The Butterfly Garden: Developmentally Appropriate Practice Defined

By Sandra Crosser, Ph.D.

The butterfly garden did not look much like a garden. It was simply an empty box with clear plastic viewing windows and a few perforations to allow air to circulate. It was a barren environment, but the larvae hatched and grew fat as they ate the special food mixture. The children peered through the windows of the box, intrigued as the metamorphosis unfolded.

The butterflies emerged wet-winged, unsure, yet beautiful. As their wings dried and strengthened we watched the miraculous creatures flutter about erratically, bumping into the sides of the box. There was nowhere to go; no branches to explore; no blossoms to suckle; no wind to ride. The environment that had allowed the caterpillars to thrive was terribly wrong for the young butterflies. What nature had intended to be graceful and joyous had instead become unnaturally clumsy and frustrated.

The caterpillar and the butterfly require different environments and care to grow and thrive. The same is true for young children. Preschoolers require a learning environment that allows them to grow, thrive, and learn. Several years ago the National Association for the Education of Young Children (NAEYC) coined the phrase developmentally appropriate practice to describe the concept of matching environment to the varying needs of young children (Bredekamp, 1987). While most professional educators have embraced this term, many do not have a complete understanding of its meaning and intent.

According to a national study conducted for the U.S. Department of Education:

School staff need a clearer understanding of developmentally appropriate practice. Most schools’ kindergarten programs claim to be “developmental” yet they rate themselves relatively low on some of the key classroom activities that early childhood educators define as developmental practice. Research on children's learning, as well as the recommendations of a number of national organizations, suggests the importance of developmentally appropriate practice.... The National Governors’ Association's strategies for achieving the national education goals include developmentally appropriate preschool programs and age-appropriate expectations and activities in kindergarten. If school administrators and teachers believe they have already adopted a developmental orientation, they are less likely to see the need to change... (U.S. Department of Education, 1992, p. 7).

In light of these findings, it would seem wise to step back and look at what we are doing in our individual preschool classrooms. Perhaps we need to reassess how well we are matching what we expect of children with what is developmentally appropriate. This article will present an overview of what is meant by a developmentally appropriate preschool classroom.

The Role of the Teacher

In a developmentally appropriate classroom, the teacher's role is that of facilitator and enabler. According to Kostelnik (1992), "...developmentally appropriate classrooms are active ones in which both teachers and students learn from one another." Creating a classroom which follows the interests of the children builds a
community of learners and permits the children to see that their teacher enjoys learning new things, too!

The teacher sets up the environment to facilitate development of skills, to pique interest, and to allow for independence. The classroom rules are few—walk indoors; be gentle with people and equipment; wear goggles when you hammer.

In the developmentally appropriate classroom, the teacher is seldom center stage. Children are the actors—the players. The teacher is on the sidelines coaching, observing, asking probing questions, and providing an island of security and comfort when needed. Teachers challenge children to comprehend at deeper levels by the nature of the questions they pose (Newman & Church, 1990).

**The Daily Schedule**

An age-appropriate schedule for preschoolers is built around large blocks of time during which children move freely about the classroom, self-selecting activities in which to engage alone or with others. According to Christie and Wardle (1992), free-choice time that is scheduled in long blocks enhances the complexity of play. When time is too short, children do not have time to plan and carry out meaningful activities. The free-choice activity time should last at least one hour before clean up begins. Some days children will need even more time to complete their work.

In a developmentally appropriate preschool classroom, teachers help children solve their own problems by asking questions such as these:

- Is there another way you could try it?
- Would it help to have some rope?
- How did you make that happen?
- Tell me about your painting.
- What could you do with these things?
- Can you change it?
- Can you make it move?
- Why do you think your plan didn't work?
- What else could you do when you are angry?

Because it is difficult, as well as unproductive, for young children to wait, they should begin their activity time as soon as they arrive at the center. If it is necessary to call a whole group meeting to explain a new learning center or changes in routine, make the meeting brief.

**Physical Environment**

The physical environment should anticipate individual and small group involvement with a variety of manipulative materials (Kostelnik, 1992). Spaces should be arranged to accommodate movement of children among equipment and materials. Interest centers should invite children to explore. Play items should contain the seeds of learning. For example, if you want children to be creative, you need to provide them with appropriate supplies and tools to implement their creative ideas (e.g., scissors, glue, cloth scraps, varieties of paper, markers, paint, soft wood scraps, tape, staplers, meat trays, and yarn). Children should be able to obtain these materials on their own when they need to use them.

Developmentally appropriate classrooms include play areas for manipulatives; blocks; dramatic play; books, puzzles, and table games; water and sand; puppets; woodworking; and large muscle activities. There should be a variety of quiet and more active areas to accommodate children's different temperaments and needs. Props contained in these learning centers should be changed to reflect themes or areas of interest to the children (Ryczynski & Troy, 1996). For example, the dramatic play center could be housekeeping, a campsite, restaurant, post office, gym, shoe store, or beach.

Depending on climate and weather conditions, some centers may choose to run concurrent indoor and outdoor free-choice activity times with children moving in and out at will. Outdoor learning centers may contain the traditional large muscle apparatus or even traditional indoor equipment. For example, move easels outside; change the dramatic play to a picnic theme; offer sidewalk chalk drawing; start a garden; wash the doll clothes and hang them to dry; or set out books and a blanket under a tree!

**Art Activities**

Art options should be an integral part of free-choice time. Children are interested in the art process at least as much as they are in a final product (Dever & Jared, 1996). Scheduling whole group art activities is
frustrating to both children and teachers. Instead, try putting out various media for children to explore as a learning center. On different days try printmaking, finger painting in pudding or shaving cream, sponge painting, working with clay, creating rubbings, stringing, sewing on canvas, weaving, scrap sculpting, and other open-ended experiences.

**Clean Up**
After free-choice activity time, children should be responsible for as much of their own clean up as possible. Children develop a sense of industry and independence, and develop motor skills as they use brooms, sponges, dustpans, and brushes. Putting away equipment improves classification skills as well as large and small muscle development, and creates a sense of cooperative teamwork.

**Show and Tell**
Show and tell activities help children gain skill in communicating, listening, and group problem solving (Jalongo, 1996). Children should be encouraged, but not required, to show or tell (French, 1996). At the conclusion of the clean up time it is appropriate for children to gather together to discuss what they accomplished, to show others what they have created, to discuss problems they encountered, and to ask the group to brainstorm possible solutions for unsolved problems. In this setting, young children find their ideas and contributions are valuable and authentic. There should be no show and tell based on materialism or one-up-manship!

**Snack-Time**
While facilities should enable children to secure a drink of water whenever they are thirsty, many teachers value an additional, and more formal, group snack time. In a developmentally appropriate program food is neither offered as a reward nor withheld as punishment. Children are encouraged, but never forced, to eat. Nutritious snacks and drinks should be made available as children sit down in small groups enjoying conversation and practicing their emerging social skills. Sponges should be available for children to clean up their own spills and crumbs.

**Books and Reading**
As boys and girls finish their snacks they may be offered a quiet library time during which they may choose from a variety of fiction, nonfiction, poetry, and magazines. Individual children may decide to look at books alone or with friends. Children may choose the place they want to sit or lie as they cozy up with their choice of literature.

Teachers may make the transition to a group story time. If there is more than one adult, several stories may be offered as choices for interactive reading in small groups. Interactive reading experiences encourage children to question, comment upon events, and make predictions as the story progresses. This interactive process facilitates language development (Whitehurst, et al., 1988). It is not developmentally appropriate to require children to listen passively until the story is finished (Kostelnik, 1992). Story reading is not a performance. Rather, it is an opportunity for children to construct meaning from print.

The developmentally appropriate classroom environment is one where children most often:

- Lead...rather than follow the teacher.
- Create...rather than duplicate.
- Move...rather than wait.
- Make the lines...rather than color in the lines.
- Speak...rather than listen passively.
- Initiate...rather than imitate.
- Raise questions...rather than answer the teacher's questions.
- Solve their own problems...rather than the teacher's problems.
- Make art...rather than do crafts.
- Emphasize the process...rather than the product.
- Use authentic skills...rather than drill and practice.
- Make books...rather than fill in workbooks.
- Decide...rather than submit.
- Choose wisely...rather than being told.
- Make a plan...rather than follow the teacher's plan.
- Try again...rather than fail.

**Large Muscle Group Activities**
A developmentally appropriate program incorporates time to develop...
large muscles outdoors and/or indoors. Simple equipment and guidance from a teacher permit children to create their own solutions to movement problems. Provide balls, hoops, and beanbags. Set up objects to jump over, crawl through, leap across, and run around. Try an obstacle course. Tape a “tightrope” to the floor. Chalk a grid on the sidewalk for jumping square to square. Use your imagination!

**Music and Movement**

While you should avoid rigid, predetermined movement activities (Rodger, 1996), it is important to devote part of the day to exploring music with children. There is a natural inclination toward making, singing, and moving to music. Include music making and listening activities as free-choice options during activity time, but also plan for small group music experiences.

Invite children to join in short, repetitive songs about familiar events in their lives. Make up a new verse to an old song. Pretend to be a conductor. Move freely to a variety of music. Make up original dances. Swing crepe paper streamers or yarn balls to recordings. Challenge children to make up original accompaniments with rhythm instruments. Have a parade. Make up a story about a short instrumental piece. Listen for high, low, fast, and slow sections. Then move to the feel of the music. Invite creative participation.

**Interest-Based Curricula**

Children's interests often initiate a theme study. Try asking children what they would like to learn about. One class explored a variety of themes including puppies and kittens, pies, our homes, restaurants, work our parents do, and rabbits. The children led and the teacher followed their interests. Over the year the children became keen observers of animal visitors; planted, tended, and harvested a garden; purchased and planted fall bulbs; made and baked pies; visited classmates’ homes; and explored family compositions and varieties of housing. They ate lunch at a natural food restaurant and had dessert in an exclusive restaurant atop a high-rise hotel; toured a mom's sculpture studio; and trained the class pet rabbit to walk (hop) on a leash!

**Conclusion**

Both butterflies and children need appropriate environments if they are to thrive. Each day we face anew the challenge to create the perfect, developmentally appropriate environment for every young child. We will most likely fall short from time to time because we, too, are growing and learning. Nevertheless, we need to take time to reflect on our practice...to reassess what we are doing in light of what we dare to achieve. The butterfly garden sits abandoned now. (The children knew what needed to be done.) And the butterflies are soaring-free to explore the world.

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**References**


French, L. (1996). I told you all about it, so don't tell me you don't know: Two-year-olds and learning through language. *Young Children*, 51 (2), 17-20.


