The Carolina Curriculum for Preschoolers with Special Needs

SECOND EDITION



Nancy M. Johnson-Martin Bonnie J. Hacker Susan A. Attermeier



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Second Edition

Ву

Nancy M. Johnson-Martin, Ph.D. Bonnie J. Hacker, M.H.S., OTR/L and Susan M. Attermeier, Ph.D., PT



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ΟΝΕ

Introduction

he first edition of The Carolina Curriculum for Preschoolers with Special Needs (CCPSN; Johnson-Martin, Attermeier, & Hacker, 1990) was an outgrowth of a federally funded "demonstration project" designed to facilitate the inclusion of preschoolers with special needs with typically developing children in community child care centers by providing consultation and developing screening and intervention materials. In the 1980s, most states had not yet established programs for identifying preschool children with special needs or for providing appropriate education for them. Other than Head Start, few public preschools existed for typically developing children, making it difficult to find space and teachers to serve those with special needs. Some states considered serving children with special needs in private child care centers or preschools by providing assistance to those centers; however, neither the child care providers nor the preschool teachers had been trained to work with children with significant impairments. Furthermore, although there were many excellent programs for training preschool teachers, relatively few programs had a special education component. Likewise, while there were many curriculum guides for teaching typically developing preschoolers, there were few curricular materials for children with special needs.

Against this background, the first edition of the CCPSN was developed as a guide for teachers and interventionists as they assessed the skills of a preschool child with special needs and planned the individualized educational program (IEP) required under federal and state guidelines developed following passage of the Education of the Handicapped Act Amendments of 1986 (PL 99-457). The first edition included skills children typically develop between the ages of 2 and 5 years. Because some children would have sufficiently atypical developmental patterns that would make it difficult for them to work through most preschool curricula, we chose to

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follow the format of *The Carolina Curriculum for Handicapped Infants and Infants at Risk* (CCHI; Johnson-Martin, Jens, Attermeier, & Hacker, 1986). The CCHI was designed for children from birth to 2 years, and many interventionists found it useful for accommodating the needs of both the children whose development was markedly atypical and those whose development was delayed but followed a typical pattern.

There have been many changes since 1990 in the services available to preschool children with special needs. Many universities provide education and training for teachers who will serve young children with special needs. All of the 50 states now have programs in place for identifying and serving these children, although there continue to be many unidentified children and many identified children who are underserved. There continues to be a need for criterion-referenced assessments and for intervention materials that accommodate a wide variety of developmental problems.

One of the continuing problems facing those who work with children with special needs is that there are a number of children of preschool age whose development in one or more areas falls within the range usually included in infant curricula rather than in preschool curricula. To deal with this issue, the CCHI was revised in 1991 as *The Carolina Curriculum for Infants and Toddlers with Special Needs* (CCITSN; Johnson-Martin, Jens, Attermeier, & Hacker). The CCITSN provided a chart to facilitate the assessment of children whose skills spanned the infant and toddler curriculum and the preschool curriculum; however, many of those relying on the two curricula to address the scattered skills of preschool children have reported difficulty moving smoothly from one curriculum to the other because of how differently they were organized.

This revision of the CCPSN and the concurrent revision of the CCITSN have been designed to provide a comprehensive guide for working with children who have special needs functioning in the birth to 60-month range. The organization of the two curricula is consistent throughout. The infant and toddler curriculum now covers developmental skills from birth to 36 months, whereas the preschool curriculum covers skills from 24 to 60 months. The sequence and the item names are identical in both volumes for the 24- to 36-month range so that interventionists can move smoothly from one curriculum to the other.

WHAT IS THE CCPSN APPROACH?

The CCPSN, like the CCITSN, links assessment to intervention through hierarchies of developmental tasks that are relevant to what children normally do with their caregivers and teachers and are pertinent to long-term adaptation. Having each item on the assessment tool linked directly to a curriculum item that describes procedures for teaching the assessed skill provides a framework for moving smoothly from assessment to intervention. Use of curricular activities that are both relevant to typical routines for young children and pertinent to long-term adaptation is an approach described as "authentic" by Bagnato, Neisworth, and Munson (1997). That is, the intervention is integrated in a meaningful way into the child's life. This edition includes the following characteristics:

- 1. The curriculum is based on typical sequences of development but does not assume that a child will develop at the same rate across domains or even within one domain (e.g., a child may exhibit typical cognitive development along with very delayed motor development or a child may have age-appropriate grammatical structures but have significantly delayed vocabulary). Thus, the curriculum is designed for you to use both with the child who is developing slowly but in a typical pattern and with the child whose pattern of development is markedly atypical due to one or more impairments.
- 2. The curriculum approaches atypical development in two ways. First, the items in each developmental domain are subdivided into logical teaching sequences (i.e., a sequence in which item order is primarily determined by how one skill builds on another, not only by the mean age levels at which typical children learn the skills). Second, general modifications of the items in each developmental domain are suggested so that you can accommodate a child's particular sensory or motor limitations. Thus, a child with severely delayed motor abilities but potentially average cognitive skills is not held up in progressing through the cognitive domain because he or she cannot do items that require typical motor skills.
- 3. The curriculum is based on the recognition that many young children with serious impairments will never develop typically in spite of intervention efforts. Thus, in treating these children, you must consider teaching atypical but highly adaptive skills that may temporarily or permanently replace typical skills. For example, should a child be unable to talk but have adequate motor skills, it is appropriate for you to teach signing as a means of communication until speech becomes effective. Should the child be unable to talk because of severe physical problems, it is appropriate to teach eye gaze, pointing, or another indicator response that will allow him or her to make choices, communicate wishes, and eventually use an electronic communication device.
- 4. The curriculum is developmental, with items drawn from standard developmental assessment tools, clinical experience, and the research literature read by the authors, but behavioral theory and methodology underlie item construction. There is also a strong emphasis on developing adaptive functional skills, even if these are not necessarily typical (e.g., moving by scooting on one's buttocks or using a scooter board when crawling would be typical but is not functional).

WHAT IS INCLUDED IN THE CCPSN?

The CCPSN has been designed to provide a systematic approach for developing intervention plans for children with special needs who are functioning within the 24to 60-month developmental range. In this curriculum, you will find

- A criterion-referenced assessment for determining the child's mastery of important social, cognitive, language, motor, and adaptive skills
- Suggestions for selecting educational objectives from the assessment
- Guidelines for developing activities for the IEP (or for the individualized family service program [IFSP]) that incorporate the educational objectives

WHAT HAS CHANGED IN THIS REVISION?

Reorganization of Sequences

This edition of the CCPSN includes almost all of the items included in the first edition, although some have been moved to different age levels on the assessment chart based on the most current information available to the authors.

The primary change is one of organization. New sequences have been created and others renamed, combined, or divided in order to provide a consistent progression from infant and toddler skills to preschool skills. In some areas of development (especially language), there appears to be a very smooth progression in the skills a child learns from infancy through the preschool period. In other areas, the progression is less clear. That is, it is difficult to identify the infant precursors of some preschool skills. We have done our best to identify the commonalities in infant and preschool skills and to reflect these in the sequences.

Table 1.1 provides a list of the sequences and the developmental domains under which they are organized in this curriculum.

Note that three sequences, Concepts/Vocabulary: Receptive; Concepts/ Vocabulary: Expressive; and Attention & Memory: Auditory are listed as Cognition/ Communication. The skills assessed in these sequences are included on almost all tests of cognitive ability and almost all tests of language ability. Thus, they clearly belong in both domains and should be included in both when estimating a summary level of development for those domains.

Increased Emphasis on Functional Activities

Recognizing that preschool children with special needs are being served in a variety of settings (e.g., at home, in child care centers, in preschools), we have replaced the *Classroom Activities* section in each item with a section labeled *Classroom & Functional Activities*. *Classroom Activities* refers to activities that a teacher may employ in a classroom to build educational objectives for children with special

Personal-Social		Communication	
1.	Self-Regulation & Responsibility	13.	Verbal Comprehension
2.	Interpersonal Skills	14.	Conversation Skills
3.	Self-Concept	15.	Grammatical Structure
4-1.	Self-Help: Eating	16.	Imitation: Vocal
4-11.	Self-Help: Dressing		
4-111.	Self-Help: Grooming		
4-IV.	Self-Help: Toileting		
Cognitio	1	Fine Motor	
5.	Attention & Memory: Visual/Spatial	17.	Imitation: Motor
6-1.	Visual Perception: Blocks & Puzzles	18.	Grasp & Manipulation
6-11.	Visual Perception: Matching & Sorting	19.	Bilateral Skills
7.	Functional Use of Objects & Symbolic Play	20.	Tool Use
8.	Problem Solving/Reasoning	21.	Visual-Motor Skills
9.	Number Concepts		
Cognitio	n/Communication		Gross Motor
10.	Concepts/Vocabulary: Receptive	22-1.	Upright: Posture & Locomotion
11.	Concepts/Vocabulary: Expressive	22-11.	Upright: Balance
12.	Attention & Memory: Auditory	22-111.	Upright: Ball Play
		22-IV.	Upright: Outdoor Play

Table 1.1.	Developmental do	mains and the sequence	s of the CCPSN
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Note: Sequences 10, 11, and 12 overlap the cognition and communication domains and have been separated in this table to show this.

needs into an activity that some or all of the children's classmates can enjoy. *Functional Activities* refers to suggestions for practicing the skill in a variety of settings and in a way that promotes greater effectiveness in the general environment. It also refers to developing skills that promote independent play, not only skills that are functional for academics or self-care.

Emphasis on Emergent Literacy

To encourage interventionists to think of the long-term goal of preparing children for school and a productive adult life, this edition of the curriculum highlights the importance of emergent literacy skills. Since the 1980s, there has been a growing recognition that literacy does not begin with learning to read and write (Notari-Syverson, O'Connor, & Vadasy, 1998). Rather, it begins in the infant, toddler, and preschool years through

• *Print/book awareness:* Reading to children before they can read themselves is highly related to their later ability to read. Parents and other caregivers play a primary role by reading books to children, letting children see them reading, and pointing out text in the environment. Awareness of print includes early scribbling, drawing, letter/word formation, and the understanding that written words express ideas.

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- *Metalinguistic awareness:* Metalinguistic awareness refers to the ability to reflect on, manipulate, and talk about linguistic forms. At the age levels covered in this curriculum, this generally involves an interest in novel sounds and new words and the recognition that a new word shares characteristics with known words (e.g., isolating initial sounds in words, forming rhymes and nonsense, creating words). Children learn these skills through rhyming, singing, and picking out sounds in words.
- *Oral language:* Oral skills related to reading include using words and sentences to describe events, tell a story, carry on a conversation, and express feelings (Notari-Syverson et al., 1998).

Items related to emergent literacy are scattered throughout the curriculum. They include memory for sequences of sounds and words, interest in pictures and books, understanding that words stand for specific objects and pictures, using words to communicate, listening to stories, trying to repeat stories as if reading, matching shapes, scribbling, drawing shapes and letters, and so forth. Emergent literacy is one of the long-term goals that should be kept foremost in mind when developing intervention programs for children with special needs, whether the program is to be implemented at home or in a preschool.

A checklist of emergent literacy skills is included in the appendix at the end of this chapter. It covers skills learned from infancy through the preschool years (the ages covered by the CCITSN and the CCPSN). Most of these skills are included in one or another of the curriculum sequences. The value of the checklist is not only to help you assess a child's progress in emergent literacy but also to demonstrate the relationship of literacy to specific curriculum items focusing on visual, motor, cognitive, language, or social skills.

References for Parents and Teachers Regarding Common Conditions Affecting Development

Many children who are served in preschool programs for children with special needs have unspecified "developmental delays." The lack of a more specific diagnosis is due to both the genuine difficulty of making correct diagnoses in young children whose development is variable and a reluctance of professionals to label a young child. As authors, we also have concerns about labeling young children. Yet, a diagnosis is sometimes helpful to parents and the child in providing access to services that are earmarked for specific conditions. Furthermore, the diagnosis may have an impact on family planning and other important issues.

In the first edition of the CCPSN, we included a chapter on selected impairments and their effect on development. Because teachers and interventionists are generally more knowledgeable now than when the first edition was written, we have omitted that chapter but included a list of common conditions affecting development in Appendix A at the end of the book. Characteristics of each of these conditions, their effects on development, specific tips for interventionists or classroom teachers, and a list of resources are included on the Paul H. Brookes Publishing Co. web site (http://www.brookespublishing.com/ccupdates).

We encourage those working with preschool children who have special needs to familiarize themselves with the characteristics of these various conditions. As you work with a child described as having a developmental delay, it may become apparent that the child does not just have delays but has characteristics that suggest a more specific condition or may simply be very puzzling. If this happens, you may wish to encourage the family to seek further evaluation or professional consultation to better understand the nature of the child's problems, especially if a specific diagnosis would provide access to additional services or support for the family.

FOR WHOM IS THE CCPSN INTENDED?

The CCPSN was originally designed to be used by teachers and child care workers in preschool and other child care settings serving children with special needs functioning between the ages of 24 and 60 months. That continues to be the primary focus of the curriculum. Many of the items included represent skills most readily observed in group care settings. However, we recognize that the first edition of the CCPSN was also used by other professionals working with this population, often in collaboration with a classroom or with parents. These professionals included speech-language pathologists, occupational therapists, physical therapists, and special education resource teachers. To encourage continued broad usage, a major effort has been to avoid professional jargon in the writing of the materials. In addition, there has been an effort to alert users to a child's characteristics or responses that require attention from professionals with particular skills (e.g., a physical, occupational, or speech-language therapist).

HOW ARE ITEMS ORGANIZED IN THE CCPSN?

The items included in the CCPSN are drawn from the clinical experience of the authors, the research literature, and a variety of published assessment instruments (see References at the end of this chapter). In the process of organizing items into sequences and assigning the sequences to the different domains, we recognize that our decisions were sometimes arbitrary. For the most part, however, there was a clear rationale for the decisions. When choosing items for sequences, our concern was that a child should be able to move through the sequence without being hung up by significant variations in the visual, motor, or speech demands of the items. For example, Sequence 6 (Visual Perception) includes items requiring visual discrimination and an understanding of the concepts of colors, shapes, and functional relationships, but the motor skills required are minimal and no speech is necessary. Sequence 10 (Concepts/Vocabulary: Receptive) and Sequence 11 (Concepts/Vocabulary: Expressive) also include items related to colors, shapes, and functional relationships but require either an understanding or an expression of a verbal concept. This division is important because a child may have such a severe speech impairment that he or she appears to have mental retardation. Typical cognitive functioning with respect to a visual understanding of the child's world, however, may be evident through his or her ability to match and sort colors, shapes, alphabet letters, and numbers and his or her ability to sort objects by class or function.

The holistic nature of development makes it problematic to divide the sequences into the typical broad domains of development (personal-social, cognition, communication, fine motor, and gross motor). For example, cognition underlies almost all aspects of development; motor skills are a necessary component of speech, self-help skills, and many cognitive skills; and communication is a critical aspect of cognition and social skills. We have assigned the sequences to domains based on what seemed to be the most important characteristics of each sequence. In the cases of communication and cognition, however, we include three sequences that span both domains. For the purposes of assessing a child and determining what skills should be targeted for intervention, the domain to which these skills are assigned is irrelevant. Yet, the domain divisions are important because they represent the traditional way of looking at the pattern of a child's development and provide a summary that you can readily understand.

WHAT IS THE ROLE OF THIS CURRICULUM?

We have observed that in many programs serving young children with special needs, there appears to be an underlying assumption that all children, regardless of their disabilities, must work through all domains in a developmental curriculum, eventually demonstrating the skills observed in typically developing children. Some modifications in those programs may be made for sensory impairments (e.g., a child who is blind is not required to learn colors), but few modifications are considered for other kinds of conditions. We do not intend for the CCPSN to be used in this fashion. Specific disabling conditions may make whole sequences inappropriate for some children and others appropriate only with significant modifications. For example, a child with severe athetoid or spastic cerebral palsy will never be able to do most of the items in the fine motor and visual-motor skills sequences. Instead of spending their time trying to master the motor requirements of stringing small beads or other such tasks, these children should be working on motor activities recommended by the occupational and physical therapists that will be *functional* for self-help or independent play activities. The cognitive components of visual-motor tasks (e.g., the form discrimination aspect of copying block patterns) should be worked on through matching and sorting tasks that minimize motor requirements.

Although we have included some suggestions for modifications at the beginning of each sequence to accommodate specific impairments, it is probably both impossible and undesirable to develop a curriculum that has modifications for every kind of disabling condition. No curriculum can replace the intelligence and creativity of a good teacher. In the CCPSN, we have made an effort to describe each sequence in such a way that the teacher or interventionist will understand the underlying purpose of the series of items and will, therefore, be able to make modifications in the items to accommodate a particular child's needs. For example, the introduction to Sequence 8 (Problem Solving/Reasoning) concludes with the statement "The purpose of this sequence is to help children observe the effects they have on the objects around them and, as language emerges, to be able to discuss perceptions and conclusions with adults. Another goal is to help children develop confidence and pleasure in their efforts to understand the world around them." Many of the items in this sequence require the child to answer questions. If the child is unable to communicate through speech or some form of augmentative and alternative communication, it may be necessary to create multiple-choice options through pictures so that the child can demonstrate reasoning by pointing or eye gaze. The child may work through the sequence quite well with such modifications and should be encouraged to do so. It is not necessary that every child demonstrate skills in the same way.

SUMMARY

The first edition of the CCPSN has been used in a variety of settings to promote developmental progress in young children with special needs. It linked a developmental assessment procedure with curricular activities and provided suggestions for modifying activities to meet the needs of children with specific and severe disabilities. This revision is an attempt to update the curriculum by responding to feedback from users, making it more consistent with the second revision of the CCITSN, building on the strengths of the previous edition, and addressing concerns.

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CHAPTER ONE APPENDIX

Checklist for Emergent Literacy Skills

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Print/book awareness

- ____ Handles and plays with books
- ____ Looks at pages
- ____ Turns pages
- _____ Examines pages visually
- _____ Puts hands on pictures
- _____ Indicates a particular picture when asked, "Show me. . ."
- Has favorite pictures or pages
- ____ Comments on story
- ____ Orients book correctly (i.e., right side up, opening from right side)
- Has favorite books, asks to have them read
- _____ Talks about a story while looking at pictures
- _____ Points to text while talking
- ____ Knows that text moves from left to right
- ____ Reads environmental print and logos
- _____ Recognizes simple words in text
- _____ Answers questions about the story
- Relates story to own life experience
- _____ Knows names and sounds of letters
- ____ Makes marks on paper
- _____ Scribbles
- ____ Copies lines
- ____ Copies shapes
- ____ Copies letters

- ____ Copies words
- ____ Pretends to write
- _____ Uses invented spelling to
- write short messages

Metalinguistic awareness

- _____ Uses environmental sounds in play
- _____ Repeats single sounds when asked to
- _____ Fills in next line in repeated line story
- _____ Participates in nursery rhymes
- Recalls one word from a sentence
- ____ Understands and produces rhymes
- Recognizes beginning sounds of a word
- ____ Blends syllables into words
- ____ Divides words into syllables

Oral language

- ____ Uses words
- ____ Uses sentences
- ____ Describes an event with a beginning, middle, and end
- _____ Repeats stories that have been read
- Uses categories to describe objects (e.g., animals, food)
- ____ Talks about past experiences during play
- _____ Predicts what might happen
- ____ Differentiates between real and pretend
- ____ Describes feelings and motivations

Source: Notari-Syverson, A., O'Connor, R.E., & Vadasy, P.F. (1998). Ladders to literacy: A preschool activity book. Baltimore: Paul H. Brookes Publishing Co.