nongraded, multi-age classrooms, children have the opportunity to learn a great deal from their more proficient classmates. In the instance above, Jackie not only witnessed what better writers do but she also learned that she, too, may write that way one day. Children in multi-age, nongraded programs often learn that children differ, and they learn to assist each other in productive ways. The organizational scheme has the potential to remove much of the competition of traditionally graded classrooms and, for many children, the stigma of being "behind."

Researchers in the CREDE project "Appalachian Children's Academic and Social Development at Home and in Nongraded Primary Schools: Model Programs for Children of Poverty" have studied the implementation and effects of nongraded primary programs on rural and urban children of Appalachian descent in Kentucky, where a statewide, nongraded primary program has been implemented in various forms since 1990. In some forms of this program, children were grouped in multi-age classrooms with at least two traditional grade levels together. Seven critical attributes (Kentucky Department of Education, 1991) of the program were originally established and intended to guide teachers' planning and instruction. These attributes included:

- multi-age, multi-ability settings;
- developmentally appropriate practice;
- authentic assessment (assessment that examines whether a student can perform a skill or procedure in contexts that are for real-life or similar purposes);
- continuous progress (the concept that children will continually progress from their developmental level onward, regardless of traditional "grade level");
- qualitative reporting (narrative to describe children's progress rather than letter grades or numerical scores);
- positive parent involvement; and
- professional teamwork.

Teachers in many Kentucky schools received professional development on each attribute; however, the quality of the professional development differed widely. Teachers implemented the program in a variety of ways. For some, it required the teachers to make extensive changes in instructional activities and organizational plans. For others—those who held similar philosophies about how children learn and appropriate pedagogy—changes involved more fine tuning of their teaching.

Today, many of the teachers, such as those who participated in the CREDE study, claim they would never return to traditional teaching because the program is so closely aligned with how children learn. The multi-age primary classroom program was built around the philosophical framework of the position statement of the National Association for the Education of Young Children (see Bredekamp & Copple, 1997). This statement reflects current knowledge of teaching and learning as derived from theory, research, and practice. It recognizes the need for teachers to teach to the whole child—the physical, social, emotional, and cognitive dimensions of the child. It recognizes the importance of joint productive activity, dialogue as a tool for learning, and activities that are based on students' backgrounds, cultures, and interaction styles. This philosophy also matches the standards of instruction developed by CREDE (Dalton, 1998). The following statements were made by teachers who had fully implemented the program, and who continue to practice it, despite changes in the current law and culture of Kentucky education. These statements illustrate how the teachers' philosophies of the program correspond to some of the standards for instruction developed by CREDE.

There's a lot more group work and projects that children do together in the primary program. We have had to learn how to direct groups of children of different ages and abilities to create meaningful products.

- Stacy Greer and Ruth Ann Sweazy, Spencer County Elementary School

As shown in this quotation and in the opening vignette, nongraded primary program classrooms are often organized around group work. The philosophy behind group work is that children learn from one another and adults while doing worthwhile tasks. CREDE Standard I, "Teachers and Students Producing Together," is intended to get students and teachers dialoguing about content the children need to learn. They do this by creating products together, such as a mural depicting a battle in the Civil War or a graph illustrating mathematical concepts.

The primary program provides the opportunity for children to learn and grow from one another. . . . They are learning from each other all the time. . . . There are no boundaries; they are open to learning anything; the sky's the limit.

- Karen Miller, Roby Elementary
One of the most important aspects of the primary program was to ensure a limitless curriculum. The most fully developed teaching occurred in classrooms where CREDE Standard IV, “Teaching Complex Thinking,” was implemented. In these classrooms, teachers did not limit students to a “second grade” or “third grade” curriculum and skills set because that happened to correspond with their ages. Teachers encouraged and taught children to read, write, and solve problems beyond expectations and to think in complex ways. In order to do this, they provided opportunities and instruction at complex levels and encouraged the children to take what they learned and apply it to the best of their abilities.

With the primary program, we’ve had to look more closely at students’ development . . . so we can teach individuals and not classes. –Sarah Monarch, Centerfield Elementary

With the primary program, we are fitting the schools to the children rather than expecting children to fit into schools. –Gayle Moore, LaGrange Elementary

These teachers knew that they must “contextualize” instruction (CREDE Standard III) in order to make it meaningful to students. The teachers did this in a variety of ways, such as incidentally connecting a topic to what the students already knew or recommending books on students’ interests. They also planned extensive units that built on students’ “funds of knowledge.” Two recent publications by CREDE researchers have been written to assist teachers in these efforts. McIntyre, Rosebery, and González (2001) illustrate how many teachers of diverse populations have connected instruction to their students’ lives, and Kyle, McIntyre, Miller, and Moore (in press) illustrate how teachers can reach out to families in ways that truly enable meaningful connections to be made.

When deciding to move from traditionally-graded classrooms to multi-age classrooms, administrators and practitioners have used these recommendations to make the transition easier and more sound:

• Read about how schools have created primary programs. Many good books are available, including those mentioned above, that can help with the organization and implementation of the instructional standards these teachers have used to create their program. Other books include those by Hovda, Kyle, and McIntyre (1996) and Anderson and Pavan (1993).
• Study and apply basic practices, such as those from the Zemelman, Daniels and Hyde (1998) book. While child-centered teaching is most appropriate for these settings, it does not mean neglecting early reading and mathematics skills. Such skills are best taught in the context of meaningful work, using dialogue as a tool.
• Start support groups. If teachers can meet to discuss their plans and classroom practices on a regular basis, preferably during the school day, change is less stressful and happens more readily.
• Seek out professional development that is meaningful for your program concerns.
• Contextualize the critical attributes or standards for your school. These are agreed-upon characteristics that all teachers will use or standards upon which all teachers will plan and implement instruction.
• Begin with small steps if your school is comfortable with that approach. For example, select one standard or critical attribute to work on first.
• Find ways to help parents or guardians understand reasons for the change, and enlist their support. See the Kyle et al. (in press) book for specific strategies for working with families.
• Refine your kidwatching skills. Observing children helps you learn why nongraded primary programs with CREDE standards are appropriate for students.

Conclusion
The study of the implementation and effects of the nongraded primary program in Kentucky revealed that when teachers fully implemented the program, they were also practicing the CREDE standards fully. Teachers across the state, however, implemented the program in a variety of ways, some of which were not philosophically aligned with the original intent. In 1997, changes to the law were made, allowing more flexibility in how the program was implemented. Today, some teachers, like those above, still implement the program while others have gone back to traditional teaching.

References and Resources

To learn about research studies on the nongraded primary program or resources for implementing the program, contact Ellen McIntyre (ellen@louisville.edu) or Diane Kyle (diane@louisville.edu), College of Education and Human Development, University of Louisville, Louisville, KY 40292, or visit www.crede.ucsc.edu.

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