Emergent Curriculum and Kindergarten Readiness

By: Deborah J. Cassidy, Sharon Mims, Lia Rucker, Sheresa Boone

This is an Author's Accepted Manuscript of an article published in

Cassidy, D.J., Mims, S., Rucker, L., & Boone, S. (2003). Emergent curriculum and kindergarten readiness. *Childhood Education*, 79(4), 194-199. doi:10.1080/00094056.2003.10521192

as published in the *Childhood Education* 2003 [copyright Taylor & Francis], available online at: http://www.tandfonline.com/10.1080/00094056.2003.10521192.

Abstract:

This article describes the curriculum activities in one child-centered, developmentally appropriate child care facility preschool classroom. In particular, it explains how activities are selected according to children's needs, interests, and abilities, and how the activities address the core competencies mandated by the public school system in kindergarten. This emergent or "grassroots" curriculum (Cassidy & Lancaster, 1993; Cassidy & Myers, 1987) is based on specific observations made of individual and small groups of preschool children. Teachers in this classroom of 3- to 5-year-olds use daily planning to respond to observed behaviors, and then facilitate learning and development for each individual child. Since this child care facility is located in the state of North Carolina, the authors delineate which competencies from the North Carolina Standard Course of Study for Kindergarten (North Carolina State Department of Public Instruction) are addressed through the activities.

Keywords: Early Childhood Education | Curriculum | Preschool | Kindergarten | North Carolina

Article:

Recently, the focus on "readiness" in early childhood education in the United States has increased dramatically in the face of growing concerns about the number of failing students and failing schools. The National Education Goals Panel (Shore, 1998) endorses an approach to school readiness that focuses on five domains of children's development and learning: 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 1 Ready Schools Resource Group and the National Association of State Boards of Education emphasize the following important points about school readiness: 1) all children are to be ready to benefit from school, 2) readiness constitutes much more than knowing the ABC's and numbers, and 3) as the backgrounds of children vary, it is not appropriate to expect all children to have a common set of skills as they enter school (North Carolina School Improvement Goal Panel Ready for School Goal Team, 2000).

It is important to note, however, that the concept of "readiness" cannot be addressed by focusing only on the children. We must scrutinize the environment into which they are entering. The following four "Cornerstones of Ready Schools" are identified in School Readiness in North Carolina (2000) as the requisite components of school settings that allow children to be successful:

* 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, in 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 their ability to use this knowledge when making decisions about individual children, is a fundamental determinant of children's success, regardless of their individual "readiness."

In spite of the promising language regarding "ready schools" and developmental readiness of individual children in recent documents on school readiness, the pervasive sentiment still seems to be that many young children are inadequately prepared for the rigors of an often inflexible public school curriculum. 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." This usually means a more academic and highly structured approach to early childhood education.

The available research on child-centered, developmentally appropriate curriculum models indicates, however, that such a retreat is unwarranted. High-quality, developmentally appropriate curricula have been shown to result in positive cognitive and social outcomes for young children (Cost, Quality, & Child Outcomes Study Team, 1995; Marcon, 1999; Schweinhart & Weikart, 1998). It is essential, however, for programs that espouse more child-centered and developmentally appropriate curriculum approaches to articulate the many cognitive, social, emotional, and physical developmental accomplishments of their curricula. Only then can they answer those parents, kindergarten teachers, and public school administrators who question how a play-based approach to educating young children can serve as preparation for kindergarten.

This article describes the curriculum activities in one child-centered, developmentally appropriate child care facility preschool classroom. In particular, it explains how activities are selected according to children's needs, interests, and abilities, and how the activities address the core competencies mandated by the public school system in kindergarten. This emergent or

"grassroots" curriculum (Cassidy & Lancaster, 1993; Cassidy & Myers, 1987) is based on specific observations made of individual and small groups of preschool children. Teachers in this classroom of 3- to 5-year-olds use daily planning to respond to observed behaviors, and then facilitate learning and development for each individual child. Since this child care facility is located in the state of North Carolina, the authors delineate which competencies from the North Carolina Standard Course of Study for Kindergarten (North Carolina State Department of Public Instruction) are addressed through the activities.

The various activities described here address competencies at or beyond the competency levels required in kindergarten. In the science area, for example, preschool children were involved in higher level skills of exploration and use of the scientific method--skills not included in the state Standard Course of Study until the 1st, 2nd, or even the 3rd grade. The Kindergarten Standard Course of Study for science requires competencies in areas such as identifying animal appearance and measuring growth and changes. The classroom pets provided an ongoing opportunity to learn such concepts, while also providing opportunities to learn about pet care. Another focus of the kindergarten science curriculum is to understand weather concepts. Each day, classroom conversations focused on daily and seasonal changes in weather and temperature. The lists of competencies in each activity description are not exhaustive. Indeed, they capture only a small number of the learning objectives met through the activities.

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 3 to 5. Planning in this particular classroom is observation-based. When planning an activity, the teachers first considered the child's (or group of children's) interest and how they could extend the interest to increase understanding and learning. Then they shaped the activity to accommodate Specific skills. If children demonstrated interest, or if similar play was observed in other areas, then the activities were further extended. Children also could request specific activities. The same activity could be repeated or altered to increase a child's experience/involvement and to target specific skills. Such repetition was an important part of this classroom and allowed children to experience mastery and develop feelings of self-competence. Strands of interest (represented by child play) and planned activities extended from day to day, sometimes lasting for months.

Treasure Hunts

Treasure hunting was a tremendous source of interest and the basis for many classroom activities from September to March. This strand was completely child-initiated; original activities began as a result of child requests and ideas. Related play often continued outside of planned activities, and lasted the entire school year, despite gaps of several weeks between the planned activities. The children began in September by hiding classroom treasures and creating their own treasure chests. In planned extensions, the children made their own treasure, complete with foil, glitter,

glue, and cellophane. The children also conducted treasure hunts, which involved marking the spot where the treasure was hidden with an "X." For subsequent hunts, the children asked teachers to draw maps of the classroom and playground, putting an "X" to mark the spot of the treasure. These activities ignited the children's imagination, and laid the groundwork for role-playing and developing their sense of visual representation through creating and using maps.

The teachers continued the activities with more maps and hidden eggs. At snack time one day, the children used graham crackers, peanut butter, and raisins to create edible treasure maps. Several children began to design their own more traditional maps. The purchase of a related computer game further reinforced and enhanced the interest in this topic.

One of the teachers visited a gem mine in the mountains of North Carolina and brought back buckets of dirt and sand in which the children could search for treasure. As they found the gems/"treasure," the children discovered the properties of the stones, and determined how they were alike and different, and why. The children then classified the gems, expanding their knowledge about solid materials in the earth. The children eventually put the gems to use again as hidden treasure.

The children used their literacy skills daily to plan and create increasingly detailed treasure maps. One day a parent brought in a box of household materials for the classroom. One of the items was a jewelry box that reminded the children of a treasure chest. They began to build forts for the treasure chest and the treasure hunts became more of a large-group activity.

Bookmaking

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 capitalized on this interest and enhanced literacy skills by planning bookmaking activities related to other activity strands, such as creating a book about feelings.

The children remained primarily interested in creating their own books, and so the teachers followed their lead. Many of the children were becoming interested in learning letters and writing words/stories in their books. The children began asking the teachers to write the words in the books as they dictated the story. They also asked teachers to write words for them on separate paper, and then they copied the letters into their books. Some children who were familiar with letters asked teachers to spell the words orally while they wrote the letters. Others were ready for the teachers to help them sound out words phonetically, so that they could try to write the words on their own. Some of the children could spell many common words, and used a rich vocabulary to tell their stories.

The children used different tools to assist them in the bookmaking 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.

As the children continued to extend their own ideas, repeat similar stories, and observe others' books, they developed more advanced skills. 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. The activity also boosted children's phonetic awareness and their understanding of story development. Many of the stories were drawn from the children's personal experiences and generated a sharing of ideas and interest in the work of others.

Classroom Garden

In December the children continued to talk about a garden they had grown on the playground the previous year. They were extremely interested in using the spray bottles to water the new plants that one of the teachers had donated to the classroom. The children began to compare the different types of plants found in the classroom--how they grew, or the similarities and differences in their appearance. They also observed that certain plants produce food, and others do not.

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

As a result of these activities, the children gained an understanding that without water, light, and nutrients, the plants and sprouts would not thrive. They also began to understand the properties of soil (e.g., how the soil absorbed or retained water, and how soil supports plant life). By taking care of the plants, the children could observe how the plants grew from day to day and week to week. They could observe whether the plant survived, and when or if it reproduced. As they cared for the plants, the children observed the life cycle of a plant: how a plant grew more leaves as it reproduced, how it matured, and how some eventually died.

Discussions about growing things eventually extended to people and animals. One of the student teachers provided a butterfly habitat, through which children were able to observe the development of butterflies from larvae. The children compared one state of growth to another as the larvae became caterpillars, then butterflies. Caterpillars grown from larvae and chrysalises developed into butterflies. By watching these processes, the children could identify similarities

and differences (appearance, growth, change, and purpose) in animals. Comparisons were suggested for consideration, such as human babies and caterpillars need kinds of food that older humans and butterflies may not need to eat. Every living thing, however, 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 the requirements of each stage. The butterfly habitat allowed the children to observe not only the development of a butterfly, but also its movement in different states. The butterfly habitat also allowed the children to observe and chart how butterflies and caterpillars move differently to get from one place to another. The class eventually released the butterflies.

Discussing Feelings

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 a base on which the children could develop relevant, functional guidelines for classroom behavior. Group-time discussions about feelings and their causes led to the creation of classroom books about feelings in which children used literacy skills and creativity. The children either drew or cut out magazine pictures and dictated the text of their stories to the teachers. During group time, the students made lists and charts, so they could compare and contrast their opinions.

Discussions about different feelings and personal reactions led to comparisons of physical characteristics. The children worked on life-sized "Me" pictures for several days in December. In February, they were still talking about their similarities and differences, so the teachers planned an activity in which the children mixed paints to develop colors that would most closely resemble their skin colors, and then again worked on self-portraits.

The children had enjoyed earlier activities that involved tape recording their voices and then identifying each voice. The teachers planned another activity in which each child read a book into a tape recorder. As a group, over several days, the children listened to the tapes and discussed the voices, as well as the story. By February, the children were able to recognize that they were not static; they began to view themselves as growing and changing beings. A growth chart that was updated over the course of the year recorded changes in height, so that the children would have further concrete evidence of change over time.

Conclusions

It is clear that play in this classroom addressed many of the goals for children's learning in kindergarten, as well as those for 1st and 2nd grade. The children were enthusiastic about the activities because the teachers built and planned them around the children's interests. The curriculum in this classroom was not only developmentally appropriate and child-centered, it also served to prepare children for kindergarten. With experience in a high-quality,

developmentally appropriate classroom such as this one, children will more likely be adequately prepared for the ever-increasing rigor of kindergarten competencies.

Regardless of the curriculum adopted in the pre-kindergarten or child care classroom, however, exposure to appropriate and stimulating curriculum does not ensure that all children will master concepts. It is critical that a developmentally appropriate curriculum be coupled with a developmentally appropriate assessment system that documents the progress of each child in the classroom. Many children will fail in a kindergarten or preschool environment that favors a rigid pass/fail system, attempts to measure only "facts," and in which assessment is conducted in artificial and unnatural settings. 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, however, it will be difficult to determine what children really know, especially if they are unaccustomed to such environments, as is often the case for children who come from developmentally appropriate classrooms. Only through developmentally appropriate curriculum and assessment, such as portfolio documentation, can we be assured that each child is adequately prepared for kindergarten.

Furthermore, three other essential components must be in place to effectively meet the needs of preschoolers:

* Teachers must be knowledgeable and able to facilitate learning for each child. They must possess a keen understanding of children's development and how the young child learns. An ability to determine the children's abilities, individual personalities, family cultures, and priorities also is critical. The teachers' role in observing the children's interests and ongoing play was the catalyst for creating this educationally stimulating environment. Their ability to capture crucial information that was relevant to this group of children, and to utilize it as the basis of their curriculum, transformed "ordinary" preschool activities into an extremely rich and stimulating learning environment.

* Communication with parents is essential in helping them understand how a play-based curriculum prepares children for kindergarten. Because play is such an enjoyable and engaging experience for children, it is sometimes difficult for parents to see how children learn through a play-based curriculum, particularly when many adults view play as fun but superfluous, and "work" as valuable but not usually enjoyable.

* Communicating with kindergarten teachers and administrators about best practices in preschool education, and its relationship to kindergarten entry, also is critical. Many public school personnel are unfamiliar with best practices in preschool education and need articulate preschool teachers to explain the relationship between play and the competencies and expectations of kindergarten.

With the guidance of knowledgeable teachers, these children were truly prepared for kindergarten and enjoyed learning during their preschool years. Teachers can educate parents and administrators about how a child-centered curriculum is also a readiness curriculum.

Summary

Much has been written, discussed, and opined about kindergarten readiness. Unfortunately, a recurrent underlying assumption places the burden of becoming ready 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 components that would make it "ready" for them. Children can be "ready" for kindergarten, given an early education environment that 1) is engaging, age-appropriate, and child-centered; 2) includes a curriculum and assessment system that provides for individual differences; and 3) provides knowledgeable teachers who are responsive and capable of facilitating learning.

TREASURE HUNT

Social Studies Curriculum Grade: Kindergarten

Competency Goal 8:

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 relationships of objects.

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

BOOKMAKING

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 uppercase and lowercase letters of the alphabet.

* Recognize some words by sight, including a few common words, one's 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.

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, such as 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 (e.g., 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 other living creature moves from one place to another.

Grade: One

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

1.01. Learn why plants need 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 (e.g., its 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, including reproduction, maturation, and death.

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 such things as seeds and bulbs.

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 with reference to cultural differences and skin color).

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

6.1. Describe changes in oneself.

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.

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 (2nd ed.). Denver, CO: 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, DC: National Academy Press.

North Carolina State Department of Public Instruction. North Carolina Standard Course of Study. Retrieved December 15, 2002, from 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. Raleigh, NC: 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, DC: Goal 1 Ready Schools Resource Group, National Education Goals Panel.

Deborah J. Cassidy is Associate Professor, Department of Human Development and Family Studies, and Sharon Mims is Director, Child Care Education Program, University of North Carolina at Greensboro. Lia Rucker is Training Coordinator and Sheresa Boone is Outreach Training Coordinator, North Carolina Rated License Assessment Project.