-, and mathematically-rich.
- Children's outcomes are influenced by teacher practices such as planning and assessment, behavior management, and language support.
- The daily routine provides consistency for children and a variety of opportunities for children to work in large and small groups, as well as in pairs and individually.
- Transition times offer opportunities for teachable moments.
- Features of the Preschool Sequence readily support its adaptation for use with children who have special needs.

Organization of the Sequence

DAF 160 The *Preschool Sequence* reflects each of the established critical areas in the development of young children - Physical Well-being and Motor Development, Social and Emotional Development, Approaches to Learning, Language Development, and Knowledge Acquisition and Cognitive Development. Within these developmental areas, the *Preschool Sequence* focuses upon nine domains or content areas; each domain covers developmentally appropriate goals for three-, four- and five-year-olds. These goals are broken down into specific, measurable, and sequential skills upon which teachers plan and implement the Core Knowledge curriculum.



Domains and Goals

The following table demonstrates the relationship between the developmental areas, domains, and goals of the sequence.

Developmental Area	Domain/Content Area	Goals
Physical Well-being and Motor Development	Movement and Coordination	Refine physical attention and relaxation Develop and refine gross motor skills Develop and refine eye-hand and eye-foot coordination Play group games Use the body expressively
Social and Emotional Development	Autonomy and Social Skills	Establish a sense of self and personal responsibility Function and work constructively in a group
Approaches to Learning	Work Habits	Develop memorization skills Develop independent work habits
Language and Literacy Development	Oral Language	Uses of communication Verbal organization and analysis of information Vocabulary and syntax
	Nursery Rhymes, Poems, Finger Plays, and Songs	Develop memorization skills Develop a sense of rhyme
	Storybook Reading and Storytelling	Listen to stories read aloud Participate in stories read aloud Develop a notion of story schema Develop awareness of book and print organization
	Emerging Literacy Skills in Reading and Writing	Develop an awareness of written print and its uses Develop an awareness of the structure of print Develop phonemic awareness Develop fine motor skills and the strokes used in writing
Knowledge Acquisition and Cognitive Development	Mathematical Reasoning and Number Sense	Sort and classify Duplicate and continue linear patterns Perceive and recognize shapes Use simple measurement skills Quantify groups of objects Compare written numerals Develop an understanding of addition and subtraction Identify money
	Orientation in Time	Understand and use language of time Establish reference points in time Demonstrate awareness of passages of time

(continued)

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(continued)

Developmental Area	Domain/Content Area	Goals
	Orientation in Space	Understand and use language of space Establish reference points in actual and represented space Use simple maps of familiar environments Demonstrate an understanding of basic geographic concepts
	Scientific Reasoning and the Physical World	Understand the living world Understand the material world Use tools appropriately
	Music	Listen and discriminate differences in sounds Imitate and produce sounds Listen and sing Listen and move
	Visual Art	Demonstrate attention to visual detail Explore and create art Appreciate art

Skills

The skills of the *Preschool Sequence* are organized in two levels: Level I skills, for typically developing three- and four-year-olds and Level II skills, for typical four- and five-year-olds. Through this design three- and young four-year-olds have the opportunity to participate in Level I activities and experiences during their first year of preschool. During the following pre-kindergarten year, these children build upon the foundation of the Level I experiences, moving on to Level II skills. For programs that only serve children in the pre-kindergarten year, the focus is on Level II skills, but the presentation of Level I skills in the *Preschool Sequence* supports teachers in identifying areas where pre-kindergarten children may need additional support or review of Level I skills.

The skills of the *Preschool Sequence* have been further differentiated into “critical skills” and “supplemental skills.” In an ideal world, in which preschool teachers had sufficient time and assistance, the teacher would evaluate all the *Preschool Sequence* objectives, i.e., both the critical and supplemental skills, on an ongoing basis for each child. However, given the present realities of most preschool classes, many of which are half-day programs, this would be an impossible task in many classrooms. Therefore, certain skills have been designated as “critical skills.” These are the skills that are most important to assess for each child. These skills have been marked with the  icon throughout the *Preschool Sequence*.

It is important to understand that, in terms of instruction, day-to-day classroom activities and experiences should still address both critical and supplemental skills. The distinction that is being made is with regard to assessment, not instruction: if time does not allow for the individual evaluation of all *Preschool Sequence* objectives, then, minimally, the critical skills should be assessed.

 **DAP 160** Effective teachers are knowledgeable of the sequence of and skills within the *Preschool Sequence*. When planning classroom activities and instruction, effective teachers keep children’s developmental levels and the sequence of skills in mind. This consideration of the children and the sequence allow teachers to better individualize for each child’s particular needs.



Core Knowledge Content

Included in the *Preschool Sequence* are specific rhymes, poems, finger plays, fiction, non-fiction, artworks, and songs. These works represent a broad range of historical, scientific, and cultural topics, selected for their suitability in supporting the skills of the *Preschool Sequence*, and for their contributions to developing children's background knowledge. Rich content knowledge, or cultural literacy, equips children to better comprehend what they'll read in the future. Reading comprehension is about much more than basic literacy skills. To comprehend, readers must understand the vocabulary and use content knowledge to connect what they read to existing knowledge. The works included in the *Preschool Sequence* provide children with opportunities to acquire both vocabulary and content knowledge. Effective teachers supplement the works suggested in the *Preschool Sequence* with other rhymes, poems, finger plays, fiction, non-fiction, artworks, and songs that are meaningful to their children.

Language of Instruction

It is almost impossible to overemphasize the significance of early language development and its impact upon nearly all other aspects of development. For this reason, the *Preschool Sequence* addresses language skills not only in the *Oral Language* chapter, but throughout the *Sequence*.

Research in language development reveals that children need to repeatedly hear language, specific words or vocabulary, grammatical features, and so on, before making them their own. When children hear certain words or phrases used repeatedly, they first acquire an understanding of the word or phrase; with repeated exposure in different situations, they will eventually begin using those same words and phrases in their own speech. Thus, it is especially important that preschool children hear the language and vocabulary typically used in school to talk about specific subjects and content.

DA P 157 For this reason, the *Preschool Sequence* includes in each content area a subsection called “Language of Instruction,” which lists terms that knowledgeable and competent individuals generally use to talk about the particular subject. Although not comprehensive or exhaustive, the lists provide a starting point, a suggested sampling of the precise vocabulary to which young children should be exposed.

It is important to stress that the word lists are not intended for use in isolated drill or memorization. These are not terms that the children are expected to memorize or necessarily use at this time in their own speech. At this stage, the aim for young children is exposure. This exposure lays the foundation for understanding such language when it is used by others.

The lists are included to serve as a guide for teachers and caregivers as they interact and talk with children during the course of various activities. Such vocabulary may be incorporated in adult comments that describe what the child is doing (or, what the adult is doing, especially if he or she is modeling a behavior or approach). By using language in this way, adults demonstrate that experience can be represented symbolically by language. Furthermore, restatements in the form of questions, using the same precise vocabulary, will invite children to listen actively and begin to assimilate the language being used. More specific examples illustrating how to use the language of instruction terms in this way are included in the *Oral Language* chapter.

Curriculum Planning

Once a decision is made to implement the *Core Knowledge Preschool Sequence*, it is helpful to set aside time for in-depth planning. If more than one teacher or class will use the *Preschool Sequence* in your setting, this planning should ideally be a cooperative effort involving all teachers.

One of the principle goals of this planning should be to “take apart” the *Preschool Sequence* and develop a month-by-month curriculum plan. If your setting offers only one year of preschool for four- and five-year-olds, you should develop a

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one-year, month-by-month curriculum plan. If your setting also offers preschool for three-year-olds and young four-year-olds, you should develop a two-year, month-by-month curriculum plan, documenting year one for three- to four-year-olds and year two for four- to five-year-olds.

Some schools choose to begin by representing the various components associated with pre-existing district or state guidelines in a month-by-month outline, and then integrating the corresponding goals and skills from the *Preschool Sequence*.

Other schools choose to begin the planning process using the *Preschool Sequence* as the initial foundation for the month-by-month curriculum plan, adding local or state guidelines later. If your local or state guidelines are vague or ambiguous, it may be easier to begin the planning process with the *Preschool Sequence*.

Considerations for Creating a Curriculum Plan

Month-by-month curriculum plans will vary considerably between preschool settings. There is no one single way to organize and present the *Preschool Sequence* month-by-month. As you and your colleagues discuss and decide when to present and teach particular parts of the *Preschool Sequence*, you should keep the following in mind:

- Level of the children in the program
- Skill order
- Ongoing skills
- Content order
- Skill-driven themes

The sections below address each of these considerations in detail.

Level of the Children in the Program

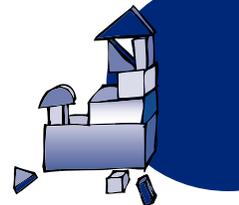
If your setting offers two years of preschool, with one or more classrooms dedicated for three-year-old and young four-year-old children and one or more classrooms dedicated for four-year-old and five-year-old children, you will use the *Preschool Sequence* in its entirety. The three- to four-year-old classroom(s) will plan using primarily Level I skills and content, whereas the four- to five-year-old classroom(s) will plan using the Level II skills and content. The idea is that by the time children transition to the four- to five-year-old classroom, they will have developed the Level I skills needed to be ready to move on to the Level II skills in the *Preschool Sequence*. **DAEP 162** Keep in mind that all children learn at different rates, and it's important to assess the children to see where they are and build their knowledge from that point. Thus, some children may need to review some prerequisite Level I material before they are ready to move on to the Level II skills.

If your setting offers only one year of preschool for four- to five-year-old children, you will use the Level II material from the *Preschool Sequence* as you plan your month-by-month curriculum plan. However, you will also need to be very familiar with the Level I material, recognizing when it is important to incorporate some prerequisite Level I skills and competencies prior to introducing certain Level II material.

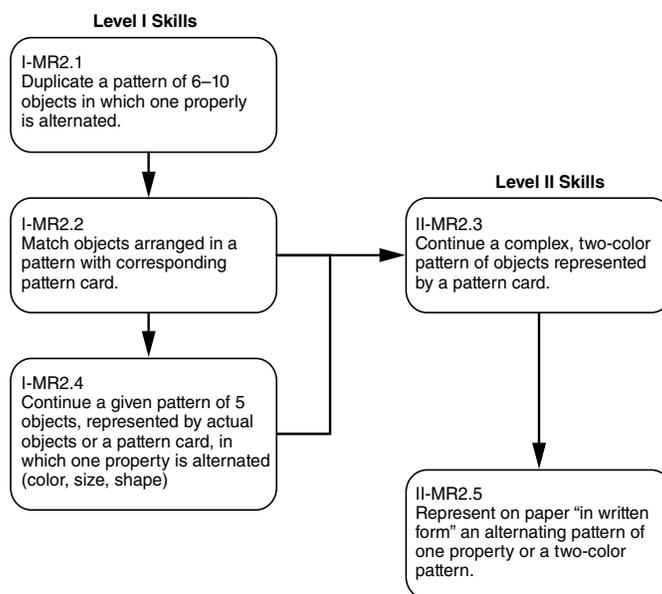
If your setting offers only one year of preschool for three- to five-year-old children in a classroom together, you will need to combine the Level I and Level II material as you plan your month by month curriculum, recognizing that the skills goals for older and younger children in the class may differ for each activity.

Skill Order

The competencies and skills listed within each domain or subject area of the *Preschool Sequence* are generally listed sequentially, from less difficult to more difficult. The order in which these skills are presented, combined with your prior knowledge and experience in working with preschool children, should assist you in deciding what to teach when. In the example below, as suggested by the order of the skills in the *Preschool Sequence*, experiences with patterning using concrete objects are planned prior to experiences in which children create patterns on paper.



Goal: Duplicate and Continue Linear patterns



Notice above that once a child has mastered simple patterns with a pattern card, activities can be planned to continue a simple pattern without a pattern card (skill I-MR2.4) or activities can be planned to continue a more complex pattern with a pattern card (skill II-MR2.3). Your experiences and your knowledge of individual children in your class will guide your lesson planning.

Ongoing Skills

As you begin to note skills and competencies on your month-by-month curriculum plan, you will realize that some skills will involve ongoing experiences that need to be practiced over several months before the skills are mastered. It is recommended that you note such skills in the given month that they will first be presented, recognizing that skills will not necessarily be mastered in the same month that they are first presented. Indeed, it is expected that, as in any effective teaching setting, the teacher will monitor student performance and extend opportunities for practice in subsequent months. It is particularly noteworthy that the nature of some skills and competencies, especially those in the areas of autonomy and social skills and oral language, are such that practice and experiences will need to be ongoing throughout the entire school year. It maybe helpful to indicate “ongoing” in association with each of these skills on the monthly curriculum plan to serve as a reminder of the ongoing nature of these skills, even though they may only be noted during the first month in which they are presented. On the sample curriculum plan (pp. 405 - 423), the  icon is used to denote skills on the plan that will be addressed in an ongoing fashion.

Content Order

Decisions about when to present certain content, such as particular rhymes, poems, finger plays, fiction, non-fiction, artworks, and songs, can be made with great flexibility, keeping in mind that some rhymes and stories are shorter and less complex than others and are perhaps put to better use in the earlier months of the school year. As you select rhymes, stories, songs, science topics, music and artwork from the *Preschool Sequence* for certain months, you may want to consider holidays and traditions that are generally associated with particular months.

Teachers should strive to integrate the content from the *Preschool Sequence* into their lessons using the following guidelines:

- Include approximately six to eight new rhymes, poems, or fingerplays per month
- Include approximately four to six works of fiction or non-fiction per month
- Include approximately one to two music selections per month
- Include approximately one to two artworks per month

I. Getting Started

Skill-Driven Themes

The *Preschool Sequence* identifies experiences, skills and knowledge in a sequential manner, helping teachers recognize what to teach to build upon children’s previous knowledge. Once a program decides the order and month in which to teach the skills, the teacher may want to then choose a theme to tie all of this information together in a fun and engaging way. Effective teachers use the skills for the particular month to determine the theme. **DAP 161** Effective teachers use a theme to allow them to make cross-curricular connections between the skills and content presented. For example, in September a teacher has decided to teach the content and skills including the following:

- I-AS2.1** *Name parts of the body: Name body parts: arm, ear, eye, face, finger, foot, hair, hand, head, leg, mouth, neck, nose, stomach, and toe.
- II-AS2.2b** Draw a two-dimensional picture of a person that includes a head, with eyes, eyebrows, nose, mouth, hair, neck, body, arms with hands, legs with feet.
- II-MC1.2** Relax specific body muscles and/or the whole body, moving from a high activity level to a quiet focused state.
- II-SC1.4** Identify the sense and body part associated with the experience of certain sensations.

Paul Klee, *Head of Man - Senecio*

An appropriate theme might be “All about Me and My Body.” This thematic unit aligns well with all of the skills and content to be addressed and allows the teacher to make cross-curricular connections between autonomy and social skills, oral language, science, movement and coordination, and visual arts. Cross-curricular connections help children learn by making connections between what they already know and some new content or skill.

Skills addressed across time can be integrated into multiple subsequent themes. For instance, orientation in space (geographic) skills may be developed over a longer period of time through a series of subsequent week long themes of “Life in the City,” “Life in the Country,” “Life in the Jungle,” and “Life in the Desert.”

Using the Curriculum Plan

Once the year-long (or two-year-long) month-by-month curriculum plan is completed, it is anticipated that each teacher will focus on one month at a time, starting with the first month of the school year, to guide the more detailed planning of specific activities and centers for the month. **DAP 154** Teachers will undoubtedly add other experiences, activities, rhymes, stories, songs, and so on, each month based upon their children’s interests and preferences. However, it is important to think of your month-by-month curriculum plan as the foundation of your program, upon which you build classroom experiences.

Some preschool teachers may find this notion of long- and short-term planning to be a new concept. For many, many years, accepted early childhood theory and practice stipulated that children constructed their knowledge of the world individually, without influence from others. Planning was deemed inappropriate, if not impossible, in that learning was to be only child-initiated. **DAP 161** We now know that a more balanced approach is necessary—teachers can be sensitive to children’s spontaneous interests and provide time to explore those interests, while still planning other experiences and activities that are deemed essential to the development of all children.

To better understand how to incorporate children’s interests and still use the month-by-month curriculum plan to guide your instruction, consider the following example:

You have decided that in the area of Scientific Reasoning, you will focus on the human body during the month of September. However, when school starts you have a child who is wildly enthusiastic about and can’t stop talking about his new pet kitten. To capitalize upon all the children’s evident interest, you decide to postpone the human body activities that you had planned and instead introduce activities on observing and caring for animals, originally slated to be introduced in October.



What is important is to be certain to reinsert the human body activities, actually noting it as part of the plan in another month, as soon as you decide to make a change. That way, you won't inadvertently forget about these content and skills.

Ultimately, the point of the month-by-month curriculum plan is not to rigidly adhere to what was originally set out in writing. As the year progresses, you may find any number of very good reasons to modify the original plan and shift some things from one month to another. The purpose of the plan is to make sure that changes are made in a conscious and deliberate way that ensures that the essential experiences of the *Preschool Sequence* will not be omitted.

Lesson Planning

By their nature, some of the competencies in the *Preschool Sequence* lend themselves to particular instructional or organizational strategies in terms of the types of experiences provided. For example, the goals and skills that focus on using appropriate social skills will be most naturally addressed in group settings. Conversely, development of the emerging literacy skill of associating sounds with the written letters of one's own name might be best approached individually.

DAEP 154 By and large, however, most of the *Preschool Sequence* competencies can, and should, be presented in a variety of ways. These may include large- or small-group activities; one-on-one teacher-child or one-on-one peer interactions; child-initiated or “free choice” center activities; and so on.

The manner in which a variety of organization strategies may be used can be illustrated by considering a specific example from the *Preschool Sequence*, the patterning competencies in the math section. The teacher might first introduce and demonstrate the concept of patterning in a large group. Later, the teacher might work with a small group of children, making patterns together, while the remainder of the children participate in free choice center time activities. At another time, the teacher might take aside and work with just one child, in order to scaffold learning, challenging, but not frustrating, the child, approaching the task one step at a time. At yet another time, the teacher might pair together two students, one who is skillful at patterning and one who is not, asking the more competent student to create patterns for the other to copy. The teacher might also create a center with a variety of materials that lend themselves to pattern making, for instance Unifix® cubes, small manipulative objects of different colors and sizes, paper, stickers, colored markers, or colored paper strips to make into paper chains. Through adult interaction and modeling, children visiting the center would be encouraged to create their own patterns.

The possibility of so many organizational strategies for presenting experiences permits teachers to creatively personalize the *Preschool Sequence* to best meet the needs of the children in their class. For teachers not accustomed to considering a full range of organizational strategies, the initial selection and management of these possibilities may present new challenges. Teachers are encouraged to consciously avoid an either-or approach, for example, using only “free choice” center type activities or only large group activities. As teachers become increasingly familiar with both the *Preschool Sequence* and their own children's particular needs, teachers will more easily and effectively integrate a variety of organizational strategies in their daily activities.

Considerations for Lesson Planning

Effective teachers plan for planning. These teachers commit specific time on a daily and weekly basis to review, assess and adjust the way their program is running, and thus its impact on the children—large and small groupings, and individuals. As with month-by-month curriculum planning, there are several considerations for lesson planning:

- Educationally meaningful experiences
- Assessment
- Instructional groupings

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- The daily routine
- The language of instruction
- Individual children
- Cross-curricular connections
- Other available resources

The sections below address each of these considerations in detail.

Educationally Meaningful Experiences

Intentionality is a hallmark of effective teaching. Ensuring that all possible teachable moments are utilized requires reflection on each activity and its purpose. Does the activity support goals, competencies, skills, or content from the *Preschool Sequence*? Does the activity engage or interest the children? Does the activity challenge, but not frustrate the children? What can children do while waiting for their peers to complete an activity? How can children be engaged in meaningful activities while waiting in line?

Assessment

DAEP 162 Through assessment, effective teachers determine each child's progress toward the goals and skills of the *Preschool Sequence*. Using this information to guide instruction ensures that each child is being met at his or her capabilities. Effective teachers use the assess-plan-teach cycle, discussed in the *Assessment* section of this chapter. These teachers reflect on classroom activities and experiences, modifying targeted content, educational materials and instructional strategies or planning additional experiences based on their reflection and their assessment of children's progress.

Instructional Groupings

DAEP 154 During the planning process, effective teachers consider instructional groupings to ensure that the groupings are appropriate to each activity's purpose. They ensure a balance of grouping formats throughout the day, including opportunities for the children to work individually with a member of the teaching team, as well as in small and large groups.

The Daily Routine

DAEP 155 A clear understanding of the daily schedule and its components allows effective teachers to ensure that children have the opportunity to participate in both teacher-facilitated and child-initiated activities. They consider the goals and skills being currently addressed or reinforced and ensure that child-initiated activities include materials that support these goals and skills. For instance, if a science skill being addressed is *Classify images of animals according to habitat or environment in which they generally live*, classroom centers can be setup to include a zoo in the dramatic play center; unit blocks, plastic animals, and plastic plants in the block center; animal puzzles in the manipulative center; animal stamps, ink, greenery, and stickers in the art center; and plastic fish, plants, and water animals at the sensory table.

The Language of Instruction

DAEP 157 Review and consideration of the language of instruction during the planning process ensure that teachers explicitly include and model novel language related to each activity. Effective teachers note the language of instruction and other novel vocabulary in advance, and they plan for and create opportunities to use this language during classroom activities.

Individual Children

DAEP 154 Each child has individual learning needs that can be met through the use of scaffolding strategies. These strategies, discussed in the "Scaffolding" section of this chapter, allow teachers to provide challenge or assistance to children to ensure that they are working within their zone of proximal development, or just beyond their independent capabilities. Each domain chapter in this handbook includes a "Scaffolding" section that provides specific examples of how, using a variety of strategies,



content from the domain can be scaffolded to support children's individual needs. Effective teachers consider specific children during the planning process and explicitly document content and strategies within their plans to meet these children's needs.

Cross-Curricular Connections

DAP 161 Although Core Knowledge goals may be taught within the context of their primary subject area or discipline, effective teachers recognize that teaching specific goals and skills within the context of multiple domains of learning is the most effective way to increase children's competency and deepen children's understanding. These teachers use multiple contexts, situations, and content areas to address skills from the Sequence. They also develop thematic units based on the skills being addressed.

Each content area chapter in this handbook includes a "Cross-Curricular Connections" table. This table illustrates how developmental domains are interrelated. Each table lists a sample of content or skills from other domains that is related to and can be addressed with skills from the chapter. Teachers can use these skills to plan and teach using an integrated approach in the development of early childhood skills. Additionally, each chapter contains sidebars in the margin documenting "Cross-Curricular Teaching Ideas."

Other Available Resources

The *Preschool Sequence* is a set of model guidelines describing fundamental competencies and specific knowledge for preschool age children that can provide a solid, coherent foundation for later learning. **DAP 161** The skills of the *Preschool Sequence* provide a flexible framework for planning activities and experiences important to children's early development. Effective teachers understand the skills of the sequence well enough to recognize quality lessons and activities from other sources. These teachers supplement their own creation of lessons and activities with high-quality lessons from other sources.

For instance, the mathematical reasoning skills in the *Preschool Sequence* are well represented by the lesson plans and activities of *Saxon Pre-K Math* (Saxon Publications, 1998) and *Number Worlds Level A* (SRA McGraw Hill, 2006). Likewise, the language and literacy skills in the *Preschool Sequence* are well represented by *Ladders to Literacy* (Brookes Publishing, 2007) and *Emergent Literacy Lessons For Success* (Plural Publishing, 2009). Effective teachers conduct lesson planning based on their curriculum map of the *Preschool Sequence* skills, but may use activities and lessons from other high-quality sources.

The Classroom Environment

Like adults, young children respond to their environment. The environment has the power to affect perception, mood, meaning, action, and behavior. There are elements of the classroom environment over which a teacher may not have much influence, such as the colors of the walls, or the amount of natural sunlight, the ventilation in a room, or the amount and condition of the furniture. Effective teachers create a classroom environment that provides the greatest potential to encourage and support children's learning, despite conditions over which they have no control.

Creating a Welcoming Environment

All elements of the environment will reflect support for children's learning of skills, their development of autonomy and self-regulation, and the comfort essential to their success in doing so. **DAP 152** Effective teachers create a safe and healthy environment that fosters opportunities for children to explore and exhibit independence.

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The following table provides guidelines to establishing a classroom conducive to children's growth and comfort:

General Considerations	<p>Shelving, tables, furniture and rugs clearly designate centers of activity, and their boundaries. All classroom areas are visible by the teaching team while standing in any location in the room.</p> <p>The room is designed to enhance children's deliberate use of space; paths into and around centers are unobstructed, and spaces that invite running are eliminated.</p> <p>Posters, invitational signs, materials that support center activity and creativity are clearly visible, support behavioral expectations, and are displayed at child's eye level.</p>
Classroom Centers	<p>The following classroom centers are incorporated into the classroom: dramatic play center, library, listening center, writing center, block center, table toys or manipulative center, sensory table, science and discovery center, and expressive art center.</p> <p>Noisier, more active centers, such as blocks and dramatic play, are placed near one another, while quieter, less active centers, such as library and listening center, are placed near one another. If possible, art and sensory centers are located near a water source for easy clean-up. Centers that complement one another, for instance, blocks and dramatic play, are placed in close proximity.</p>
Furniture and Materials	<p>Furniture is child-sized. Materials are organized, stored, and labeled in a manner that fosters children's independent use and care for them. Other visual cues, such as footprints, step-by-step illustrations, and arrows, are used to assist children with self-sufficiency and organization.</p> <p>Materials are safe and well maintained, with no safety hazards (e.g., broken edges, missing screws).</p> <p>Children have individually assigned places to store their belongings. Depending on the age of the child, these places are labeled with a photo of the child and/or the child's written name.</p> <p>Teacher materials and cleaning products are stored in an area that is not easily accessible to children, such as on high shelves and in locked cabinets.</p>

Social Environment

DAP 151 The social environment in the classroom fosters a sense of community. Effective teachers support development of children's cooperation, listening skills, manners, and general consideration of one another. **DAP 159** Classroom rules are used to set clear limits regarding acceptable and unacceptable behaviors. These rules are taught, displayed, and reinforced. Social skills are explicitly addressed using a positive behavior support system that allows teachers to reinforce desired behavior. **DAP 175** A conflict resolution system is used to support children as they work together to solve conflicts and problems that arise in the classroom.

Child-Friendly Environment

A child-friendly classroom environment fosters children's sense of belonging, pride in their work, positive relationships, and self-sufficiency and involvement in classroom activities. Furniture and materials are child-sized, and organizational strategies are used to ensure children can access and put away classroom materials on their own.

Children's work that is organized intelligently, described in print, and attractively displayed extends the work beyond the activity, and becomes a resource to review and a place to return for children and parents alike. Children's (and parents')



understanding of new concepts can be supported by visual aids supplied and attractively displayed by teachers. Visual aids can encourage children into centers they otherwise ignore, assist children in understanding new vocabulary, and stimulate language and creativity.

Effective teachers create classroom displays that relate to current skills or supporting thematic units. These displays are predominantly at the children's eye level and are referenced to reinforce skill development or make cross-curricular connections. For instance, an effective teacher might point out collages that children made from items found on a nature walk and say, "When we went on our nature walk we found many different kinds of leaves and sticks. Leaves and sticks are parts of a plant. Today, we are going to read a book about plants and learn more about how plants grow."

Effective teachers demonstrate their value of the children's efforts by treating children's work products with care and respect. These teachers talk with children about their work, and often document children's work with the child's dictation or explanation of the work.

Visitor-Friendly Environment

A visitor-friendly classroom helps parents and other visitors understand what is happening in the classroom, so that they can easily participate in the day's activities with little or no guidance. Effective teachers foster a visitor-friendly classroom environment by posting the week's lesson plan. Visitors can reference the plan to better understand the structure of the day and the content and skills being addressed. Effective teachers label each learning center with "When children play here they learn..." signs to help visitors identify and support skills that are developed at each center.

Print-Rich Environment

Display and use of print in the classroom environment fosters children's developing literacy skills. Effective teachers include object labels, alphabet letters, and charts with children's dictated stories. It is not enough to simply enhance an environment with print. Effective teachers draw children's attention to the print around them by talking about the letters, words, and uses of print throughout the day. Effective teachers engage children in literacy activities on a daily basis. These activities, such as the creation of Know-Wonder-Learn (KWL) charts and Language Extension Activity (LEA) charts, provide opportunities for teachers to model and discuss forms and uses of writing and print. The finished charts are displayed in the classroom and are subsequently referenced by teachers and children. For more information on creating KWL and LEA charts see the *Language and Literacy* chapter of this handbook.

Mathematically Rich Environment

There has been much focus in the past decade on creating "literacy-rich" early childhood environments. Mathematical richness is also important to the development of young children. Effective teachers create a mathematically rich classroom environment that includes concrete manipulatives like blocks, collections, and measuring tools, that allow children to experiment with mathematical concepts such as quantity and number sense, measurement, patterns, and computation. A mathematically rich environment also includes materials like dominoes, graphs, and dice to support the development of symbolic representation. A mathematically rich environment includes numerals posted where children can see them. These visual displays include real world uses of numbers (calendars, graphs, schedules, recipes). Finally, the environment includes materials, activities and dramatic play opportunities that allow children to see how math used in real-life situations like going to the grocery store, baking cookies, or building a bird house.

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Classroom Centers

Classroom centers, or learning areas, may include areas for dramatic play, library, listening, computer, writing, block, table toys or manipulative, sensory table, science and discovery, and expressive art. Effective teachers rotate the materials available in each center regularly. Their selection of materials for each center is based upon the competencies and skills currently being addressed during other classroom activities. The materials and activities available at classroom centers are intentionally planned to allow opportunities for children to practice, expand, or extend competencies and skills that were addressed during other parts of the daily routine. Materials for each center are stored and labeled with pictures and words so that children can access and replace them independently. Supplies and materials are plentiful for the number of children permitted at each center. Effective teachers promote sharing, but also ensure that there are multiples of the toys and materials that are most popular with children.

Classroom centers each provide opportunities to develop language and literacy skills through inclusion of reading and writing materials related to the center, current skills, and or supporting thematic unit. These materials represent real-world or naturalistic uses of literacy. For instance, the block center might contain blue construction paper and white chalk so that children can make “blueprints” for their constructions. The dramatic play center, setup as a grocery store, might contain note pads for shopping lists and sales fliers from the newspaper, and the science and discovery center might contain paper and drawing materials so children can document the growth and development of seeds they have planted.

Classroom Practices

In addition to the physical environment and the availability of supplies and materials, children’s classroom experiences are strongly influenced by classroom practices. Supplies and materials represent what teachers *have* and classroom practices represent what teachers *do*. In addition to how teachers “teach,” classroom practices include the things that teachers do on a daily basis to plan, assess, support language development, and manage behavior in the classroom.

Planning and Assessment

Effective teachers use a month-by-month curriculum plan to guide their weekly and daily planning. **DAEP 161** Effective teachers use the lesson planning process to ensure coherence and integration of activities and content from the *Preschool Sequence*. These teachers have written lesson plans that include accommodations and extensions for specific children based on individual needs. Effective teachers assume a highly interactive role in guiding and presenting experiences in the classroom. Even during child-initiated activities, effective teachers interact with children by participating in a manner that follows the children’s lead. During the activity, these teachers use direct observation as a means of assessment. These teachers also engage children in naturalistic conversation aligned with the activity and the children’s direction. **DAEP 155** Effective teachers involve children in planning and reflecting upon activities through discussion before, during, and after the activities. This discussion informs the teacher’s modification and planning of activities that are engaging to children.

Effective teachers plan for assessment. These teachers document opportunities for assessment in their lesson plans and conduct assessment in an ongoing fashion throughout all portions of the classroom routine. For more detail on planning and assessment, see the “Assessment” section of this chapter.

Language Support

Language development is at the foundation of the *Preschool Sequence*. Opportunities to support language development are integrated throughout the sequence. The “Language of Instruction” tables in each domain chapter document specific language to which children should be exposed; the *Oral Language* chapter includes specific goals and skills related to language development; and oral language skills related to each content area domain are included in the chapter for that content area.



Effective teachers use practices that support language development. **DAEP 157** These teachers explicitly plan the language of instruction that can be used within each activity, and they model rich vocabulary, grammatically correct language and a variety of syntactical structures as they talk to and interact with children.

Effective teachers explicitly introduce new vocabulary and foster conversations with children. **DAEP 157** These teachers accept each child's communication attempts and expand upon children's utterances no matter what the child's language level. They listen responsively to children and provide children with ample time to formulate their thoughts and responses. Specific strategies for supporting language development are discussed in the *Oral Language* chapter of this handbook.

Classroom and Behavior Management

The development of social skills, communication skills, and self-regulation skills are important to the academic success of young children. **DAEP 158** Effective teachers model and encourage good behavior and foster children's growing development of self-regulation by providing them with opportunities to plan and solve problems. Effective teachers ensure that classroom routines and the physical environment reduce the potential for confusion and conflict and enhance a community of caring and cooperation by:

- **DAEP 159** implementing a few simple and consistent classroom rules and involving children in the creation and documentation of these rules.
- implementing routine procedures so children will learn and eventually know how to do everyday tasks like lining up to go outside, brushing their teeth, cleaning up from center time, and putting their things away when they arrive.
- using classroom management systems for student check in, knowing when centers are full and what to do if a center is full, and performing daily transitions.
- **DAEP 158** teaching children pro-social skills and the language that goes with those skills through an explicit program such as *Stop & Think Social Skills Program* (Knoff, 2001).
- **DAEP 158** teaching children conflict resolution strategies and the language that goes with these strategies through an explicit program such as *Peace Making Skills for Little Kids* (Schmidt, & Friedman, 1993).
- designating and guiding children's use of a space for "private time," a time when a child needs to relax or calm down and have time to him or herself. This space should be located in a quiet area of the classroom and provisioned comfortably with pillows and soft objects.

Effective teachers provide an emotional infrastructure within which children learn to cooperate, empathize, and express positive messages to other children, and to acknowledge feelings such as anger, fear, and sadness in appropriate ways.

Daily Routine

Core Knowledge teachers follow a consistent, organized, and intentional daily schedule in order to ensure the application of an effective assess-plan-teach cycle. The use of the pictorial schedule cards is one method that assists children to independently follow the daily routine. This routine also supports children's growing understanding of time.

DAEP 155 The Core Knowledge daily schedule reflects a balance of child-initiated and teacher-guided activities. Both child-initiated and teacher-guided activities occur in multiple groupings including individual, small group and large group. **DAEP 153** The "pacing" ensures an appropriate mix of quiet, calm activities and loud, energetic activities. Activities that require children to be seated should be followed by activities that allow children an opportunity to move around. Activities that excite children should be followed by calming activities, like storybook reading or art activities.

The daily schedule and weekly lesson plans ensure that teachers can use each part of the day as opportunities for children's learning, and to intentionally plan for that opportunity. For example, as children move from one portion of the daily routine to

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another, transition activities are used to review or assess skills and provide a means of ensuring an organized and efficient transition from one activity to another.

The *Preschool Sequence* may be implemented in either half- or full-day settings. Elements of the daily schedule and activities performed within each element of the routine are presented in the sections below:

Arrival

Arrival time provides effective teachers with an ongoing opportunity to develop and deepen relationships with parents and children. During arrival time, teachers greet the children and their parents as they arrive. **DAP 150** Effective teachers use arrival time to build warm and caring relationships with parents and children.

For most programs, arrival takes place during a window of time, in which children trickle in as they arrive. Effective teachers provide a structured routine in which children hang up or store their coats and book bags and indicate their attendance for the day. Effective teachers plan arrival time to ensure that children who are waiting for their peers are engaged in constructive and meaningful activities while they wait.

During arrival time children:

- greet teachers and classmates.
- hang up coats and book bags.
- look for name cards and place them on daily attendance chart.
- sign in (older children).
- participate in a table top activity, such as manipulatives, puzzles, books, or drawing.

Circle Time

Circle time activities allow teacher and children to address some of the administrative and business needs of the day, while addressing development of both new and ongoing skills. During circle time, effective teachers conduct administrative tasks such as finalizing attendance, meal orders, and classroom job assignments in a manner that involves the children and supports skill development. During circle time children participate in literacy activities including morning message and recitation of songs, nursery rhymes, or finger plays. Circle time also offers the opportunity to introduce or reinforce specific skills and content from the *Preschool Sequence*.

Effective teachers consider the length of circle time, and ensure that it doesn't last longer than children are capable of maintaining engagement in the circle time activities.

In classrooms that have a full-day schedule, teachers may wish to conduct two shorter circle times. During the first circle time, the "business of the day" is addressed (e.g., calendar, weather, attendance). A second circle time later in the day can be used to address specific skills and content.

During circle time, children:

- explore calendar and weather.
- participate in morning message.
- review classroom rules or *stop and think* social skills.
- recite finger play(s) and/or sing song(s).
- review daily schedule and note any changes for the day.
- participate in math-related activities such as counting the number of children present, patterning the days on the calendar, graphing the weather, and counting the number of a particular letter in the morning message.



Meals

Breakfast, snack, and lunch times provide an often missed opportunity to foster oral language skills. During meal times, effective teachers facilitate conversation by responsively interacting with the children, making comments, and following and extending children's conversational topics.

During meal or snack time, children:

- eat nutritiously.
- develop social skills and table manners.
- participate in and lead conversations, building oral language skills and self-confidence.

Small Group Time

Small group time provides teachers the opportunity to work with individual children or small groups of children on particular skills. Effective teachers create dynamic ability-based groups and recognize that the groupings may change based on the particular skills being addressed or children's ongoing progress with the skills. During small group time, each group works with either the teacher or the assistant teacher. Activities planned for each group are based on the skills being addressed and ability level of the children in the group. Effective teachers scaffold individual children's learning within each small group.

During small group time, children:

- participate in activities designed specifically for their individual skill level.
- interact with the teaching team with less "competition" from peers.
- interact and cooperate with their peers.
- have more opportunities to respond and demonstrate capabilities.
- have more opportunities to receive individualized feedback.

Center Time

Center time provides children with an opportunity to make choices and initiate their own activities. Center time is an intentional part of the day. Although center time is often referred to as "free play," early childhood experts consider centers and play an opportunity to extend learning (Bowman, Donovan, & Burns, 2000; Copple & Bredekamp, 2009; Harms, Clifford, & Cryer, 2004). The National Research Council report called "Eager to Learn: Educating Our Preschoolers" (2001) notes these opportunities for learning as follows:

*Good teachers acknowledge and encourage children's efforts, model and demonstrate, create challenges and support children in extending their capabilities, and provide specific directions or instruction. **All of these teaching strategies can be used in the context of play and structured activities.** Effective teachers also organize the classroom environment and plan ways to pursue educational goals for each child as opportunities arise in child-initiated activities and in activities planned and initiated by the teacher. (Bowman, Donovan, & Burns, 2000).*

The Early Childhood Environment Rating Scale (ECERS; Harms, Clifford, & Cryer, 2004), a commonly used classroom observation tool uses the term "free play," but their definition focuses on child choice of materials and companions. The ECERS definition also states that "free play" does not mean "free for all" or no rules and that "free play" does not mean that all areas of the classroom must be open at one time with all materials accessible. Effective teachers plan the available materials and activities for each center, and rotate them frequently to provide opportunities for children to develop and refine specific skills from the *Preschool Sequence*.

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The Teacher's Role During Center Time

DAP 153 Effective teachers strive to include at least 60 minutes of learning center time on a daily basis. These teachers also deliberately plan and conduct center time activities. The teacher processes related to supporting center time take place at three distinct times—before center time, during center time, and after center time.

Before center time, teachers deliberately plan activities and materials for each center that support and reinforce the current skills or supporting thematic unit. **DAP 153** Effective teachers rotate the materials at *each* center regularly to support intentional learning activities and generate interest in the center. These teachers also explicitly review the available materials and changes to materials and activities with children. This review process provides children with ideas (or models) of what they might do at each center, allowing them to more effectively participate in the planning process (see The Plan-Do-Review Process section below). Before center time, teachers facilitate the plan portion of the plan-do-review process.

During center time, teachers and children are participating in the do portion of the plan-do-review process. During center time, effective teachers assume an active, but not dominant, role. These teachers interact with children by joining in the play and scaffolding where appropriate to extend both learning and the level of play. Effective teachers use center time as an opportunity to facilitate children's planning and initiative, use of language, and development of self-regulation. Center time also provides teachers with an excellent opportunity to observe and assess children during their own natural activities. Effective teachers facilitate this assessment process by intentionally planning center time activities and deliberately considering what skills and competencies to observe and assess at each center.

After center time, effective teachers involve children in the clean-up process. Classroom centers are organized and labeled to allow children to independently participate in the clean-up process. After center time, teachers also conduct the review portion of the plan-do-review process. Effective teachers scaffold children's review of their activities by actively observing during center time so that they can provide children with hints and reminders during the review process. These teachers scaffold children's language skills during the review process by allowing non-verbal retelling, modeling language, and responding responsively to children (see the *Oral Language* chapter for specific language support strategies). Finally, after center time, effective teachers reflect on the materials and activities that were provided. These teachers consider whether the materials interested (or engaged) children and stimulated independent practice of recently acquired skills. They use this information to inform the assess-plan-teach cycle and modify planned activities and available materials accordingly.

The Plan-Do-Review Process

The plan-do-review process emerged as the core of the High/Scope curriculum (Hohmann & Weikart, 2002) in the 1960s. The process, which has been adopted by many non-High/Scope classrooms, was designed to foster self-regulation and initiative and to support language development by allowing children to express a plan of action, carry out their actions, and reflect upon and discuss the actions they performed. Effective teachers in Core Knowledge preschool classrooms use the plan-do-review process.

Plan

During the plan process, children express their plans using the communication skills they have mastered. For some children, this will indeed be a verbal process. For other children, initial attempts at planning may require the use of pictures or gestures. **DAP 158** Effective teachers scaffold children's planning so that over the course of the school year planning progresses along a continuum from non-verbal to verbal (complete sentences) expression of plans.

Effective teachers use a lesson planning process that incorporates a system to ensure balanced opportunities to plan and review for all children. Effective teachers recognize that each child needs many opportunities over time to express



their plans, but that there is not sufficient time for each child to plan on a daily basis. These teachers track which children have had the opportunity to plan, ensuring that each child has a weekly opportunity to plan. Effective teachers also facilitate the planning process and support children's plans by implementing clear system for indicating which centers are open or closed, for ensuring balanced opportunities to participate in each center, and for transitioning between centers during center time.

Do

Play, and the resulting learning, is the work of the child. The do process, when deliberately planned by the effective teacher, supports learning activities as children carry out the plans that they have made.

During the do portion of center time, children:

- initiate their own activities.
- make choices about activities, materials, and play partners.
- have opportunities to practice and explore newly introduced skills and concepts.
- develop language skills through the plan-do-review process and as they interact with adults and peers during center time.

Review

During the review process, children reflect upon and discuss their center time activities using the communication skills they have mastered. As with planning time, for some children, this will be a verbal process. For other children, initial attempts at reviewing activities may require the use of pictures or gestures. Effective teachers scaffold children's reviewing so that over the course of the school year review progresses along a continuum from non-verbal to verbal (complete sentences) review of activities.

Outdoor Play

During outdoor play time, children take part in both child-initiated play and exploration and structured movement activities, such as group games and obstacle courses. Effective teachers take an active role in outdoor play time, joining in the play, interacting with children, and planning and conducting structured play activities to address specific skills from the *Preschool Sequence*.

During outdoor play, children:

- develop fine and gross motor skills.
- cooperate with peers to play group games.

Read Aloud

Read aloud time offers opportunities to introduce, review, and support each of the skills in the *Preschool Sequence*. Although some of the skills can be addressed directly through the book reading process (e.g., identifying letters of the alphabet, attending and listening to illustrate picture books with simple story lines, predicting events in a story), other skills can be addressed through the content of the story (e.g., noting key physical characteristics, development, needs and life cycle of plants and animals, naming opposites, and looking at and talking about works of art). For a detailed description of the storybook reading process and specific strategies, see the *Storybook Reading and Storytelling* chapter.

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During read aloud time, children develop a variety of skills from throughout the sequence, including:

- demonstrate observable listening behaviors and wait turns to speak in a group.
- discriminate attributes including shape, color, and size.
- understand and use intonation and emphasis to ask a question, express surprise, agreement, displeasure, or urgency.
- understand and use temporal, spatial, and sensory words.

Read aloud time can also be used to introduce and review content related to skills like “describe basic properties of air, water, and light” and “describe basic characteristics of plants and animals” using informational texts and storybooks.

Nap/Rest

Nap or rest time provides children with an opportunity to wind down and rejuvenate. For children who don't nap, this time provides an opportunity for some one on one time with the teacher. Effective teachers sometime talk or read quietly with children who don't nap. Talking or reading quietly with these children provides them an opportunity participate in a restful activity and develop a warm relationship with teacher or assistant.

During nap time, children:

- wind down from their busy day.
- rejuvenate for upcoming activities.

Nap or rest time also provides an opportunity to quietly plan upcoming activities, review and assess children's work products from the day, or make anecdotal notes to include in children's portfolios, label and file work samples into portfolios, enter assessment data into computer system, or to take down or put up bulletin boards and displays of children's work.

Dismissal

Dismissal time may offer the opportunity for a quick review, allowing children to make connections between the activities and skills addressed during the day. During the dismissal window, children may not all depart at the same time. As with arrival time, effective teachers plan intentional and constructive activities for children who are waiting to be dismissed.

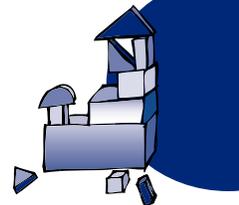
During review time, children:

- review activities that occurred during the day.
- say good-bye to classmates and teachers.

Sample Full-Day Schedule

Although the skills of the *Preschool Sequence* can be addressed within either a half-day or full-day schedule, a full-day schedules offer teachers additional opportunities to extend learning and review previously introduced skills with the children. Teachers in full-day programs may wish to consider the following additions to the daily schedule:

- a review or share time circle, where children share what they did during their day. Children can bring a toy they played with to the circle, or show artwork they created or work samples on which they wrote their name.
- a content area specific time in the afternoon each day. For instance, a math time where activities are planned to focus solely on developing math skills.
- a second read-aloud time. This second read-aloud time enables teachers to re-read and extend upon a story from the beginning of the day.



Below are two examples of how a full-day Core Knowledge classroom schedule may look.

Sample Full-Day Schedule #1

8:00 – 8:15	Arrival
8:15 – 8:30	First circle
8:30 – 8:40	Bathroom break
8:40 – 9:00	Breakfast
9:00 – 9:15	Second circle
9:15 – 9:30	Small group time
9:30 – 9:35	Center time: Plan
9:35 – 10:20	Center time: Do and Clean-up
10:20 – 10:30	Center time: Review
10:30 – 10:50	Outdoor play
10:50 – 11:10	Read aloud
11:10 – 11:20	Bathroom break
11:20 – 12:00	Lunch
12:00 – 1:30	Nap
1:30 – 1:40	Bathroom break
1:40 – 2:00	Snack
2:00 – 2:20	Music and movement
2:20 – 2:35	Math time
2:35 – 2:45	Daily review / Share time
2:45 – 3:00	Dismissal

Sample Full-Day Schedule #2

8:00 – 8:15	Arrival
8:15 – 8:30	First circle
8:30 – 8:40	Bathroom break
8:40 – 9:00	Breakfast
9:00 – 9:15	Second circle
9:15 – 9:20	Center time: Plan
9:20 – 10:05	Center time: Do and Clean-up
10:05 – 10:15	Center time: Review
10:15 – 10:30	Small group time
10:30 – 10:50	Outdoor play
10:50 – 11:00	Bathroom break
11:00 – 11:40	Lunch
11:40 – 12:00	Read aloud
12:00 – 1:30	Nap
1:30 – 1:40	Bathroom break
1:40 – 2:00	Snack
2:00 – 2:20	Music and movement
2:20 – 2:35	Read aloud
2:35 – 2:45	Daily review / Share time
2:45 – 3:00	Dismissal

Sample Half-Day Schedule

During a half-day schedule, teachers may only have children for two and a half to four hours. Effective teachers plan carefully to squeeze the most teachable moments out of this limited time. Some considerations to make the most of half-day programs include:

- planning effectively and being mindful of pace.
- using each transition as a learning opportunity (see the “Transitions” section below).
- using meal or snack times as an opportunity to conduct the planning or review portion of the plan-do-review process.
- incorporating music and movement activities into dismissal times through good-bye songs and fingerplays.
- creating a “teacher table” center and conducting small group time as a portion of center time. Children rotate to the “teacher table” during center time to participate in small group activities with the teacher.
- using outdoor time intentionally to support skill development through games and activities.
- using a shorter center time, but ensuring that children have ample opportunities to make choices and participate in child-initiated activities during other parts of the daily routine (e.g., arrival, dismissal, upon completion of other activities).

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Below are two examples of how a half-day Core Knowledge classroom schedule may look.

Sample Half-Day Schedule #1 (four hours)

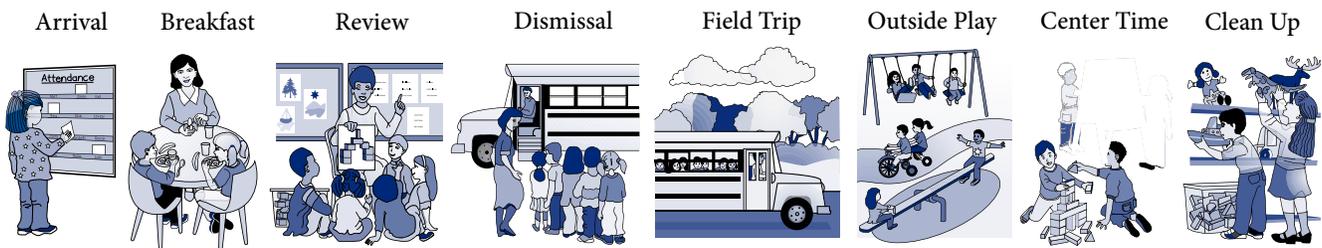
8:00 – 8:15	Arrival
8:15 – 8:30	First circle
8:30 – 8:40	Bathroom break
8:40 – 9:00	Breakfast
9:00 – 9:15	Second circle
9:15 – 9:30	Small group
9:30 – 9:40	Center time: Plan
9:40 – 10:15	Center time: Do Clean-up
10:15 – 10:30	Read aloud
10:30 – 10:40	Bathroom break
10:40 – 11:00	Outdoor play
11:00 – 11:40	Lunch / Center time: Review
11:40 – 12:00	Music and Movement/Dismissal

Sample Half-Day Schedule #2 (three and one half hours)

8:30 – 8:45	Arrival
8:45 – 9:00	First circle
9:00 – 9:10	Bathroom break
9:10 – 9:30	Breakfast
9:30 – 9:45	Second circle
9:45 – 9:55	Center time: Plan
9:55 – 10:25	Center time: Do/Small group
10:25 – 10:40	Read aloud
10:40 – 10:50	Bathroom break
10:50 – 11:10	Outdoor play
11:10 – 11:50	Lunch / Center time: Review
11:50 – 12:00	Dismissal

Use of the Pictorial Schedule

A pictorial schedule gives children a visual plan of what their daily routine will be and lets them know what to expect. Core Knowledge has created colorful pictorial schedule cards, a sample of which are illustrated below, that show each of the different activities that occur in the daily routine.



Effective teachers display the pictorial schedule cards on a wall or bulletin board at child's eye level. The cards are arranged in chronological order as the activities occur within the daily routine. An arrow or marker, placed above or below the cards, signifies which part of the daily routine is currently taking place. Throughout the course of the day, each time there is a change in activity, movement of the marker can be integrated into the transition. Using this process, effective teachers call children's attention to the schedule throughout the day, building children's understanding of time including past, present, and future. Effective teachers initially model this process, and then later add the job of "time keeper" for children. As a time keeper the child assumes the responsibility of moving the arrow at each change of activity. Effective teachers continue to model the language of time, describing the relation between different activities. For example, "We just finished center time. *Next*, we will have lunch. *After* lunch we will go outside to play. *Tomorrow*, some of you can finish the sculptures that you started at the art center."



Transitions

Effective teachers use care in planning their routine to minimize the number of transitions. Where transitions are required, effective teachers use the time deliberately as an opportunity to review and practice skills and competencies. Transition times occur throughout the preschool day and often involve waiting. Effective teachers use consistent routines to ensure that children know what is expected and to facilitate fast and efficient transitions. When waiting is required, these teachers use the time to support learning and skill development. They may sing or recite rhymes with waiting children to develop phonological awareness, or they may engage the children in reordering the line by height. For transitions that involve children moving from one area of the classroom to another, effective teachers dismiss children in small groups using skill-based activities like identifying colors, locating their name or a particular letter, or moving like a specific animal.

Many children, especially those with special needs, have difficulty during classroom transitions. Often, these children are more comfortable and perform better when they know what to expect and what is expected of them. Effective teachers provide visual and or verbal warnings of upcoming transitions paired with a review of what will happen during the transition. Effective teachers provide and model clear expectations during transitions, positively reinforcing rules and appropriate social skills.

Using the *Preschool Sequence* with Children Who Have Special Needs

The *Preschool Sequence* is well suited for use with children who have special needs. Understanding elements of the *Preschool Sequence*, making some adaptations to the classroom environment and instructional processes, and working closely with parents facilitate a teacher's ability to meet the needs of all children, including children with special needs.

Effective teachers understand and embrace inclusion, or the practice of having children with special needs actively participate in the same setting as their typically developing peers (DEC/NAEYC, 2008). Inclusion offers supports to children of all abilities to allow them to accomplish the goals established for them by parents and professional service providers. It is important to view all children from a strength-based perspective, think about what the child can do, and how to help children who have special needs to participate fully in classroom activities. This may include:

- adapting materials,
- changing the environment, and
- differentiating instruction.

For instance, materials may be adapted for children with autism by using visuals to help them follow directions. The physical environment may require adaptation to accommodate access for children with wheelchairs, and instruction may be differentiated by providing smaller group size to accommodate more individual instruction for children with special needs.

Various elements of the *Preschool Sequence*, discussed below, lend themselves to supporting an inclusive classroom.

Preschool Goals and Skills

Each goal in the *Preschool Sequence* covers several skills. The specificity and sequencing of these skills offer guidance to teachers in making decisions about how to get from “point A” (where the child is) to “point B” (achievement of the goal). Effective teachers recognize that “typical” development encompasses a wide range of abilities, and that individual children will progress at their own pace. Using the *Preschool Sequence*, these teachers plan activities and experiences that meet children at their individual learning levels. These teachers maintain high expectations for all children, but recognize that rates and methods of learning may vary among individuals. For example, while John may be using scissors and refining his fine motor skills,

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Keisha may have less developed fine motor skills and only be able to tear. When planning instructional activities, effective teachers consider the student, the environment, the task, and the tools needed to accomplish the goal (Zabala, 1995; Zabala, 2005). For example, John may create a collage using individual images cut from a magazine, while Keisha completes her collage using torn pieces of construction paper.

Content

The stories, nursery rhymes, poems, fingerplays, songs, and art works recommended within the *Preschool Sequence* are appropriate for most children. Teachers may wish to consider adding additional stories to help children build awareness and understanding of special needs and peers who have them. See the “Resources” section of this chapter for some suggestions.

Language of Instruction

The language of instruction lists, provides a suggested sampling of the precise vocabulary to which young children should be exposed. Effective teachers recognize that children with disabilities or language delays may require more significant and intense exposure to language opportunities than their typically developing peers. In order to meet the needs of these children, effective teachers develop and modify language of instruction lists to meet the specific needs of children with disabilities. For example, teachers may focus on a subset of the language of instruction list, and provide visuals to accompany these words. Other children with special needs may not develop oral language skills as quickly as their peers or may be non-verbal. Effective teachers promote alternative ways to communicate such as pictures or pointing at objects, and provide children with tools that help them do so. For instance, students who are non-verbal can use voice output communication aids, pictures, or gestures to communicate.

Cross-Curricular Teaching

Cross-curricular teaching provides teachers with opportunities to connect content from multiple subject areas, and repeat goals and skills in multiple contexts. Repetition provided by cross-curricular teaching may be especially beneficial for children with special needs. Through repetition, children gain a sense of familiarity and growing proficiency. Effective teachers consider how to provide as many cross-curricular opportunities as possible to children who have special needs. The cross-curricular connections tables in each chapter provide a sample of skills and content that can be presented in this manner.

The Daily Routine

Children’s anxiety and insecurity may increase in a chaotic or disorganized environment. This may be particularly true for children who have special needs. Predictability and consistency support children’s ability to be successful. Effective teachers maintain a consistent routine, use a pictorial schedule to provide visual cues, and frequently review (or preview) the upcoming portions of the schedule. These teachers provide children with advance notice of scheduled changes to the normal routine and may have a standard manner for dealing with unexpected changes to the schedule. For instance, these teachers might consistently use a piece of paper to cover portions of the daily routine that will not take place, thus helping manage children’s expectations.

Effective teachers may also create a schedule change card to represent any sudden change in schedule. Although the time, date, and reason for the change may differ, repeated use of this extra card will assist children in recognizing when a change will occur. For instance, if the teacher has just announced that it is time to go outside to play, but a sudden rain storm occurs, the schedule change card can be used to indicate a break in the normal routine.

Effective teachers also plan to minimize chaos and unpredictability associated with transitions between activities. These teachers give visual and verbal cues about upcoming transitions to prepare children for the upcoming change. These teachers plan transitions for better management, moving children from one activity to another in small groups and using a repertoire of transition songs and activities. For instance, a clean-up song can signal the end of center time and the transition to clean up. A get-the-wiggles-out song can be used to transition from a lively activity to a calm activity. In addition to signaling the upcoming change, these songs foster singing skills, sound discrimination (rhyming), memorization skills, and a variety of other skills from the *Sequence*.



Scaffolding

Scaffolding strategies are particularly useful for children with special needs. These strategies support children by allowing teachers to provide and adjust the difficulty level of a task. In doing so, teachers provide tasks that are challenging but not frustrating, and children have opportunities to experience success. As children become proficient with scaffolded tasks, effective teachers slowly remove the supports provided. Children with special needs may require scaffolds (or additional support) in many areas of the curriculum, much like many of the children in the classroom setting. These scaffolds may include use of concrete materials, visual or verbal cues, fewer choices, and step-by-step feedback. Effective teachers familiarize themselves with scaffolding techniques to best meet the needs of the learner. For example, these teachers might accommodate the needs of a child who has fine-motor skill delays by replacing Unifix® cubes in a math activity with unit blocks that are bigger and easier to grasp, or these teachers might allow non-verbal children to point to pictures that represent words in a nursery rhyme while other children recite the rhyme. These scaffolds ensure that children with special needs can participate in classroom activities to their fullest capabilities. If children's proficiency with a task develops, scaffolds can be slowly removed.

Effective teachers familiarize themselves with the scaffolding strategies described in the scaffolding section of the *Using the Preschool Sequence* chapter. When planning classroom activities, these teachers consider the needs of individual learners and the scaffolding strategies that best support those needs.

Assessment

Ongoing use of assessment to inform instruction enables teachers to plan and teach from an accurate understanding of each child's position along the path to skill mastery. Although children with special needs may progress along this path more slowly than their peers and may never master the same skills as their peers, effective teachers recognize and document the strengths of these children. These teachers use many sources of documentation including observation, portfolio collection, and written, photographed, or taped recording of classroom activities that require skills to be exhibited in an authentic capacity.

Effective teachers recognize that children with special needs may require modifications or accommodations to the assessment process. These teachers may mediate assessment by using scaffolding techniques to assess children's progress. For instance, these teachers allow children with low language skills or non-verbal children to demonstrate understanding by providing receptive responses rather than expressive (verbal) responses. Often, children with special needs have an Individualized Education Program (IEP), which may include information pertaining to goals and the necessary assessment accommodations a child will require. Effective teachers work closely with parents to ensure that each child's educational goals are being met.

Resources

The titles listed below are offered as a representative sample of materials and are not a complete list of all resources.

For children —

- *A Very Special Sister* by Dorothy Hoffman Levi (Kendall Green Publications, 1997). “Laura, who is deaf, is excited about becoming a big sister, but she worries that a new baby who can hear might get more love from their mother than she does. Text and illustrations provide instructions for signing eight words.” (Barnes and Noble product description) Paperback, 36 pages, ISBN 9780930323967.
- *Howie Helps Himself* by Joan Fassler (Albert Whitman, 1975). “Though he enjoys life with his family and attends school, Howie, a child with cerebral palsy, wants more than anything else to be able to move his wheelchair by himself.” (Barnes and Noble product description) Paperback, 32 pages, ISBN 9780807534229.

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- *Ian's Walk: A Story About Autism* by Laurie Lears (Albert Whitman, 2003). “When her autistic little brother, Ian, wanders off while on a walk to the park, Julie must try to see the world through his eyes in order to find him.” (Publisher description) Paperback, 32 pages, ISBN 9780807534816.

- *It's Okay to Be Different* by Todd Parr (Little, Brown Young Readers, 2001). “For anyone who ever doubted it, Todd Parr is here to tell us all that it's okay to be different. With his signature artistic style, featuring brightly colored, childlike figures outlined in heavy black, Parr shows readers over and over that just about anything goes. From the sensitive (“It's okay to be adopted”—the accompanying illustration shows a kangaroo with a puppy in her pouch) to the downright silly (“It's okay to eat macaroni and cheese in the bathtub”), kids of every shape, size, color, family makeup, and background will feel included in this gentle, witty book. In this simple, playful celebration of diversity, Parr doesn't need to hammer readers over the head with his message.” (Amazon product description) Hardcover, 32 pages, ISBN 978-0316666039.

- Kids Corner Book Nook, <http://www.iidc.indiana.edu/cedir/kidsWeb/Booknook/booknook.html>, provides a list of books that include characters with a disability. These books may help children build awareness and understanding of their special needs peers. The book list on this web site is categorized by disability.

- *Moses Goes to a Concert* by Isaac Millman (Farrar, Straus and Giroux, 2002). “Moses and his school friends are deaf, but like most children, they have a lot to say. They communicate in American Sign Language, using visual signs and facial expressions. This is called signing. And even though they can't hear, they can enjoy many activities through their other senses. Today, Moses and his classmates are going to a concert. Their teacher, Mr. Samuels, has two surprises in store for them, to make this particular concert a special event.” (Barnes and Noble product description) Paperback, 40 pages, ISBN 9780374453664.

- *Someone Special, Just Like You* by Tricia Brown and Fran Ortiz (Henry Holt & Company, 1995). “Here are children singing, dancing, going down slides, and blowing bubbles. A girl with a sly smile carefully crosses a balance beam. Out on a science trip, two boys step close enough to touch the glass wall between themselves and a huge porpoise. One young child smells a lovely flower, another splashes in a pool, and a third bangs on a tambourine. Here are children discovering the world around them, at home and with their friends. All of these children are doing the things that children like to do the children in these photographs have handicaps. Although they may not walk, talk, hear, or see the way that others do, that doesn't make them different in their need to experience life completely. Each child in *Someone Special, Just Like You* is a full participant in the joys and pains of childhood.” (Barnes and Noble product description) Paperback, 64 pages, ISBN 9780805042689.

- *Sometimes I Drive My Mom Crazy, But I Know She's Crazy About Me: A Self-Esteem Book for Overactive and Impulsive Children* by Lawrence E. Shapiro (Childsworld/Childsplay, 1993). “This story is about a child with ADHD who develops a sense of self-worth.” (Amazon product description) Paperback, 129 pages, ISBN 9781882732036.

- *What's Wrong with Timmy?* by Maria Shriver and Sandra Speidel (Little, Brown Books, 2001). “Making friends with a mentally retarded boy helps Kate learn that the two of them have a lot in common.” (Barnes and Noble product description) Paperback, 48 pages, ISBN 9780316233378.

For teachers —

- *15 Instant and Irresistible Learning Centers* by Deborah Hillstead and Marjorie Fields (Scholastic Professional Books, 2001). Paperback, 64 pages, ISBN 0439251826.

- *Classroom Routines That Really Work for PreK and K* by Kathleen Hayes and Renee Creange (Scholastic Professional Books, 2001). This book provides strategies for arrival time, center time, small groups, outdoor play, and dozens of other routines. Paperback, 128 pages, ISBN 0590029282. Knowledge Tree Core Knowledge Getting Started Kit.

- *Creative Resources for the Early Childhood Classroom* by Judy Herr (Delmar Cengage Learning, 2007). This handy reference presents classroom ideas including topic webs, topic vocabulary, interactive bulletin board ideas, parent letter samples, music selections, transition activities, and activities to support each content area domain. Paperback, 784 pages, ISBN 1428318321.

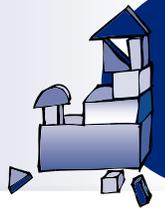


- *Developmentally Appropriate Practice* by Carol Copple (NAEYC, 2009, 3rd edition). “Since the first edition in 1987, NAEYC’s book *Developmentally Appropriate Practice in Early Childhood Programs* has been an essential resource for the early child care field. Now fully revised and expanded, the 2009 version comes with a supplementary CD containing readings on key topics, plus video examples showing developmentally appropriate practice in action. Based on what the research says about development, learning, and effective practices, as well as what experience tells us about teaching intentionally, DAP articulates the principles that should guide our decision making. Chapters describe children from birth through age 8 in detail, with extensive examples of appropriate practice for infant/toddler, preschool, kindergarten, and primary levels.” (NAEYC Product Description) Paperback, 352 pages, ISBN 1928896642.
- *Getting the Most Out of Morning Message and Other Shared Writing Lessons* by C. D. Payne and Mary Browning Schulman (Scholastic Professional Books, 1999). “This comprehensive guide to shared writing is filled with strategies for writing collaboratively with emergent writers. Explains the link between shared writing and independent writing, offers ideas for collaborative writing with children across the curriculum, provides assessment forms and classroom examples to help you know where students are in their writing development.” (Amazon Product Description) Paperback, 128 pages, ISBN 0590365169.
- National Center for Learning Disabilities, <http://www.ncl.org/>, provides information and resources for to help ensure that children with special needs succeed in school, work, and life.
- *Peacemaking Skills for Little Kids* by Fran Schmidt and Alice Friedman (Peace Education Foundation, 1993). This conflict resolution program includes an instructional book of activities, a companion cassette, I Care Cat puppet and a companion poster. The Peace Making Skills program uses activities, games, and songs to teach children listening, cooperating, sharing, and the Peace Table conflict resolution process. Paperback, 76 pages, ISBN 1878227165. Knowledge Tree Core Knowledge Social Skills Kit.
- *Preschoolers at Play! Building Language and Literacy Through Dramatic Play* by Alice K. Wiggins (Super Duper, Inc., 2006). “Each lesson begins with a list of roles for play scenarios and props, reading and writing props, and print labels that are appropriate in that lesson environment. The lists provide the basics for setting up the play scene. A sample introduction allows you to embed explicit language instruction in each theme to include prepositions, pronouns, adjectives, and verbs. The lesson plan also presents a list of vocabulary words for the teacher to model, an alphabet focus for two to three letters, beginning sounds, related literature, and implementation ideas. The CD-ROM that accompanies the book allows you to conveniently print all activities and props with a simple click.” (Super Duper Product Description) Paperback, 122 pages, ISBN 1932054391.
- *Scaffolding Children’s Learning: Vygotsky and Early Childhood Education* by Laura Bekr and Adam Winsler (NAEYC, 1995). Paperback, 182 pages, ISBN 0935989684.
- *Strategies for Including Children With Special Needs in Early Childhood Settings* by M. Diane Klein, Ruth E. Cook, and Anne Marie Richardson-Gibbs (Cengage Learning, 2001). “This practical, hands-on guide is required reading for early childhood professionals who work with children with special needs—from ECE professionals to parents. It includes information on the most common disabilities, including cerebral palsy, Down syndrome, autism, visual impairment, and behavior disorders, as well as strategies and activities to facilitate the children’s participation in all components of the daily routine. It also shows how to adapt common early childhood activities for children of varying abilities to maximize their achievements. This is an invaluable resource to promote success in school for all children.” (Google Book product description) Paperback, 330 pages, ISBN 9780827383524.
- The Center on the Social and Emotional Foundations for Early Learning (CSEFEL), <http://www.vanderbilt.edu/csefel/>, provides research and materials for promoting the social emotional development and school readiness of young children.
- The Council for Exceptional Children (CEC), <http://www.cec.sped.org/>, is dedicated to improving educational success of children with disabilities, gifts, or talents. CEC is an advocate for governmental policies, resources, and professional practices related to individuals with exceptionalities.
- The Gray Center for Social Learning and Understanding <http://www.thegraycenter.org/>, the official home of Carol Gray and the social stories she has authored.

I. Getting Started

- *The Inclusive Early Childhood Classroom: Easy Ways to Adapt Learning Centers for All Children* by Patti Gould and Joyce Sullivan (Gryphon House, 1999). “All children in early childhood programs need nurturing and stimulating learning environments, but children with special needs may also require some modification of typical classroom experiences in order to thrive. These modifications can seem overwhelming to busy teachers who must decide whether the environment, the classroom equipment and materials, the activities themselves, or the expectations they have of the child must change.” (Barnes and Noble product description) Paperback, 192 pages, ISBN 978-0876592038.
- *The Stop & Think Social Skills Program PreK-1 Manual* by Howie Knoff (Sopris West, 2001). “this nationally recognized program addresses four developmental levels and helps students learn interpersonal, survival, problem-solving, and conflict resolution skills.” (Sopris West Product Description) Paperback, 181 pages with 146 reproducibles, ISBN 1570354863.
- *Transition Magician: Strategies for Guiding Young Children in Early Childhood Programs* by Nola Larson, Mary Henthorne, and Barbara Plum (Redleaf Press, 2002). This book contains two sections. The first provides guidance on evaluating the classroom environment and daily routine to prevent problems. The second section contains over 200 learning activities that can be conducted during transition times. Paperback, 136 pages, ISBN 0934140812.
- *Transition Magician 2: More Strategies for Guiding Young Children in Early Childhood Programs* by Mary Henthorne, Nola Larson, and Ruth Chvojicek (Redleaf Press, 2002). Paperback, 224 pages, ISBN 1884834868.

II. Scaffolding Children's Learning



The Big Idea

Scaffolding is a collaborative process between teacher and learner, with the teacher initially providing high support and direction for the novice learner, gradually decreasing assistance as the child gains greater mastery of a skill.

At a Glance

The most important ideas for you are:

- Teacher interaction is important to young children's development.
- Scaffolding strategies allow teachers to meet the needs of individual children by increasing or decreasing the difficulty of a task.
- Effective teachers vary the materials they use in order to tailor tasks and activities to meet each child's individual needs.
- Effective teachers vary the responses they expect from children in order to tailor tasks and activities to each child's individual needs.
- Effective teachers vary the frequency and specificity of the feedback they provide in order to tailor tasks and activities to each child's individual needs.

II. Scaffolding Children's Learning

What Teachers Need to Know

Past thought and practice in American preschools was derived largely from Piagetian theory, and was characterized by a predominant reliance upon child-initiated learning as the primary, if not sole, means of cognitive development and knowledge acquisition. Although the active participation of the child is essential to the construction of knowledge, it is now recognized that this process does not occur in a vacuum: the social environment serves as the support system that allows the child to move forward and continue to build new competencies with ever increasing autonomy. This more recent understanding of child development has important implications for the approach taken in preschool classrooms.

Teachers, as well as parents and peers, are active participants, not passive facilitators, in leading children to ever increasing levels of competence (Hamre & Pianta, 2001; Pianta, 2000). Interactions with competent individuals in the child's social environment bridge the gap between the child's capabilities and the child's potential. Content knowledge and skill mastery, which may have been perceived as inappropriate for young children to discover on their own, are now seen as accessible through these interactions.

The *Preschool Sequence* designates specific knowledge and skills. Using these competencies as end goals, teachers are able to start wherever the child is and identify intermediate steps, activities, and strategies that will, with practice, lead to the final goal. This collaborative process between teacher and learner has been referred to in the educational literature as scaffolding (Justice & Pence, 2005; Gallimore & Tharp, 1990; Norris & Hoffman, 1990; Wood, Bruner, & Ross, 1976), with the teacher initially providing much support and direction for the novice learner, gradually decreasing assistance as the child gains greater competency in the skill. It is important to note that the goal of scaffolding is not to make tasks easier, but rather to break tasks down in a manner that helps children see the thought processes or logical steps on the path to the end goal.

In this way, the child's current skills and knowledge always become the starting place for new experiences and instruction, rather than a limitation or restriction.

Scaffolding Strategies

The key to scaffolding is to structure a task so that it is challenging for the child, slightly above his or her independent level of functioning, but not frustrating. This may be accomplished by modifying any of several variables in the learning environment.

For example, breaking a skill down into smaller components is one way to structure support or scaffolding. To break a task or skill into smaller components,

1. Reflect upon the end goal
2. List, sequentially, each thing that one must do in order to successfully accomplish the goal. *It may be helpful to actually perform the task while making note of each subskill or step that is required to do so.*
3. Offer experiences and activities designed to provide practice in each new step of the task, moving to subsequent steps as a child masters each intermediary step.

The difficulty level of individual steps of a task can be adjusted or scaffolded, by modifying the materials used for the task, modifying the response expected from the child, or modifying the feedback provided during completion of the task.

Scaffolding with Materials

Changing the materials used to complete a task offers a variety of options for adjusting the difficulty level of the task. Effective teachers vary the materials they use in order to tailor tasks and activities to meet each child's individual needs.



Concrete to Abstract

Concrete, manipulative materials are more immediately understood than abstract, symbolic representations. For example, a child just beginning to create patterns will experience greater success in pattern-making by first using concrete objects (like blocks or beads) and then moving to more symbolic representations (like drawing or painting). Once a task can be completed with concrete manipulatives, the level of difficulty can be increased by increasing the abstractness of the representation.

Fewer Choices to More Choices

The difficulty of a task can be adjusted by limiting or expanding the number of possible choices of answers or actions. For example, a child may have less difficulty when sorting circles and squares than when sorting circles, squares, rectangles, and triangles. Once a task can be completed with fewer choices, additional choices can be added to increase the level of difficulty.

Different Choices to Similar Choices

The difficulty of a task can be adjusted by modifying the similarities or differences between “correct” and “incorrect” responses. The correct answer may be depicted as distinctly different from incorrect answers. For instance, the correct answer may be dissimilar, in shape, size or color, from incorrect answers. For example, differentiating and sorting circles and squares may be less difficult than differentiating and sorting circles and ovals. Once the child is successful in selecting the correct response with distinctly different choices, the distinction between the choices can be gradually eliminated to increase the level of difficulty.

Many Cues and Models to Fewer Cues and Models

The difficulty of a task can be adjusted by varying the degree of assistance that is offered. For example, for a child just learning to tie his shoes, the teacher might initially perform all the steps in the tying process, leaving just the last step, tightening the bow, for the child to complete. Subsequently, the teacher might begin the tying process, but perform fewer and fewer steps herself, moving the child progressively closer to independent tying. Once a task can be completed with explicit cues or models, fewer (or less explicit) cues can be provided to increase the level of difficulty.

Ordered to Random/Unordered

The difficulty of a task can be adjusted by modifying the order of the materials presented. For example, a child may have less difficulty completing a puzzle if the pieces are turned so that they are oriented as they will appear in the completed puzzle (i.e., the pieces are all facing right side up with their tops facing the top of the puzzle board). Once a task can be completed from ordered materials, randomness or disorder can be added to increase the level of difficulty.

Scaffolding the Child’s Response

Changing the type of response required from a child offers several options for adjusting the difficulty level of the task. Effective teachers vary the language they use and the type of responses they elicit in order to tailor tasks and activities to meet each child’s individual needs.

Receptive to Expressive

The difficulty of a task can be adjusted by limiting or expanding the amount of language that is required for a child to provide a response. Asking a child to demonstrate receptive understanding of a question may be achieved before the child can produce a response on his own. For example, it will be easier for a child just learning colors to respond to, “Here’s a red block. Show me the other blocks that are red like this one,” than to respond to “Show me all the red blocks,” or “What color is this?” Once a non-verbal response can be completed successfully, the level of difficulty can be increased by increasing the amount of language required for the child to answer.

II. Scaffolding Children's Learning

Less Language Required



Point to

Point to the red one.

Point to "A."

Point to the circle.

Yes/No

Is this one a square?

Is Curious George tired?

Do you think the block will move?

Choice

Which is bigger, the bear or the boy?

Which one is red, the circle or the square?

Is the mouse happy or sad?

Open Question

What color are these blocks?

How do you think Mary feels?

What kinds of things can the air move?

More Language Required

Many Verbal Cues and Models to Fewer Verbal Cues and Models

The difficulty of a response can be adjusted by limiting or expanding the number of verbal cues or models provided to the child. For example, "We're looking for the yellow duck. Can you tell me what color this duck is?" provides more support to the child than, "What color is this duck?" Once successful responses are provided with cues and models, the number of cues or models provided can be limited to increase the difficulty of the response.

Scaffolding with Feedback

The difficulty level of a task can be adjusted by changing the frequency or amount of feedback provided. Effective teachers vary the specificity and timing of the feedback they provide in order to tailor tasks and activities to meet each child's individual needs. Effective teachers use feedback to provide affirmation, but also to provide corrective support to children. High-quality feedback is focused on extending children's learning. Often, children need feedback to correct their thought processes. Effective teachers provide feedback as a two-way conversation between teacher and learner. These teachers ask questions and provide hints that help children clarify or extend their thinking.

At Each Step to At the End

The difficulty of a task can be adjusted by changing the immediacy or frequency of feedback and error correction provided during completion of the task. For example, when a teacher is seated next to a child, making comments simultaneously as he performs a task, she is providing a greater degree of structured assistance and support than if she asks the child to attempt the entire task on his own and then show it to her for feedback. Once a task can be completed with feedback at each step of a task, the frequency of feedback can be limited to increase the difficulty of a task. Using step-by-step feedback provides teachers with an opportunity to point out contradictions or incorrect thought processes children may use on the path to the end goal.

More Specific to Less Specific

The difficulty of a task can be adjusted by changing the degree of specificity in the feedback provided. For example, open-ended comments or questions, such as "What do you think we should try next?" are less supportive than more explicit questions,



such as, “Do you think we should try the blue piece or the red piece next?” Once a task can be completed with specific feedback, the specificity of the feedback can be limited to increase the difficulty of a task. More specific feedback can also be used to redirect children’s thinking when they demonstrate incorrect thinking. For instance, if a child misidentifies a triangle as a square, an effective teachers provide feedback to help the child understand what makes a square a square and a triangle a triangle (e.g., “How many sides does a triangle have? Let’s count the sides of this shape. One, two, three, four. How many sides did you say the triangle had? How many sides does this shape have?”)

Levels of Support

It is important to remember that each of the scaffolding strategies occurs on a continuum with high support at one end, low support at the other end, and varying levels of support in between. For example, when scaffolding a patterning activity along the continuum from concrete materials to abstract materials, you may move from counting bears (concrete) to paper cut outs of bears (between concrete and abstract) to drawing a pattern with paper and markers (abstract). Scaffolding is a collaborative process between teacher and learner and must be adjusted along the continuum to meet the level of the child at the particular point in time.

Each of the scaffolding techniques described here can be used in throughout the developmental domains of the *Preschool Sequence*. For instance, the following examples illustrate how modeling or cueing responses can be used as a strategy to support children’s participation in oral language, scientific reasoning, and autonomy and social skills activities:

Oral Language

Many Verbal Cues/Models High Support

“Do you remember the song we sang yesterday? It was called *Head, Shoulders, Knees, and Toes*. We pointed to our head [pointing to head] and our shoulders [pointing to shoulders]. We are going to talk about body parts today. Let’s start with this one [pointing to head]. What is this body part called?”

Few Verbal Cues/Models Low Support

We are going to talk about body parts today. Let’s start with this one [pointing to head]. What is this body part called?”

Scientific Reasoning

Many Verbal Cues/Models High Support

Model the question, “I wonder if we could blow bubbles with a straw?” After demonstrating that bubbles can be blown with the straw, prompt children for other ideas using the cue, “The straw has a hole we can blow through. I wonder if there are some other things that have a hole we might be able to blow through.” In this case, the teacher models both the concept (we need to have a hole to blow through), and the language used to ask questions (“I wonder if...”).

Few Verbal Cues/Models Low Support

Ask open ended questions to generate predictions providing fewer cues or models, “I just blew bubbles with a straw. What are some things from our classroom that we can use to blow bubbles?”

II. Scaffolding Children's Learning

Autonomy and Social Skills

Many Verbal Cues/Models High Support

"Today we have a special visitor, Mr. Garcia. He is going to tell us about his postal delivery job. Can you say, 'Good morning, Mr. Garcia?'"

Few Verbal Cues/Models Low Support

"Today we have a special visitor, Mr. Garcia. Does anyone have anything to say to Mr. Garcia?"

Examples like these are provided in each content area chapter of the *Preschool Sequence* to illustrate how specific scaffolding strategies can be used. There is no recipe or formula for the amount and type of support required by a child. Scaffolding strategies employed are highly dependent on each individual child and activity.

Scaffolding Across the Daily Routine

In addition to scaffolding the skills and content of the *Preschool Sequence*, effective teachers scaffold many classroom routines and processes discussed in the *Getting Started* chapter. The list below illustrates some examples of how effective teachers scaffold elements of the daily routine:

- During arrival time, effective teachers scaffold the attendance process to meet the needs of individual children and increase in difficulty as the year progresses. Early in the year, and for younger children, the attendance process may involve matching a symbol or photograph for each child. Later in the year, and for older children, the attendance process may involve a picture labeled with the child's name or a card containing the child's name. By the end of the year, children should be attempting to sign in. For some children, this may involve scribbles, letter-like symbols, or some letters of the child's name. For other children, sign-in will involve actually writing one's own name.
- During arrival time, effective teachers scaffold the availability and assignment of classroom jobs (e.g., door holder, table setter, flag holder, time keeper). Early in the school year, the teacher models how each job is performed, prior to making the job available for the children to complete. Initially, only a few jobs are available from which children may choose. As the year progresses, new jobs are added to the pool of available jobs.
- Effective teachers scaffold the length of circle time to meet the capabilities of the children in class. Early in the school year, these teachers conduct a short circle time and focus on reinforcing rules of group behavior. As the year progresses, children's ability to listen and be attentive in a group setting increases and circle time gets longer.
- In a Core Knowledge preschool program, the introduction of days of the week and calendars are scaffolded. Effective teachers initially introduce children to a weekly calendar, with a focus on learning the days of the week. Once children have learned the days of the week, the concept of week is presented, and finally the concept of month. Effective teachers introduce a monthly calendar only after children have a basic understanding of days of the week.
- In a Core Knowledge preschool program writing is scaffolded. Effective teachers focus on ensuring that children can make the individual writing strokes that comprise letters before introducing or expecting children to make attempts at letter writing. For more on writing strokes, see the *Emerging Literacy Skills in Reading and Writing* chapter.
- During the center time plan-do-review process, children's planning and reviewing are scaffolded through the use of pictures or gestures prior to the use of expressive language to make plans or review activities. Effective teachers often use a planning board that illustrates each center. Using the board, children are supported as they point to or say the name of the center that they would like to visit or that they have visited. As the year progresses and children's oral language skills increase, effective teachers use language support strategies to help children provide ever more descriptive expressions of their plans or reviews.



Resources

The titles listed below are offered as a representative sample of materials and are not a complete list of all resources.

For teachers —

- *Alternative Approaches to Assessing Young Children* by Angela Losardo and Angela Notari-Syverson (Brookes Publishing, 2001). “Developed to address the limitations of standardized assessment, the authors’ transdisciplinary framework stems from new child development theories and awareness of the complexity of influences on children from birth to eight years. Losardo (language, reading, and exceptionalities; Appalachian State U., Boone, NC) and Notari-Syverson (Washington Research Institute, Seattle) review historical perspectives; traditional and contemporary assessment models; and future directions. Includes guidelines for six types of assessment, review questions, data collection sheets, and a glossary.” (Book News Product Description) Paperback, 246 pages, ISBN 1557664986.
- *Developmentally Appropriate Practice* by Carol Copple (NAEYC, 2009, 3rd Edition). “Since the first edition in 1987, NAEYC’s book *Developmentally Appropriate Practice in Early Childhood Programs* has been an essential resource for the early child care field. Now fully revised and expanded, the 2009 version comes with a supplementary CD containing readings on key topics, plus video examples showing developmentally appropriate practice in action. Based on what the research says about development, learning, and effective practices, as well as what experience tells us about teaching intentionally, DAP articulates the principles that should guide our decision making. Chapters describe children from birth through age 8 in detail, with extensive examples of appropriate practice for infant/toddler, preschool, kindergarten, and primary levels.” (NAEYC Product Description) Paperback, 352 pages, ISBN 1928896642.
- *Ladders to Literacy: A Preschool Activity Book* by Angela Notari-Syverson, Rollanda O’Connor, and Patricia Vadasy (Brookes Publishing, 2007). This publication includes lesson plans and a detailed chapter on scaffolding techniques. Spiral bound, 486 pages, ISBN 1557669139.
- *Scaffolding Children’s Learning: Vygotsky and Early Childhood Education* by Laura Bekr and Adam Winsler (NAEYC, 1995). Paperback, 182 pages, ISBN 0935989684.
- *Scaffolding Emergent Writing in the Zone of Proximal Development* by Elena Bodrova and Deborah Leong (McREL, 2006) http://www.mcrel.org/our_work/scaffolding.pdf.
- *Scaffolding with Storybooks: A Guide for Enhancing Young Children’s Language and Literacy Achievement* by Laura M. Justice, Khara L. Pence, Angela R. Beckman, Lori E. Skibbe, and Alice K. Wiggins (International Reading Association, 2005). “Use story-book reading to build the early literacy competencies that your preschool, kindergarten, and first-grade students need to become successful readers and learners. This essential research-based guide provides strategies and sample interactions that will help you to strengthen children’s knowledge of written language, vocabulary, phonology, the alphabet, narrative discourse, and the world around them. As you develop students’ abilities and interests in these areas, you will ease their transition to more advanced levels of reading and learning.” (Amazon Product Description) Paperback, 144 pages, ISBN 0872075788.

III. Assessment and Planning to Meet Children's Needs

The Big Idea

Assessment is an ongoing and purposeful activity used to inform the planning and modification of classroom lessons and activities. Only when assessment is an integral part of a content-rich preschool education can teachers truly ensure children are reaching their highest potential.

At a Glance

The most important ideas for you are:

- Assessments used in the early childhood classroom should be tailored to a specific purpose and used only for the purpose for which they have been demonstrated to produce reliable, valid information.
- Effective teachers use ongoing assessment (assess, plan, teach, assess) to inform and guide the planning of lessons and activities.
- There are many methods of assessing children. Observation during everyday classroom activities is an important assessment tool.
- Scaffolding can be used to mediate assessment for the purpose of determining a child's capabilities and whether the instructional or assessment methods are effective. Understanding what a child can complete with help provides a better understanding to guide activities, instruction, and experiences.
- Parents are a useful source of information regarding children's competencies.
- Effective assessments are objective, specific, and systematic. Effective assessment takes place over time. Children are variable in their development—one day they may seem to know something and the next day they may not. Repeated assessment ensures a better understanding of children's progress and mastery of skills.
- Assessment can take place throughout all parts of the daily routine.

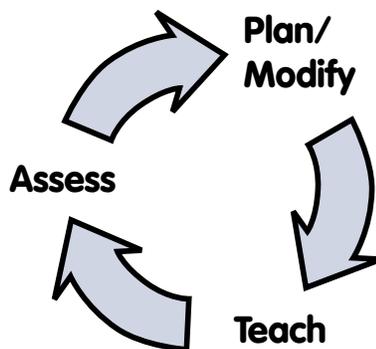


What Teachers Need to Know

DAEP 180 Effective teachers use assessment to inform the planning of lessons, activities, and experiences in their classrooms. **DAEP 180** Evaluation of each student's progress takes place in an ongoing process, often conducted within the context of daily experiences and activities. **DAEP 180** This type of assessment is reliable and valid only when two key considerations are clearly specified:

- what is being assessed in terms of children's work
- the criteria used to determine satisfactory or unsatisfactory performance

The specificity of the skills and competencies in the *Preschool Sequence* facilitates systematic and deliberate use of authentic assessment devices to monitor each child's progress. The teacher must start with knowledge of the child's existing competencies, relative to the end goal in question. From the assessment results, effective teachers plan whether to back up, move on, or change the instructional approach to support each child's mastery of a skill or goal. The diagram below illustrates this teaching cycle.



Using this cycle of assessment and focusing assessment on specific skills from the *Preschool Sequence* ensures that what is being assessed is developmentally and educationally significant.

Purposes of Testing

In the field of education, assessment takes place for a variety of purposes. Assessments may be used for:

- program evaluation and accountability
- screening
- diagnosis
- instructional planning
- progress monitoring

DAEP 178 Assessments used in the early childhood classroom should be tailored to a specific purpose and used only for the purpose for which they have been demonstrated to produce reliable, valid information.

III. Assessment and Planning to Meet Children’s Needs

Assessment for the purpose of program evaluation and accountability is used to ensure that desirable outcomes are being achieved by children who participate in a particular program. Screening assessments are used to determine whether children are at risk for potential medical, developmental or learning issues. Screening results outside an expected range are used to determine which children may require additional attention or further assessment for the purposes of diagnosis. **DAEP 178** Diagnosis decisions and other decisions that have major impact on children, such as program enrollment or placement, require multiple sources of relevant information. These decisions should be informed by parents and teachers, who are valuable sources of information and observation, which should supplement assessment data.

In this section, we focus not on accountability, screening, or diagnosis, but on the use of ongoing assessment for the purposes of instructional planning and progress monitoring.

Assessment for Instructional Planning

Effective teachers conduct both informal (e.g., observation) or formal (e.g., performance tasks) assessments to determine a starting point for instruction. **DAEP 180** Results from initial assessment help teachers begin the assess-plan-teach-cycle. From initial assessment of each child, effective teachers plan classroom activities and experiences that support skill development. Initial assessment also provides teachers with a greater understanding of individual differences of students in the class so that they can plan scaffolding strategies and extension or support activities.

Assessment for Progress Monitoring

Once instruction has been initiated, effective teachers use ongoing progress monitoring to determine whether or how each child is advancing, step-by-step, toward the educational goal. Once again, the information obtained through these assessments allows the teacher to make informed decisions about the nature and pace of future instruction.

Results from ongoing assessment can be used to improve the effectiveness of teaching practices and program outcomes. **DAEP 180** Effective teachers reflect not only on their practices but also on the progress of children. This reflection informs planning and modification of future activities and experiences. Effective teachers use results of ongoing assessment to more accurately communicate with children’s families about their child’s progress.

A summative evaluation is generally conducted at the end of an instructional sequence to determine whether the children have learned what was intended. At the preschool level, summative evaluations, unless carefully designed and repeated over time, can be rather misleading. Most preschool teachers know all too well the experience of thinking that a child has “learned” something one day, only to find out several days later that the child may be unable to satisfactorily complete the same task.

Methods of Assessment

Methods of assessment used in early childhood classrooms are appropriate to the developmental status and experiences of young children and recognize individual variation in learners and allow children to demonstrate their competence in different ways.

Observations of Children

One of the most common assessment techniques used by effective teachers is simply direct observation of children’s every-day behaviors. Effective teachers often complete anecdotal or running records, in which they note exactly what it is that they see a child or group of children doing during a particular observation period. Such observations have the advantage of taking place in a completely naturalistic setting that is familiar to the children. Direct observation over extended periods of time



provides a wealth of information about the knowledge, skills, and competencies of the child or children observed. Unfortunately, few teachers have the time needed to observe each and every child in his class in this way on an ongoing basis.

Direct observation can be made more efficient, in terms of the teacher's use of time, by identifying and targeting in advance those specific behaviors that the teacher wants to observe either for an individual child or a group of children. The objectives of the *Preschool Sequence*, both explicit and specific, lend themselves to completing this task. Effective teachers plan assessment opportunities to coincide with classroom activities and experiences.

To further refine the observation of specific behaviors, some teachers find it helpful to identify focus questions that help direct their attention to particular behavioral indicators. Effective teachers use various techniques including checklists, participation charts, and other graphic organizers to guide their observations.

Collection of Children's Work Samples

Another assessment technique, useful at the preschool level, is known as portfolio collection and involves collecting samples of children's work. Portfolio contents might include:

- drawings
- paintings
- samples of dictated work
- journal entries
- photographs of children's work products,
- and audio recordings of nursery rhyme recitations, sample conversations

Effective teachers collect and catalog a variety of children's work products to demonstrate skill level across various developmental domains and across the school year. To ensure that the portfolio contents are useful for monitoring progress and mastery of skills, effective teachers label each portfolio item with the:

- child's name
- date of collection
- specific *Preschool Sequence* skill demonstrated in the work
- teacher's comments regarding the work product
- children's comments regarding the work product

There are a variety of organizational strategies that can be used to store portfolio contents. Some teachers use a three-ring binder for each child, marking sections for each developmental domain. Other teachers use accordion files, multi-section file folders, or hanging folders for each child. Some teachers use pizza boxes, which provide storage space large enough for paintings and other creative works.

Activity Probes

Activity probes are performance tasks included in the *Core Knowledge Preschool Assessment Kit* and the *Core Knowledge Preschool Assessment Tool (CK-PAT)*. An activity probe, as the name implies, is the presentation of an activity, similar to those in which children participate on a day-to-day basis. These activities permit the observation of a child performing a particular skill or demonstrating particular knowledge. Well-constructed probes will incorporate the use of the same kinds of manipulatives, concrete materials and tasks that children have experienced during classroom activities.

Activity probes are a way to intentionally collect information rather than having to wait for something to occur spontaneously to observe in the classroom environment. Assessment activity probes are no different from teaching activities, except that the teacher only observes and collects data; the teacher does not provide instruction.

Effective teachers select and create activity probes that use the same materials that children play with in the classroom.

III. Assessment and Planning to Meet Children’s Needs

Mediated Assessment

Once an activity probe has been conducted and the child’s performance level has been documented, the teacher may want to deviate from the original plan for conducting the assessment. If a child is not yet ready with or progressing with a skill, effective teachers work to further determine whether they are teaching so that the child can fully understand the concept. For example, if Samuel cannot name the colors when they are laid out on the table, will he understand if the task is presented in a different way? For example, can Samuel demonstrate understanding of the concept of color by pointing to the colors if they are named for him?

Effective teachers use scaffolding to mediate assessment probes for the purpose of determining a child’s capabilities and whether the instructional or assessment methods are effective. **DAP 180** Assessment looks not only at what children can and cannot do independently, but also what they can do with assistance from other children or adults. Understanding what a child can complete with help provides a better understanding of how activities, instruction, and experiences should be provided.

The Core Knowledge Preschool Assessment Kit

The Preschool Assessment Kit provides the materials needed to assess each of the critical skills found in the *Preschool Sequence*. **DAP 178** An activity probe is available for each critical skill in the developmental domains of Autonomy and Social Skills, Oral Language, Early Literacy Skills in Reading and Writing, Math, and Science. Each activity probe contains detailed directions as well as rating criteria to make assessment easier. This kit makes it easy for a teacher to assess a student with minimum preparation. The kit can be used for both pre- and posttesting to monitor student achievement.

The Core Knowledge Preschool Assessment Tool (CK-PAT)

The CK-PAT is a software system for collecting and reporting on child assessment data. The CK-PAT is based on the *Core Knowledge Preschool Sequence*, with explicit goals and assessments in Autonomy and Social Skills, Oral Language, Early Literacy Skills in Reading and Writing, Math, Science, Art, Music, and Movement. The CK-PAT provides detailed guidance in assessing each goal, using direct observation, portfolio collection, and activity probes, with suggested criteria to evaluate each child’s performance. The CK-PAT software generates detailed reports for individual students, the classroom, as well as an entire center or agency. Data from the software can be used to create easy-to-read graphs, parent letters, and child-level or skill-level reports. The CK-PAT meets Head Start Child Outcome Reporting requirements and produces reports that address each of the Head Start domains.

Parent Input

DAP 181 Effective teachers recognize parents and children themselves as useful sources of information for purposes of assessment. Effective teachers supplement assessment data with information provided by parents through frequent contact and conversation. These teachers talk with parents about their children and their children’s capabilities and progress. Effective teachers talk with children about classroom activities and experiences, gaining insight from the child’s perspective.

Characteristics of Effective Assessment

Effective assessments have several key characteristics. Effective assessments are *accurate*. Assessments are conducted and documented in real time and don’t rely on one’s memory of what happened or how a child performed. Effective teachers document portfolio materials in a timely manner to ensure that skills demonstrated by the work products are accurately captured.

Effective assessments are *objective*. Assessments capture objective information free from biases such as feelings and opinions. When documenting observations, effective teachers write about what they observe and omit feelings and opinions about those observations. Objective assessments capture observable words and actions (e.g., *Mary said, “The yellow block*



was beside the red block”) and specific skill levels (e.g. “Johnny caught the beanbag four out of five times”). Objective assessments do not describe attitudes, general skills (e.g., “Johnny has good fine motor skills”), or feelings and opinions (e.g., “I don’t think Mary likes working with the blocks”).

DAEP 178 Effective assessments are *specific* and *explicit*. Assessments capture observable behaviors and characteristics and are free from non-tangible characteristics. When documenting observations and assessments, effective teachers record or document only those things that a third party would also see in the same way.

DAEP 179 Effective assessments are *repeated*. Young children are variable in their development—one day they may seem to know something and the next day they may not. Therefore, it is important that assessment take place over time. Sometimes, a child will overhear another child and will simply repeat what has been heard—not a sign of real understanding.

It is not sufficient to ask a child to count to ten only one time and, based on the response, say that the child does—or does not—know how to count to ten. Instead, assessment of this skill must be repeated on different occasions.

DAEP 179 Effective assessments are *systematic*. Effective teachers plan for assessment in the same way they plan for instruction. In fact, effective teachers note assessment opportunities in their lesson plan and conduct ongoing assessment as part of each lesson or activity.

Assessment Across the Daily Routine

Assessment takes place across all aspects of the daily routine and throughout all elements of the *Preschool Sequence*. Each content area chapter in this handbook provides suggestions for “what to look for” and “when to look” to assess skills. Effective teachers recognize that because of the cross-curricular nature of activities in a Core Knowledge preschool classroom, opportunities to assess skills from each domain occur across the day.

What to Look For

DAEP 181 Effective teachers observe children throughout the daily routine. These teachers look for children at play and work demonstrating skills from the *Preschool Sequence*. Effective teachers talk with children about what they are doing or making. These teachers ask questions to encourage children to describe their thinking.

Effective teachers understand and are familiar with the skills in the *Preschool Sequence*. Specifically, these teachers understand when a child does and does not possess a skill and which skills are precursors to one another. Effective teachers are familiar with characteristics of each skill and are able to accurately determine whether a child does not yet demonstrate (not yet), sometimes demonstrates (progressing), or consistently and independently demonstrates (ready) a specific skill, knowledge, or behavior.

When to Look

Effective teachers plan for assessment. Effective teachers look for and recognize assessment opportunities in all classroom centers and classroom activities. These teachers reflect upon upcoming activities and experiences to allow for intentional opportunities to assess children’s skills, knowledge, and behavior. These teachers recognize which skills are used on a daily basis through the classroom routine. They use these daily opportunities to ensure that all children have the opportunity to demonstrate their capabilities over time. For instance, effective teachers recognize language and literacy assessment opportunities embedded in morning message. These teachers conduct morning message in a manner that allows each child (perhaps several children per day) to demonstrate print, letter, word, or sound knowledge, through participation.

III. Assessment and Planning to Meet Children’s Needs

Resources

The titles listed below are offered as a representative sample of materials and are not a complete list of all resources.

For teachers —

- *Alternative Approaches to Assessing Young Children* by Angela Losardo and Angela Notari-Syverson (Brookes Publishing, 2001). “Developed to address the limitations of standardized assessment, the authors’ transdisciplinary framework stems from new child development theories and awareness of the complexity of influences on children from birth to eight years. Losardo (language, reading, and exceptionalities; Appalachian State U., Boone, NC) and Notari-Syverson (Washington Research Institute, Seattle) review historical perspectives; traditional and contemporary assessment models; and future directions. Includes guidelines for six types of assessment, review questions, data collection sheets, and a glossary.” (Book News Product Description) Paperback, 246 pages, ISBN 1557664986.

- *Basics of Assessment: Primer for Early Childhood Educators* by Oralie McAfee, Deborah Leong, and Elena Bodrova (NAEYC, 2004). This book offers the basic concepts, and vocabulary of child- and classroom oriented assessment including what to assess, when to assess, tools for assessment and organization of assessment data. Paperback, 100 pages, ISBN 1928896189.

- *Developmentally Appropriate Practice* by Carol Copple (NAEYC, 2009, 3rd Edition). “Since the first edition in 1987, NAEYC’s book *Developmentally Appropriate Practice in Early Childhood Programs* has been an essential resource for the early child care field. Now fully revised and expanded, the 2009 version comes with a supplementary CD containing readings on key topics, plus video examples showing developmentally appropriate practice in action. Based on what the research says about development, learning, and effective practices, as well as what experience tells us about teaching intentionally, DAP articulates the principles that should guide our decision making. Chapters describe children from birth through age 8 in detail, with extensive examples of appropriate practice for infant/toddler, preschool, kindergarten, and primary levels.” (NAEYC Product Description) Paperback, 352 pages, ISBN 1928896642.

- *The Power of Observation for Birth through Eight* by Judy Jablon, Amy Dombro, and Margo Dichtelmiller (Teaching Strategies, 2007). This book illustrates how observation helps teachers become more effective through planning and assessment. The book provides specific strategies to help teachers refine their skills of observation. Paperback, 194 pages, ISBN 1933021527.

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Nursery Rhymes in the Preschool Sequence

The rhymes noted below represent a core selection for young children. They will delight in listening to the strong rhythm and rhyme, and sometimes, the sheer nonsense, of these selections. With repeated exposure, they will take pleasure in learning some of their favorites by heart.

Mother Goose and Other Traditional Rhymes

<i>A Hunting We Will Go</i>	<i>Polly Put the Kettle On</i>
<i>Bat, Bat</i>	<i>Pussy Cat, Pussy Cat</i>
<i>Bobby Shafto</i>	<i>Rain, Rain Go Away (K)</i>
<i>Diddle, Diddle Dumpling,</i>	<i>Ride A Cock Horse</i>
<i>My Son John (K)</i>	<i>Ring Around The Rosey (K)</i>
<i>Doctor Foster</i>	<i>Rock-A-Bye, Baby (K)</i>
<i>Here We Go Round The Mulberry Bush</i>	<i>The Old Woman Must Stand At</i>
<i>Hickety, Pickety, My Black Hen</i>	<i>The Tub, Tub, Tub</i>
<i>Lucy Locket</i>	<i>There Was A Crooked Man</i>
<i>Once I Saw A Little Bird</i>	<i>This Is The Way The Ladies Ride</i>
<i>One For The Money</i>	<i>This Littlepiggy Went To Market (K)</i>
<i>One Misty, Moisty Morning</i>	<i>To Market, To Market</i>
<i>Pat-A-Cake (K)</i>	<i>Tom, Tom, The Piper's Son</i>
<i>Pease Porridge Hot</i>	<i>Two Little Blackbirds</i>
<i>Peter, Peter Pumpkin Eater</i>	<i>Wee Willie Winkie</i>

Other Poems

In addition to the Mother Goose rhymes listed above, young children should have many other opportunities to listen to poetry, old and new. They will enjoy the playful use of language in most poetry, the cadence and the frequent use of rhyming words. Read poems aloud, encouraging young children's participation. The selected poems particularly lend themselves to pantomime and or rhyming activities:

<i>An Older Person From Ware (Edward Lear)</i>
<i>At The Seaside (Robert Louis Stevenson)</i>
<i>Higglety, Pigglety, Pop! (Samuel Goodrich)</i>
<i>Jack-O-Lantern (Aileen Fisher)</i>
<i>January (Maurice Sendak)</i>
<i>Jump Or Jiggle (Evelyn Beyer)</i>
<i>Raindrops (Aileen Fisher)</i>
<i>Singing Time (Rose Fyleman)</i>
<i>The Pancake (Christine Rossetti)</i>
<i>The Worm (Ralph Bergengren)</i>
<i>There Was A Fat Pig (Arnold Lobel)</i>

Appendix V: Additional Recommendations

Fingerplays and Songs

The following titles represent a core of traditional songs and fingerplays for young children. They will enjoy listening to and singing these selections. Teachers and parents are encouraged to supplement these recommendations with additional selections from popular, contemporary children's music.

A Tisktet, a Tasket

Are You Sleeping?

Bingo (K)

Blue-Tail Fly (Jimmie Crack Corn)

Do Your Ears Hang Low?

Did You Ever See A Lassie?

Eensy, Weensy Spider

Five Little Ducks That I Once Knew

Five Little Monkeys Jumping On The Bed

Happy Birthday To You

Head And Shoulder, Knees And Toes

Here Is The Beehive

Hush Little Baby (K)

I Know An Old Lady

If You're Happy And You Know It (K)

I'm A Little Teapot

John Jacob Jingleheimer Schmidt

Kookaburra

Lazy Mary

Looby Loo

Oats, Peas, Beans and Barly Grow

Oh, Dear What Can The Matter Be (1)

Oh, Do You Know The Muffin Man?

Oh Where, O Where, Has My Little Dog Gone?

Old Macdonald (K)

One Potato, Two Potato

Open, Shut Them

Pop Goes the Weasel

Row, Row, Row Your Boat (1)

Teddy Bear, Teddy Bear, Turn Around

Teddy Bear's Picnic

Twinkle, Twinkle Little Star (K)

Two Little Black Birds

The Wheels on The Bus (K)

Where Is Thumbkin?

Who Stole The Cookie From The Cookie Jar?

Yankee Doodle (1)

You Are My Sunshine

Other

Pledge of Allegiance

Stories and Tales in the Preschool Sequence

The following works constitute a core collection of stories and tales for young children. In preschool, these stories are meant to be read-aloud selections. Expose children to many more stories including classic picture books and read-aloud books.

Stories

The Gingerbread Boy

How Turtle Flew South for Winter (or, *Why Turtle Has a Cracked Shell*) (Native American: Dakota legend)

The Shoemaker and the Elves (Brothers Grimm)

Thumbelina (Hans Christian Anderson)

Why Flies Buzz (African folktale)

Goldilocks and the Three Bears (K)

The Little Red Hen (K)

The Three Little Pigs (K)

Aesop's Fables

The Town mouse and the Country Mouse

The Lion and the Mouse (K)

Legends and Stories of America's Past

Thanksgiving Day celebration between the Indians and the Pilgrims (K)

George Washington and the cherry tree (K)

Abraham Lincoln and his humble origins (K)

Betsy Ross and the flag (1)

Martin Luther King (2)

Books

Books with author in () are from Scholastic Library, others are from Knowledge Tree Library

Some Suggested Storybooks:

A Frog in the Bog (Wilson)

A House Is A House For Me

Abuela (Dorros)

Alejandro's Gift

Amazing Grace

Are You My Mother?

Ask Mr. Bear

At the Firehouse (Rockwell)

Barn Dance! (Archambault)

Big Mama

Big Red Barn (Brown)

Blueberries for Sal

Borreguita and Coyote

Brown Bear, Brown Bear, What Do You See?

Caps for Sale

Chicka Chicka Boom Boom

Chrysanthemum (Henkes)

Corduroy

Curious George

Curious George Learns the Alphabet

Appendix V: Additional Recommendations

Some Suggested Storybooks (continued):

- Does A Kangaroo Have A Mother, Too?*
Dr. Seuss's ABC Book
Duck on a Bike (Shannon)
Eating the Alphabet
Frederick
Frog Where Are You?
Froggy Goes to School (London)
Good Dog Carl
Good Night Gorilla
Harold & the Purple Crayon
Have You Seen My Duckling? (Tafari)
Hello, School Bus! (Parker)
Honey... Honey... Lion! (Brett)
I Stink! (McMullan)
If You Take a Mouse to School (Numeroff)
If You're Happy and You Know It (Warhola)
In the Small, Small Pond (Fleming)
It's Mine! (Lionni)
Jonathan and His Mommy (Smalls)
Jump, Frog, Jump! (Kalan)
Kindergarten ABC (Rogers)
Kite Flying
Knuffle Bunny (Willems)
Lola at the Library (McQuinn)
Madeleine
Make Way for Ducklings
Mama, Do You Love Me? (Joose)
Market Day (Ehlert)
Mike Mulligan & The Steam Shovel
Millions of Cats
Miss Rumphius
Mufaro's Beautiful Daughters
Museum ABC by Metropolitan
 Museum of Art
My Father's Dragon
Night Shift Daddy (Spinelli)
Papa, Do You Love Me? (Joose)
People by Peter Spier
- Peter's Chair* (Keats)
Quick As A Cricket
Roar! (Edwards)
Rosie's Walk (Hutchins)
Round is a Mooncake
Ruby in Her Own Time (Emmett)
Sam and the Tigers
Siesta
Strega Nona
Swimmy
The Bossy Gallito (*El Galo de Bodas*)
The Carrot Seed
The Cat in the Hat
The Cow That Went Oink (Most)
The Hello, Goodbye Window (Juster)
The Kite Festival
The Lion & The Mouse
The Lion and the Mouse (Watts)
The Little Engine That Could
The Littles
The Park Bench
The Rain Came Down (Shannon)
The Red Balloon
The Runaway Bunny
The Snowy Day
The Story of Ferdinand
The Tale of Rabbit and Coyote
The Very Hungry Caterpillar
The Wheels on the School Bus (Moore)
There Was an Old Lady Who Swallowed a Fly
Tikki Tikki Tembo
Uncle Jed's Barbershop
We're Going On A Lion Hunt
We're Going on a Nature Hunt! (Metzger)
What Aunts Do Best/ What Uncles Do Best (Numeroff)
Where the Wild Things Are
Who Is In The Garden?
Yoko (Wells)

Non-Fiction Books:

A Child's Book of Art
A Day at the Apple Orchard (Faulkner)
A Day with Firefighters (Kottke)
A Day with Police Officers (Kottke)
A Life Like Mine: How Children Live Around the World
A Log's Life
Abe Lincoln and Me
Animal Homes
Apples (Berger)
Brothers & Sisters (Senisi)
By the Seashore
Cactus Hotel
Chameleon! (Cowley)
Children Just Like Me
Deserts
Friends at School (Bunnett)
Happy Birthday Martin Luther King
How a Plant Grows
I Can Crayon
I Can Cut and Stick
I Can Draw Animals
I Can Finger Paint
I Pledge Allegiance: The Pledge of Allegiance
I'm a Seed
In the Ocean
Knowledge Tree presents
Learning about Animals
Let's Read About Abraham Lincoln
Let's Read About George Washington
Let's Read About Martin Luther King
Let's Talk Tigers (Gerrard)
Life in a Pond (Fowler)
Lifetimes
Martin Luther King Jr.
My First Animal Board Book
My First Farm Book
Night-time Animals (Royston)
Oceans
Oh Baby! (Hirschmann)
Our Animal Friends at Maple Hill Farm
Over on the Farm (Gunson)
Pilgrim Children Had Many Chores
Pumpkins (Berger)
Scholastic First Picture Dictionary
Story of George Washington
Tattered Sails
The Big Book of Playtime Activities (includes 4 below)
The Great Animal Search
The Pilgrim's First Thanksgiving
The Pledge of Allegiance
The Story of Abraham Lincoln
The Story of America's Birthday
The Story of Martin Luther King, Jr.
The Story of Thanksgiving
There's a Rumble in the Jungle
This First Thanksgiving Day: A Counting Story
This is the Sunflower
This is the Way We Go to School (Baer)
Time to Sleep
Touch & Feel: Wild Animals
Under One Rock: Bugs, Slugs,...
What Am I? Animal Guessing Game
Whose Forest Is It?

Music in the Preschool Sequence

See also *Fingerplays and Songs*

Instrumental Works in the Preschool Sequence

- Georges Bizet, Overture to *Carmen*
- Johannes Brahms, *Cradle Song (Brahms' Lullaby)*
- Claude Debussy, *Cakewalk* from *Children's Corner Suite*
- Victor Herbert, *March of the Toys* from *Babes in Toyland*
- Aram Khachaturian, *Sabre Dance* from *Gayane*
- Wolfgang Amadeus Mozart, Variations on *Ah, vous dirai-je maman!*
- Jacques Offenbach, *Can-can* from *Gaite parisienne*
- Amilcare Ponchielli, *Dance of the Hours*
- Robert Schumann, *Dreams* from *Scenes from Childhood*
- Johann Strauss, Jr., *Donnor und Blitz (Thunder and Lightning)* waltz
- Peter Ilich Tchaikovsky, from the *Nutcracker*, *March; Dance of the Flutes; and Dance of the Sugar Plum Fairies*
- Heitor Villa-Lobos, *The Little Train of Caipira*

Works of Art in the Preschool Sequence

Create work in the style of...

- Sonia Delaunay, *Rhythm Couleur*
- Egyptian Dynasty, *Blue Hippo*
- Paul Klee, *Head of Man - Senecio*
- Henri Matisse, *Red Interior, Blue Table* or Henri Matisse, *The Snail*
- Joan Miro, *People and Dog in Sun*
- Piet Mondrian, *Broadway Boogie-Woogie*

Look at and talk about...

- Romare Bearden, *Summertime* or Romare Bearden, *Sunday After the Sermon*
- Edgar Degase, *Little Fourteen Year Old Dancer*
- Edward Hicks, *Noah's Ark*
- Jonathan Eastman Johnson, *The Old Stagecoach*
- Munier, *Special Moment* or Munier, *The New Pets*
- Horace Pippin, *Domino Players*
- Henri Rousseau, *The Sleeping Gypsy*