This study examined the implementation of the seven critical attributes of the primary school curriculum mandated by the Kentucky Education Reform Act (KERA) in a single multi-age primary classroom. The study used a case-study approach over a 16-month period. The seven attributes observed are: (1) developmentally appropriate practices; (2) multi-age and multi-ability classrooms; (3) continuous progress; (4) authentic assessment; (5) qualitative reporting methods; (6) professional teamwork; and (7) positive parental involvement. The classroom observed contained nearly equal numbers of 6-, 7-, and 8-year-olds, with the teacher using a whole-language and student-paced approach to teaching. Weekly observations of the class over the course of the study found that the teacher was actively implementing all seven attributes of the KERA primary curriculum. The observations supported inclusion of an eighth attribute in the Reform Act, the development of social responsibility and student ownership of the educational process. (MDM)
The Kentucky Education Reform Act (KERA): The "Eighth" Attribute Critical to the Development of Quality Nongraded Primaries

by

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The Kentucky Education Reform Act (KERA): The “Eighth” Attribute Critical to the Development of Quality Nongraded Primaries

This paper describes the implementation and critical features of a primary classroom of 6-, 7-, and 8-year-old students within the context of the Kentucky Education Reform Act. The data collected from the study were analyzed using the seven critical attributes of a primary program as developed by the Kentucky Department of Education (KDE). The analysis revealed the need for an additional critical attribute, that of social responsibility and student ownership of the educational process.

The Kentucky Education Reform Act

The primary school program was mandated by the Kentucky Education Reform Act (KERA). KERA was enacted in 1990 as a result of the declaration by the Kentucky Supreme Court that the state’s method of funding public school systems was inequitable and therefore unconstitutional. The reform touched almost every aspect of the educational process, from school governance to learning outcomes. The focus of this study was the implementation of one aspect of this law, the primary school program which was defined in KERA KRS 158.030(2) as:

that part of the elementary school program in which children are enrolled from the time they begin school until they are ready to enter the fourth grade. Notwithstanding any statute to the contrary, successful completion of the primary school program shall be a prerequisite for a child’s entrance into fourth grade. The State Board for Elementary and Secondary Education shall establish, by regulation, methods of verifying successful completion of the primary school program pursuant to the goals of education as described in KRS 158.6451.
Methodology

The research for this study took place over a 16 month period from September, 1992 through December, 1993. The researcher spent at least 2 days per week in the classroom using Eisner's (1991) Educational Connoisseurship as the research methodology. This methodology called for the researcher to become a connoisseur of the educational process in question. To be of value, the connoisseur must share the complex and subtle qualities of the work with others. Eisner refers to this sharing as "educational criticism."

Eisner describes the importance of studying how a teacher mediates the curriculum. In this case, the focus of this study was how effectively the teacher implemented the seven attributes critical to the development of a successful primary program as enumerated by the Kentucky Department of Education. These attributes: (1) developmentally appropriate practices, (2) multi-age/multi-ability classrooms, (3) continuous progress, (4) authentic assessment, (5), qualitative reporting methods, (6) professional teamwork, and (7) positive parental involvement; provided the basis for analysis of the data.

The Classroom and Its Structure

The classroom studied was self-contained and composed of nearly equal numbers of 6-, 7-, and 8-year-olds. The teacher, Katherine Alexander, is a 14 year veteran who has taught art, special education classes, as well as first, second, and fourth grades. Ms. Alexander was the first teacher in her building to
implement the primary program with more than 2 age groups of children. It is important to note that Ms. Alexander adapted her already well-developed classroom structure to younger children. She did not significantly change the way she taught or thought about teaching because of the KERA mandate, quite the opposite—the KERA mandate confirmed that the ways in which Ms. Alexander approached teaching before KERA were "best practice" and not "that odd teacher in room 102."

The structure of the classroom is based on the whole-language approach to teaching reading and writing and on the teacher's belief that each child has the right to learn at his or her own pace. Instruction is based on a series of workshops (reading, writing, and math) and an in-depth study of social studies and science concepts referred to as unit study.

The 24 children of this classroom are arranged in 6 multi-age/multi-ability "offices." This method of grouping encourages responsible group membership and self-sufficiency, two of the current goals of KERA. The physical arrangement of the classroom is integral to the instructional methods and key to the development of social responsibility and student ownership of the educational process.

Teacher Beliefs

As a researcher, I believe it is important to get the emic point of view, the reflections of the practitioner (Harris, 1979). Ross, Bondy, and Kyle (1993) define a reflective teacher as one who "makes rational and ethical choices about what and how
to teach and assumes responsibility for those choices." (p. 3). The insights of reflective practitioners provide valuable perspectives on the educational process. It is the teacher who deals with children on a daily basis. It is the teacher who must make the critical decisions of how to develop a learning environment that meets the needs of the students she teaches. As a teacher, Katherine Alexander strongly believes that she is providing the students in her classroom with a positive learning environment. It is critical to her to develop an environment in which students learn that "with freedom comes responsibility."

The extended period of time I spent observing Katherine Alexander in her classroom and talking with her about her teaching practices, revealed to me that she fit the definition of a reflective teacher. How does Katherine Alexander interpret each of the seven critical attributes and how does she apply these attributes to her practice? In the next section the views of this reflective practitioner will provide insight into the process of developing effective primary programs.

The Seven Critical Attributes and Ms. Alexander's Classroom

As previously mentioned, KDF instituted seven attributes critical to the establishment of a successful primary school program. I entered this research setting believing that a classroom in which these attributes were observable would be a successful primary. The following is a synopsis of the analysis of the data provided by my study, Development of Social Responsibility and Student Ownership in the Educational Process:
Developmentally Appropriate Practices

Developmental appropriateness means that educators are applying the best practice for what we know about children and how they learn. This best practice is holistic in nature in that the cognitive, social, and emotional development of the child are taken into consideration (Kentucky Department of Education, 1993). It also recognizes that children of the same chronological age develop at different rates.

Katherine Alexander's classroom is composed of children aged from 6 through 9 years. This large age span indicates the need to accommodate children at different developmental stages by establishing curricular goals that will keep older children in in the classroom motivated and excited about learning without, at the same time, overwhelming the younger children. Katherine reminded me that,

Children of varying age levels are going to take different understandings away from reading and writing workshops, unit studies, and math workshop. It is important to develop learning activities that will engage the children in active learning so that each child can take something away from that activity and feel successful.

For example, during a unit studying light and color, Joshua (6) understood categorizing objects as clear or opaque. He was able to show his understanding of light transmission during a classroom activity in which each student classified various objects by their transmission property; however, he could not put
that knowledge into practice when Ms. Alexander made up situations involving builders choosing building materials. In this activity the children had to decide what type of material the builder would need to use--transparent, translucent, or opaque--and write the appropriate sign on their individual chalkboards. Joshua was unable to translate his foundational knowledge of transparent and opaque to this practical situation. Had he been in a traditional first grade setting, it is unlikely he would have been exposed to that concept at this age so his inability to translate his understanding of light transmission is a developmental one. In contrast, most of the third year students were able to answer all the questions in the builder vignette.

During a unit study entitled "Westward Ho," the students actually planned a trip west by a pioneer family whose identity they invented. The planning of this trip required the students to research this era in order to become acquainted with the reasons the early pioneers decided to move west, when areas of the west were settled, how the families traveled, what types of provisions they took, and what types of homes they built when they arrived in each area. In order to assess what the children were learning, Ms. Alexander required them to keep a diary of their trip, which was written in the voice of the family member they portrayed. Because the students worked within the office arrangement (multi-age/multi-ability), each child brought something different to the development of the project. The 6-
year-olds' diaries were not nearly as comprehensive as the 8-
year-olds' work; however, at the end of the unit even the 6-year-
olds had begun to write in a voice that was different from their
normal writings. They were attempting to imitate the authentic
diary entries from people moving west during the 1800s that Ms.
Alexander shared with the class each day. This activity
stretched the students beyond the usual type of assignment where
writing topics are provided by the teacher that are not relevant
to the students' lives or experiences.

Multi-Age/Multi-Ability Classrooms

The term multi-age/multi-ability implies that children of
varying ages and demonstrated abilities are grouped together for
instruction and socialization. Multi-age/multi-ability
classrooms incorporate "flexible grouping and regrouping of
children of different ages, sex, and abilities who may be
assigned to the same teacher(s) for more than one year" (Kentucky

In order to provide a multi-age/multi-ability setting
Katherine Alexander's classroom is structured around the concept
of continuous progress of children. Whether the children are
studying science and social studies concepts or working on
improving their reading, writing, and math skills, each child
moves at his or her own pace.

Katherine says:

Once you group children you stop somebody's
progress. You almost automatically start teaching
to the middle or the top or the bottom. Somebody
is going to lose out. You can try homogeneous
grouping, but you can't homogenize people. Multi-age, multi-ability classrooms give the kids a chance to grow at their own pace. It makes it easier to make the classroom a safe place to be. I think it is really important to keep the kids in multi-age groupings. Kids learn so much from each other. The older children can help the younger ones, and sometimes vice versa--I really believe in peer coaching and cooperative learning and a multi-age classroom allows that type of learning to take place.

Examples of this concept of multi-age/multi-ability are evident in the creation of "offices" occupied by children of different ages. Most project work in science and social studies is done by students working within this office arrangement, allowing the environment to remain multi-age. For instance, when the students were studying light, Stephen (8) was also able to help Joshua (6) conceptualize the difference between clear and opaque during the class period spent on categorizing objects by these characteristics.

The math games played during math workshop are usually played by multi-age pairs or groups. I often found 6- and 7-year-olds, or 6- and 8-year-olds playing together. The whole group problem-solving strategy games using Venn diagrams for classification, cooperative learning games, and minicomputers (a modern day abacus invented by Georges Papy that models the positional structure of our customary number system) are naturally multi-age.

During partner reading time, students would pair up regardless of age. Amy (7) often read with James (6). Stephen (8) would take time to read with Joshua (6). Jenna
(7) liked to help Julie (6), who was an emergent reader. During reading/writing workshop, students in this classroom are not grouped according to reading ability. Megan (9) learned much about reading expressively from Lisa (7). In turn, Megan (9) was able to help Jenna (7) with grammatical errors when they co-authored stories. At the beginning of the year, Joshua (6) and Zachary (6) spent much of reading workshop thumbing through books, giving cursory attention to the illustrations or the text. By the end of the year, both Joshua and Zachary were spending a great deal of time examining each page of the books they were "reading." Both had excellent understanding of the concepts that illustrations can give readers clues to the print and that skipping over a word and reading the rest of the sentence may help to decipher the unknown word, and both had established a large reading vocabulary. Joel, who had prematurely begun reading "chapter books," had finally realized that he needed to apply strategies beginning readers use to check the difficulty of the reading material. At the beginning of the year, he was trying to read the words in chapter books, but he was not comprehending them. By the end of the year, he had become a much more accomplished and selective reader. The point is that the workshops are structured to allow the children to take in knowledge at a pace that is right for them.
Continuous Progress

Continuous progress is defined by the state department as allowing students to proceed through curricular areas at their own rate and not comparing their achievement with the progress of other children.

Katherine believes that continuous progress is the key to a successful primary program. She states,

Children have to be allowed to move at their own speed. There is no sense in holding children back, or for that matter, pushing them forward, just to keep up with a group. That's why I have developed the workshop approach to reading, writing, and math. That approach allows each child to progress at his or her own pace. Look at Brian, he is already in a third year book in math and he is only 7 years old. Because he is only 7 years old does that mean I should make him do second grade work? I don't think that is what the primary program is all about.

As a researcher, I found that, because this classroom is individualized in reading, writing, and math, students were able to make continuous progress in their development. And remarkably, students did make continuous progress working in mixed-ability groups. Students who quickly caught on to a particular math concept, as Katherine mentioned, did not have to wait for other students to reach an understanding before they could move on. Brian was able to skip over many pages containing the concepts "count forward, count back, and skip count," as well as classifying objects by sets, because he had either already demonstrated his ability to perform those concepts or was able to perform them after one page. He then moved directly into grouping
and place value, concepts normally associated with older children.

All the curricular areas were treated holistically, allowing children to view reading and writing as a process and not a skill. For example, 6-year-old students began the year assuming they were going to learn to read and write, and Katherine reinforced this assumption by immediately referring to and respecting them as readers and writers. In unit study, the assumption was that each child was accepted for the strengths and knowledge he or she brought to each new project. Those students who were unable to read were read to by more experienced readers. As the emergent readers became more confident, they began assuming responsibility for reading to the group—even if their progress was slower than that of more proficient readers. Each step in their progress was a cause for celebration.

**Authentic Assessment**

Authentic assessment is assessment that occurs within the context of the learning environment and reflects actual learning experiences that can be documented through anecdotal records, observation, journals, conferences, etc. (KDE, 1993). Katherine is adamant about using authentic assessment of the students in her class. She commented:

By making anecdotal records, having the students keep learning logs, and using reading and writing conferences, I am much more aware of what my students actually know than when I was giving tests. When I tested the children, I knew they knew the test material, but that is so limiting.
With journals and conferences, I can actually see and hear what the children know—in their own words.

The builder vignette and the Westward Ho unit mentioned earlier and the production of student authored jokes reveal that authentic assessment is a way of life in this classroom. Students "traveled" west in the Westward Ho unit. In this unit they had to apply what they knew about math to determine how long their trip would take. They had to plan what supplies the families would need to make the trip and then had to use problem solving techniques as families ran into difficulties. During the light and color unit, the children applied what they knew about light and reflection of light to assist a builder with a variety of projects. During another unit study on the tropical rain forest, the class built their own rain forest. They had to use what they knew about math to measure the plastic for the huge bubble they were going to build. They invited the entire school to tour the rain forest they built within their bubble. In order to be guides to their guests they had to research the tropical rain forest and its inhabitants.

Katherine also uses reading and writing conferences to assess student progress. She regularly takes anecdotal notes after such conferences so she has a written record of each child's progress throughout the year.
Qualitative Reporting Methods

Qualitative reporting methods deal with the way in which student progress is communicated to the children's families. It should be holistic in nature.

Katherine supports the use of qualitative reporting.

I feel it is important to keep in close contact with each child's family. That's why I send home weekly progress reports, the math and reading logs, and the weekly newsletter.

Katherine's classroom is filled with examples of qualitative reporting of the assessment of students' work. As mentioned, the students keep reading and math logs. These logs are sent home each week to be reviewed and signed by parents. The students plan individual writing strategies with Katherine that cover a certain period of time and set up parameters within which the child will work. Katherine sends home weekly progress reports to parents in order to keep them abreast of their child's progress, and she dutifully adds written comments that are individual to each child on the 9-week report cards.

In math, the children's completed work is recorded by them in their math logs. These logs assist Katherine in keeping track of what each student is working on and allow her to make comments on each log about the student's progress. When a student has had difficulty with a particular concept, Katherine is able to offer immediate remediation. For example, Cari (8) was working on a page that involved developing sets. She missed every answer on
the page. When Katherine looked over the page, she called Cari over to the pillow area. Using manipulatives (unifix cubes), she had Cari show her several different types of sets of objects. Cari was able to successfully complete each set. Katherine knew she understood the concept of sets; she had just misunderstood the directions.

Katherine also uses reading logs in much the same way. The students record what they have read and must add a comment on what they gleaned from their reading on that particular day. Katherine collects the logs and then comments on their reading selections and insights. During the 1992-93 school year, Katherine had only one type of reading log. She has expanded the types of logs the children may choose from during the 1993-94 school year. She told me,

These new logs allow the students to record their reading experiences in a variety of ways instead of having only one log to use.

Professional Teamwork

Professional teamwork includes every person in the building communicating and working toward meeting the needs of all children. There is an old saying that goes something like this, "It takes a whole village to raise a child" and, like the village, it takes the whole school to educate a child. Katherine believes that the whole school must work toward excellence in education. One person, in one classroom, can make a difference in 24 children's lives, but
23 teachers working together can help change the lives of over 600 children. Katherine stated:

Whatever it takes to help a child learn and grow is what needs to be done. I think teachers need to work together. We need to inform each other about theories and good teaching ideas. I just don't think it's good practice to move children among a team of teachers--besides, I like teaching all the curricular areas.

In this regard, she has extended herself to assist others in her building and in the system by conducting workshops in the reading/writing process and helping the fourth grade teachers develop the math and writing portfolios.

Even though her classroom is self-contained, Katherine is part of a team of teachers who share teaching ideas, provide support, and develop team activities for three self-contained primaries and a fourth grade classroom.

Katherine is involved in her school's Participatory Management Committee as Chair-elect. She is working hard to help in the restructuring of her school, mainly because she believes the teachers need to work to attain equity for all students. She said:

I do not particularly relish the idea of being chairperson of our participatory management committee, but I am committed to improving our school, so maybe this is one way of helping.

However, Katherine feels that a teacher can be actively involved as a professional within the school, and the system, and still teach in a self-contained classroom. She believes that very young children need the continuity provided by working with just one teacher for most of the
day. As it is, her students see at least two teachers a day—one for Spanish and a special area teacher (music, art, P.E.). She thinks it is difficult for very young children to adjust to a variety of teaching styles. It is also important to her to have flexibility in her schedule. If, for instance, on a given day the students need to spend more time on unit study or math, she can do that without disrupting the schedule of another teacher. Katherine does feel that students can adjust much better to having a team of teachers as they grow older. She is very supportive of teams within middle schools, and she believes that high school teachers need to work more closely together to provide students with continuity and assistance when needed.

Positive Parental Involvement

Positive parental involvement means building a relationship between the home and the school that promotes understanding and increases the success rate for students.

Katherine tells parents:

You are welcome in this classroom any time. I feel we need to work together to provide your children with the best possible educational experience.

During the time I spent in this classroom there were always parents in and out of the room. Parents have opportunities to come to 2 evening meetings each 9-week grading period. They may schedule conferences with Katherine to discuss any problems their child might be having. Parents are also encouraged to participate in the many field trips the class
Social Responsibility and Student Empowerment

It is obvious that Katherine's classroom is reflective of the seven critical attributes as outlined by the Kentucky Department of Education; however, the data provided by this study indicate that her classroom reaches beyond these seven attributes by focusing on making the learning environment safe and attending to the social and emotional needs of the children.

As I watched and learned in this particular classroom, I kept returning to the question, "What is this teacher doing differently in this classroom that makes it so special?"

I had only spent one day in Katherine Alexander's classroom when I wrote the following in my reflections of the day:

What I wouldn't have given to have been in a classroom like this when I was a child. Every child seems to be respected and loved. Even those who try Katherine's patience are treated with respect. The room is a bustle of activity. There are no long periods of sitting and listening. Children have an opportunity to make decisions all day long. They may choose when they drink (they have drink bottles on their desks), when they go to the restroom, and when they earn the right to keep their stars up. They have choice in their reading material, what they write about, and what math they work on. In the unit study all children joined in and were given time to speak and interact.

Reflective notes September 16, 1992

The children in this classroom think of themselves as learners. They enjoy reading from their own writings in
"Author's Chair" and publishing their own books, complete with copyrights, for the class library. This class learns by doing, but there is more.

After much deliberation and watching, I realized what was different. The children in this classroom were given choice and student ownership of the educational process. The students are given opportunities to choose how they went about their work. I questioned Katherine on what I saw. She told me:

I believe that children have to learn responsibility. You can't teach kids to be responsible if you do not give them some control over their environment. It is critical to help kids realize that with choice comes responsibility. I want these children to grow up knowing who they are--how to make decisions--and, when they make decisions to know they are then responsible for those decisions.

It is also critically important to me that I help to develop a safe, risk-free learning environment. I want the children to know that it is okay to make mistakes. I make them all the time. The important thing is that we learn from our mistakes. That's why I spend so much time working with the children in the areas of learning how to express anger. I want them to know that it is okay to be angry. What isn't okay is to express that anger in a way that could hurt them or someone else.

I spend a lot of time teaching children how to communicate. Communication is essential. If they don't learn how to express themselves they are going to grow up confused and angry. I don't want that for them. When kids know that they have control over how they express their emotions, then they have learned a really important lesson. I want them to learn that they can express their emotions in a positive way. It's really important to me.

The students in this classroom learn about
responsibility by knowing that they are free to make many
decisions, but with that freedom comes responsibility.
During the year I spent in this room, the students voted to
change the class schedule from starting the day with
reading/writing workshop to beginning with math. Several of
the older students in the classroom liked having math first
last year and wanted to continue that practice in the
current year. Ms. Alexander allowed them to plead their
case to the rest of the class during a class meeting. The
students listened to their peers and voted to change the
schedule.

During another class council meeting several students
voiced the need to have more choice in the type of reminders
they received when a classroom procedure was broken. Class
representatives met and developed a list of new options.
Again the class voted and Ms. Alexander's management system
expanded from simple reminding checks when a student forgot
a classroom procedure to giving the students' choice in the
type of reminders they receive.

The class also developed Caring/Sharing rules that help
them be responsible group members. If students forgot and
did or said something to hurt friends, they were reminded by
their peers which rule was broken and what needed to be done
to make amends. In this classroom students learned to speak
for themselves when they were upset; the teacher did not
interfere in negotiations unless the students were unable to
work out their problem. For example, the following vignette took place early in 1992:

The children are baking bread. One office is in hot debate over who will do what. (The children's ages are in parentheses)

Amanda (7): I want to measure the flour.
Jenna (7): No, it's my turn.
Cari (8): No, let me do it.
Julie (6): (Sits quietly and watches. Then she announces.) I think we need to take turns. Ms. Alexander, we need help.

Katherine moves toward the group, but refuses to act as negotiator.

Katherine: What do you girls need to do?
Cari (8): (Regaining her role as leader.) We can take turns. Amanda, why don't you measure one cup and Jenna, you can measure the next.
Amanda (7): (falling into the spirit of compromise) That'll work. You can measure the water Julie. I'll help you get it right.

The girls went on to mix their dough laughing and talking about each step of the process.

By devising a learning atmosphere in which each child is respected and in which continuous progress of each student is the key aspect, Katherine has created an atmosphere where every child feels successful and is working at a developmentally appropriate level. As Smith (1990) points, out magic happens in a classroom if magic is allowed to happen. In this classroom magic is encouraged.

The Eighth Critical Attribute

If we are to make the primary program work for all
children, we must be aware of the need to develop programs that display the seven critical attributes. From this study it is also clear however, that, if we want to assist teachers in developing responsible citizens for tomorrow, then it is important that we give children some ownership in the educational process--the addition of an eighth critical attribute of a successful primary program that of Development of Social Responsibility and Student Ownership of the Educational Process.

The addition of this attribute would necessitate that the teacher accept the role of facilitator of learning and social development and give students ownership in the educational process. It would empower students to have control over educational choices and to develop a social responsibility by addressing the ideas of choice and the consequences of choices. As Goodman (1992) emphasizes, democracy is more than voting rights. It should also include a social awareness that would include individual and collective responsibility for helping to create a better society. By adding the eighth attribute we would be focusing the attention of teachers on the need to help young children begin to develop that social responsibility.
References


