

Emergent Curriculum and Kindergarten Readiness

Deborah J. Cassidy

Sharon Mims

Lia Rucker

and

Sheresa Boone

University of North Carolina at Greensboro

Greensboro, North Carolina

## Emergent Curriculum and Kindergarten Readiness

The focus on “readiness” in early childhood education has increased dramatically in recent years with the growing concern about the number of failing students and failing schools. The National Education Goals Panel Goal One Task Force on School Readiness (Shore, 1998) delineated five domains of children’s development and learning that should be part of any description of school readiness: physical health and motor development, social and emotional development, approaches toward learning, language development, and cognition and general knowledge. Both the National Education Goals Panel Goal One Task Force and the National Association of State Boards of Education emphasize the following important points about school readiness: 1) all children are ready to benefit from school; 2) readiness is about much more than knowing ABCs and numbers; and 3) conditions of children will vary as they enter school and it is not appropriate to expect a common set of skills for all children as they enter school (School Readiness in North Carolina, 2000).

However, the concept of “readiness” cannot be addressed by focusing only on the children entering Kindergarten, but must include scrutiny of the environment into which they are arriving. Four “Cornerstones of Ready Schools” are identified in School Readiness in North Carolina, (2000) and include the requisite components in school settings that allow children to be successful. These four cornerstones are:

- Knowledge of growth and development of typically and atypically developing children
- Knowledge of the strengths, interests, and needs of each individual child
- Knowledge of the social and cultural contexts in which each child and family lives

-The ability to translate developmental knowledge into developmentally appropriate practices

The concept of “ready schools” implies the need for flexibility to address individual differences in the physical environment, the curriculum and in the teaching strategies employed. The degree to which the professionals in our schools possess an in-depth knowledge of child development, and the ability to use this knowledge when making decisions about individual children, is a fundamental element in whether children in schools experience success, regardless of their individual “readiness”.

In spite of the promising language regarding “ready schools” and the developmental readiness of **individual** children in recently published documents on school readiness, the pervasive sentiment still seems to be that young children are often inadequately prepared for the rigors of a public school education that is often inflexible. The response of many preschools, child care programs, and public schools to the barrage of information indicating that young children arrive at kindergarten unprepared, has been a rapid retreat “back to the basics” including a more academic and highly structured approach to educating young children. The available research on child-centered, developmentally appropriate curriculum models indicates that such a “retreat” is unwarranted. High quality, developmentally appropriate curricula have been shown to result in short-term and long-term positive cognitive and social outcomes for young children (Marcon, 1999; Schweinhart, L. & Weikart, D., 1998; Cost, Quality, & Child Outcomes Study Team, 1995). However, what does seem essential is that programs that espouse more child-centered and developmentally appropriate curriculum approaches better articulate the many cognitive, social, emotional, and physical developmental accomplishments of their curricula.

Parents, kindergarten teachers, and public school administrators often question how a play-based approach to educating young children can serve as “preparation” for kindergarten.

The following description of the curriculum activities in one child-centered, developmentally appropriate child care facility preschool classroom delineates how particular activities that were provided based on observations made of the needs, interests, and abilities of the 3-5-year old children address the competencies in the public school system standard course of study. The emergent or “grassroots” curriculum (Cassidy, & Lancaster, 1995; Cassidy & Myers, 1987) is based on specific observations made of individual and small groups of preschool children. Teachers in this classroom use daily planning to respond to the observed behaviors to facilitate learning and development in the classroom for each individual child.

In order to provide enlightenment regarding the many ways in which the ongoing activities in this classroom facilitate children’s development and thereby kindergarten readiness, we will present a description of several curriculum topics/strands that were implemented in the preschool classroom. The activities in which the children were involved will be described as they unfolded in the classroom. Since this child care facility is located in the state of North Carolina, we will also delineate the competencies from the North Carolina Standard Course of Study for Kindergarten (North Carolina State Department of Public Instruction), the curriculum used in kindergarten classrooms across the state of North Carolina, that are addressed through the activities.

The activities described addressed competencies that met or exceeded the actual level of the competencies required in Kindergarten. For example, in the science area, children in the preschool classroom were involved in higher level skills of exploration and use of the scientific method—skills not seen in the North Carolina Standard Course of Study until 1<sup>st</sup>, 2<sup>nd</sup> and even

3<sup>rd</sup> Grade. The Kindergarten Standard Course of Study for science requires competencies in areas such as animal appearance, growth, changes and purposes. The pets available in the classroom provide an ongoing opportunity to learn about these concepts about pets and the additional opportunity to learn about pet care. Another focus of the kindergarten science curriculum is to understand weather concepts. Again, this was accomplished in this classroom on a daily basis through conversations about daily and seasonal changes in weather and temperature. The lists of competencies in each activity description are not exhaustive lists. Indeed, they capture only a small number of the learning objectives of the activities included in each strand. In fact, they do not even include all of the kindergarten competencies addressed in the experiences but provide only examples of what is learned in the experiences that are consistent with kindergarten expectations.

### **The Preschool Classroom**

During the 6-month period of time described in the following curriculum strands there were 15 children in this classroom ranging in age from three to five. Planning in this particular classroom is observation based. When planning an activity, the teachers look first at the child's (or group of children's) interest and how they can extend the interest to increase understanding and learning. Then they begin to alter the activity to accommodate specific skills. If children demonstrate interest or similar play is seen in other areas, then activities are further extended. Children also request or provide ideas for many activities. The same activity may be repeated or altered slightly to increase a child's experience/ involvement and target specific skills. This type of repetition of activities is an important part of this classroom and allows children to experience

mastery and develop feelings of self-competence. Strands of interest, represented by child play and planned activities extend from day to day and may last for months.

## Treasure Hunt

### **Social Studies Curriculum**

**Grade: Kindergarten**

#### Competency Goal 8: Geography

8.2. Construct simple maps, models, and drawings of home, classroom, and school settings

### **Science Curriculum**

**Grade: One**

Competency Goal 2: The learner will build an understanding of solid earth materials.

2.02 Classify rocks and other earth materials according to their properties: Size, Shape, Color, and Texture.

Competency Goal 3: The learner will build an understanding of the properties and relationship of objects.

3.01 Determine the many ways in which objects can be grouped or classified.

Treasure hunting was a tremendous source of interest and basis for many classroom activities from September to March. The strand of treasure hunting was completely child initiated. Original activities began as a result of child requests and ideas. Related play has

continued outside of planned activities and lasted the entire school year, even with spaces of several weeks between planned activities incorporating treasure, etc. The children began in September by hiding classroom treasures and creating their own treasure chests. This extended to the children making their own treasure with foil, glitter, glue, and cellophane using creativity and fine motor skills. The children completed treasure hunts that involved marking the spot where the treasure was hidden with an "X". Later hunts involved the children asking teachers to draw maps of the classroom and playground, with an "X" to mark the spot of the treasure. The children were able to use their imagination to create maps for discovering treasures. They also had to be able to use the classroom's layout to map where the treasured gems would be found. These maps aided the treasure hunters in their search for the hidden gems. This demonstrates the beginning of an extended experience with visual representation, role-playing, and mapping patterns.

The teachers continued activities with pre-drawn maps and hidden eggs. At snack time one day the children used graham crackers, peanut butter, and raisins to create edible treasure maps. At the same time, several children were beginning to design their own maps as well. A CD-ROM was purchased for the classroom and further reinforced and enhanced the interest in this topic.

One of the teachers visited a gem mine in the North Carolina Mountains and brought back buckets of dirt/sand for the children to search for treasure. The found gems/treasure allowed the children to discover properties of the stones, such as which ones were alike and different and to define why they were alike or different. Using observed properties to classify the gems allowed the children to expand their knowledge about solid materials on the earth. The children eventually put the gems to use as the hidden treasure.

Maps drawn by the children became increasingly detailed. Children were using literacy skills daily to plan and create maps for treasure hunts. A parent brought in a box of household materials for the classroom. Included in the materials was a jewelry box, that the children thought looked much like a treasure chest. They began to build forts for the treasure chest and the treasure hunts became more of a large group activity with a single treasure at the end of the search.

# Book Making

## English Language Arts Curriculum

**Grade: Kindergarten**

Competency Goal 1: The learner will develop and apply enabling strategies and skills to read and write.

1.03 Demonstrate decoding and word recognition strategies and skills.

- Recognize and name upper and lower case letters of the alphabet.
- Recognize some words by sight including a few common words, own name, and environmental print such as signs, labels, and trademarks
  - Recognize most beginning consonant letter-sound associations in one-syllable words

Competency Goal 4: The learner will apply strategies and skills to create oral, written, and visual texts.

4.02 Use words that name and words that tell action in a variety of simple texts.

4.03 Use words that describe color, size, and location in a variety of texts: e.g., oral retelling, written stories, lists, and journal entries of personal experiences.

Competency Goal 5: The learner will apply grammar and language conventions to communicate effectively.

5.01 Develop spelling strategies and skills by:

- Representing spoken language with temporary and/or conventional spelling.
- Writing most letters of the alphabet.
- Analyzing sounds in a word and writing dominant consonant letters.

## Science Curriculum

**Grade: Kindergarten**

Competency Goal 4: The learner will increase his/her understanding of how the world works by using tools.

4.02 Determine the usefulness of tools to help people: scissors, pencils, crayons, etc.

In December many of the children began to make their own books by stapling, taping, and gluing paper together. Some children cut pictures from magazines and glued them into their books, while others drew their own pictures. Teachers built on this interest and enhanced literacy skills by planning activities related to other activity strands, centered on book making, such as creating a book about feelings. However the children's primary interest remained with creating their own individualized books.

Since the children obviously had their own plans, the teachers followed the lead of the children. Many of the children were beginning to become interested in letters and writing words/stories in their books. Children began by asking the teachers to write their words and stories in the books for them, as they dictated the story. They also asked teachers to write words for them and then copied the letters into their books. Some children who were familiar with letters asked teachers to spell words orally, while they wrote the letters. Others were ready for the teachers to help them sound out words phonetically, for them to write. Many common words were spelled independently by some of the children. The children had to use a variety of words, including naming and action words, to tell their stories. As they combined words into sentences, many different kinds of words were used to tell their story.

The children used different tools to assist them in the book making process. Some children cut and glued pictures from magazines while others drew their own pictures. Some asked teachers to write dictated stories, others copied letters and words teachers wrote for them, while still others only needed the word to be spelled orally or sounded out for them. Scissors, pencils, and crayons were used by most of the children. These tools were useful in helping the children create individual products.

More advanced skills developed later in the strand as the children continued to extend their own ideas, repeat similar stories, and observe other's books. This strand allowed the teachers to observe and naturally extend literacy skills, such as letter recognition, writing development, and top to bottom and left to right orientation. Story development and phonetic awareness were also skills developed through the activity. The children used creativity and independent decision making to continue work on their books. Many stories drew from the children's personal experiences and generated a sharing of ideas and interest in the work of others.

# Growing Things

## Science Curriculum

## Grade: Kindergarten

Competency Goal 1: The learner will build an understanding of similarities and differences in plants and animals.

1.01 Identify the similarities and differences in plants: Appearance, growth, change, and uses.

1.02 Identify the similarities and differences in animals: Appearance, growth, change, and purpose

1.03 Observe the different ways that animals move from place to place, and how plants move in different ways

1.04 Observe similarities of humans to other animals and their basic needs. Observe how humans grow and change.

Competency Goal 2: The learner will build an understanding of weather concepts.

2.03 Observe the seasonal and daily changes in weather; similarities and differences, temperature changes

Competency Goal 3: The learner will build an understanding of the properties/movement of common objects and organisms.

3.03 Describe motion when an object, a person, an animal, or anything goes from one place to another.

## Grade: One

Competency Goal 1: The learner will build an understanding of the needs of living organisms.

1.01 Determine the needs of plants: Air, Water, Nutrients, and Light..

Competency Goal 2: The learner will build an understanding of solid earth materials.

2.03 Determine the properties of soil: Capacity to retain water and ability to support life.

## Grade: Two

Competency Goal 1: The learner will build an understanding of plant and animal life cycles.

1.01 Analyze the life cycle of plants: Reproducing, Developing into an adult, eventually dying.

## Grade: Three

Competency Goal 1: The learner will build an understanding of plant growth and adaptations.

1.03 Analyze plant structures for specific functions: Growth, Survival, and Reproduction

1.04 Determine that new plants can be generated from: Seeds, Bulbs.

In December the children continued to talk about a garden they had grown on the playground the previous summer. The children were also extremely interested in new plants that one of the teachers had given to the classroom as the result of a move. They used the spray bottles to water them daily. The donated plants, sprouting beans and planting bulbs allowed the children to compare different types of plants. They could see how the growth and appearance of each plant was alike and how it was different. They could also see that certain plants are food producing and others are not.

The teachers wanted to build on the children's appreciation of nature and skills of observation. However, an outdoor garden was not possible during this time of year so they assisted the children in sprouting beans in the classroom. In January the children and teachers planted bulbs and began to chart the growth of their plants. The children's discussion of different types of seeds and uses for the seeds led to art activities using seeds to make necklaces, collages, media table experiences, etc. The class also made plans for a vegetable garden in February and began to plant some of the plants in the classroom. The children discussed when they needed to plant indoors and why and when plants could be planted outdoors.

These activities caused the children to be aware of the different things plants, seeds, and bulbs need to grow. Without the care of the children (water, light and nutrients), the plants and sprouts would not thrive. They learned the vital elements that plants need to grow. Growing plants and sprouts in soil allowed the children to see the properties of soil. By watering them, the children could observe how the soil absorbed or retained the water. An abundance of water would not be able to be retained by the soil. They could also observe how soil supports the life of the plants, bulbs, and sprouts.

Through daily care of the plants, the children could observe the functions of the plants. They could see how the plants grew from day to day and week to week. They could observe when or if the plant reproduced. They could also see whether or not the plant(s) survived week to week. Through caring for the plants, the children could also observe the life cycle of a plant. When the plant grew more leaves, it was reproducing. As it matured and became stronger, it was developing into an adult. Finally, some of the plants eventually died, allowing the observation of the life cycle to be completed.

The discussions about growing things extended to people and animals. One of the student teachers provided a butterfly habitat in which children were able to help create and observe the development of butterflies from larvae, to caterpillars, to butterflies. Caterpillars were grown from larvae, chrysalises to butterflies--to identify similarities and differences (appearance, growth, change, and purpose) in animals. The changes during the stages of growth allowed the children to compare one state to another. Associations were suggested for the children to compare, such as, babies have certain needs to grow (bottles) and caterpillar chow was needed for the caterpillars, but older humans and butterflies may eat differently. Every living thing needs a source of food or nutrients to sustain life. Also, those needs change at different times or stages in life. The children were able to observe these stages and requirements of each stage. The butterfly habitat not only allowed the children to observe the development of a butterfly, but also its movement in different states. Butterflies and caterpillars move differently to get from one place to another. The children were able to observe this and compare the difference in mobility. The children charted this development and there was a release party as the butterflies hatched and were ready to fly.

## Feelings/Awareness of Self and Others

### **Healthful Living Curriculum**

**Grade: Kindergarten**

Competency Goal 2: Stress Management

- 2.1 Naming feelings
- 2.2 Verbalizing feelings
- 2.3 Accepting the normalcy of feelings.

### **Social Studies Curriculum**

**Grade: Kindergarten**

Competency Goal 2: The learner will infer that individuals and families are alike and different.

- 2.1 Describe aspects of families
- 2.2 Distinguish likenesses and differences among individuals and families (particularly cultural differences & skin color)

Competency Goal 6: The learner will characterize change in different settings.

- 6.1 Describe changes in one's self.

### **Science Curriculum**

**Grade: Kindergarten**

Competency Goal 1: The learner will build an understanding of the similarities and differences in plants and animals.

- 1.04 Observe how humans grow and change

In November the teachers initiated several group meeting discussions regarding feelings with the purpose of helping the children develop a set of classroom rules. They believed that helping the children understand and recognize their own feelings would provide an understandable base on which the children could develop relevant, functional guidelines for classroom behavior. Group time discussions about feelings, what causes them, how people act when they feel certain ways, etc., led to the creation of books about feelings in which the children used literacy skills and creativity. Language development was enhanced as the children either drew or cut out magazine pictures and dictated the text of their stories for the teachers to write. Lists and charts were also made during group times so that the children could compare and contrast opinions regarding their own feelings and those of others.

Discussions about different feelings and personal reactions led to comparison of physical characteristics as well. The children worked on life-sized "Me" pictures for several days in December. In February the children were still talking about similarities and differences between themselves and the teachers planned a color mixing activity using people colored paint to allow the children to mix a color that was similar to their skin color. Many of the children then used their paint to work on another self-portrait, increasing their multicultural awareness.

The children had enjoyed earlier activities that involved tape recording their voices and then guessing whose voice it was, so the teachers planned another activity in which each child read a book and then as a group over several days, the children listened to the tape and discussed the voices, as well as the story. Also in February the strand of feelings and self-awareness became tied into another strand as the children began to view themselves as growing and changing beings. They were able to see themselves as not static, but constantly changing beings. Just as each person may have different characteristics, each person also changes within himself

or herself. Height was focused on as a changing feature of each child. A growth chart that was updated over the course of the year recorded changes in height so children would have concrete evidence of change over time.

### **Conclusions**

It is clear that many of the goals for children's learning during Kindergarten, as well as first and second grade, are being addressed during their play in this classroom. Their enthusiasm and excitement for the activities stems from building and planning these activities around their interests. The curriculum in this classroom is not only developmentally appropriate and child-centered but serves to prepare children for kindergarten. Even with the ever-increasing rigor of kindergarten competencies, children in a high quality, developmentally appropriate classroom such as this one can be adequately prepared for kindergarten.

However, regardless of the curriculum adopted in the pre-kindergarten or child care classroom, exposure to appropriate and stimulating curriculum does not ensure that all children will have mastered the concepts addressed. It is critical that a developmentally appropriate curriculum be coupled with a developmentally appropriate assessment system that documents progress of each child in the classroom. If screening instruments or other assessment instruments are structured so that there is a rigid pass/fail system, attempt to measure only "facts", and are conducted in artificial and unnatural settings, children will fail. Indeed, the only way for children to be successful under such circumstances is for teachers to teach to the test under typical test taking conditions. Under such conditions, it will be difficult to determine what a child knows, especially if they are unaccustomed to these circumstances, as is the case for children in developmentally appropriate classrooms. Only through developmentally appropriate assessment,

such as portfolio documentation, can we be assured that the curriculum has adequately prepared each individual child for kindergarten.

Furthermore, there are three other essentials that must be in place in order for preschool developmentally appropriate curricula to effectively meet the needs of today's preschool child and the demands of schools and today's society:

1. A critical component to the kind of learning that took place in this classroom was knowledgeable and well-educated teachers who were able to facilitate learning for each child. Obviously, teachers in classrooms that encourage children to construct their own knowledge must possess a keen understanding of children's development and how the young child learns. Their ability to determine the children's abilities, individual personalities, family cultures and priorities also assisted them in facilitation of the children's learning. The role they played in observing the children's interests and on-going play was the catalyst for creating this educationally stimulating environment. Their ability to capture crucial information, relevant to this group of children, and utilize it as the basis of their curriculum transformed "ordinary" preschool activities into an extremely rich and stimulating learning environment.
2. Communication with parents is essential in helping them understand how a play-based curriculum is preparing children for kindergarten. It is difficult for parents to see how children learn through a play-based curriculum. Children at play, because it is such an enjoyable and

- engaging experience for them, does not seem like the academic exercise parents expect to see in a kindergarten readiness program
3. Communicating with kindergarten teachers and administrators is also critical. Many public school personnel are unfamiliar with the best practices in preschool education and need articulate preschool teachers to explain the relationship between the play that occurs in their classrooms and the competencies and expectations that are required for kindergarten entry.

Through participation in this stimulating environment with guided learning provided by knowledgeable teachers, as well as documentation of each child's needs, interests, and abilities, these children were truly prepared for kindergarten and enjoyed learning during their preschool years. With concerted effort teachers can educate the public and public school officials about how a child-centered curriculum is a readiness curriculum.

### **Summary**

There is much written, discussed and opined about kindergarten readiness today. Unfortunately, there is often an underlying assumption that the burden of becoming ready rests solely on young children and their families. All too often children are forced to be "ready" for an inappropriate environment that contains few of the requisite components to be "ready" for them. Given an early educational environment that is 1) engaging, age-appropriate and child-centered, 2) includes an assessment system that ensures a curriculum that provides for individual differences, and 3) provides knowledgeable teachers who are responsive and capable of facilitating learning, children can be "ready" for kindergarten.

## References

- Cassidy, D.J. & Lancaster, C. (1993). The grassroots curriculum: A dialogue between children and teachers. Young Children, 48 (6), 47-51.
- Cassidy, D. J., & Myers, B. K. (1987). Early childhood planning: A developmental perspective. Childhood Education, 64, 2-8.
- Cost, Quality, & Child Outcomes Study Team (1995). Cost, Quality, and Child Outcomes in Child Care Centers, Public Report, second edition, Denver: Economics Department, University of Colorado at Denver.
- Marcon, R. A. (1999). Differential impact of preschool models on development and early learning of inner-city children: A three cohort study. Developmental Psychology, 2, 358-375.
- National Research Council, (2000). Eager to Learn. Washington, D.C., National Academy Press.
- North Carolina State Department of Public Instruction. North Carolina Standard Course of Study. (<http://www.dpi.state.nc.us/Curriculum>)
- North Carolina School Improvement Goal Panel Ready for School Goal Team (2000) School Readiness in North Carolina: Strategies for Defining, Measuring, and Promoting Success for All Children, North Carolina State Board of Education.
- Schweinhart, L. & Weikart, D. (1998). Why curriculum matters in early childhood education. Educational Leadership, 55 57-60
- Shore, R. (1998). Ready Schools. Washington: Goal 1 Ready Schools Resource Group, National Education Goals Panel.