Characteristics and Attributes of Primary Programs and Practices

Executive Summary
Of Findings

February 5, 2003

University of Kentucky
College of Education
CHARACTERISTICS AND ATTRIBUTES OF EFFECTIVE PRIMARY PROGRAMS AND PRACTICES IN KENTUCKY

INTRODUCTION
In October 2000, the Kentucky Department of Education (KDE) joined in collaboration with faculty at the University of Kentucky and the Institute on Education Reform to initiate a project that would provide a systematic and strategic method of inquiry to identify the characteristics and attributes of effective primary schools and classrooms. The research attempted to answer the basic question: “What types of programs, supports, and environments best facilitate high student performance in Kentucky’s primary classrooms?” Seven strands of inquiry were identified for investigation. These were (1) instructional practices, (2) assessment, (3) multiage/multiability grouping, (4) professional teamwork/development, (5) family involvement, (6) program transition, and (7) leadership.

METHOD
Three groups of schools were selected for comparison; (1) schools that had demonstrated high performance using the 2000 4th grade Core Content Test data; (2) schools that demonstrated a consistent level of progressive improvement across four assessment cycles; and (3) schools that were low scoring as evidenced by the 2000 4th grade Core Content Test data. The selection process included other important variables such as geographic region, size of school, school-level socio-economic status, and inclusion of an onsite preschool. The full data set includes 112 teachers from 28 schools who participated in onsite investigation and 49 teachers from 19 schools participating in survey investigation.

Project researchers reviewed the effective schools and early childhood literature for appropriate instruments. A pre-publication version of the Assessment of Practices in Early Elementary Classrooms (APEEC; Hemmeter, Maxwell, Ault, & Schuster, 2001) was used for classroom observations.

PROCEDURE
During Phase I of the investigation, a team of nine (9) experienced elementary school educators were employed as field researchers and then trained to use the commercial and project-developed instruments to collect data through classroom observations and teacher interviews. Researchers spent a full day observing in each classroom; additional time was spent in teacher interviews and record reviews. Multiple strategies were used to investigate the leadership variable: (a) surveys of parents, principals, teachers, and district supervisors, (b) onsite interviews with teachers, and (c) telephone (in Phase I) and onsite (in Phase II) interviews with principals. Preliminary findings from Phase I were used to identify those variables requiring closer and more comprehensive analysis and investigation during Phase II. Two schools were selected during Phase II for targeted interviews and investigation through a case study methodology. Six focus groups were conducted during Phase II of the project with membership from three (3) to twelve (12) teachers, families, and staff.

FINDINGS
Multiple research methodologies were used in the analysis of the project data. Researchers used qualitative, quantitative, and survey methodologies in this investigation. Findings are reported for the seven variables listed below.

Instructional Practices
Findings support the effectiveness of developmentally appropriate practice (Bredekamp & Copple, 1997) in the instruction of young children in primary classrooms. Developmentally appropriate practice describes primary classrooms in which children are engaged meaningfully in learning activities, use hands-on
materials to support their learning, and actively construct their knowledge. The findings are important because they provide additional empirical support for the link between such practices and students’ performance on academic achievement tests. They also begin to identify specific practices that differentiate schools with varying levels of success on state-mandated assessments. Preliminary data analysis reveals significant differences on multiple variables related to classroom instruction. The significant findings include:

- Teachers in **high-performing schools** were differentiated from teachers in other schools in the use of these developmentally appropriate practices:
  - Promoting autonomy and responsibility in students
  - Promoting active engagement with learning
  - Using hands-on and other relevant materials for the majority of activities
  - Including children in making choices and decisions that impact the class
  - Teacher-child language (teachers’ efforts to prompt children to elaborate on statements, their encouragement of peer conversation about classroom activities, and their informal conversation with children)
  - Appropriate transitions (these transitions allow children to move independently from one activity to another, provide students with advance notice of transitions, and allow children to begin another activity when finished).

Other notable differences included:
- Significantly more computer-based instruction
- Extracurricular activities related to arts and humanities (e.g., rock climbing, chess, dance)
- Intentional, planned, and systematic interventions for addressing discipline and guidance issues
- Individualized instruction for students by using resources and strategies such as parent volunteers, peer buddies, collaboration, contracts, and strategies to address multiple intelligences.

- Teachers in **low-performing schools** differed from teachers in other schools in use of:
  - Few hands-on materials
  - Teacher-child interactions (almost all child language was teacher-directed and teacher questions had one correct answer or required rote memorization)
  - Ineffective classroom transitions (children waited between activities with nothing to do and transitions did not occur in an orderly fashion)
  - Reactive, punitive discipline and discipline strategies (e.g., suspension, expulsion)

Other notable differences included:
- Teachers had to purchase their own materials more often
- Fewer health and safety resources available in the classroom

**Assessment**

Teachers in this sample were not observed to use assessment in a systematic way to monitor student progress or inform instruction. However, teachers were knowledgeable of authentic assessment procedures and reported the use of a wide variety of authentic assessment strategies. Some differences between the groups were reported in the diversity and preference of assessment strategies. Teacher in
classrooms in high-performing schools reported a greater diversity of strategies while teachers in low-performing schools used observation as the primary form of evaluation. Teachers in the improving schools were much more likely to use tests than their colleagues.

**Multiage/Multiability Groups**

Although teachers and principals report multiple strategies to individualize curriculum for young children, multiage and multiability groupings are not predictive of membership across categories in this sample (high, low, or improving schools). In other words no significant differences were noted between schools across categories for this variable; however, very few schools across the full sample reported using a multiage structure.

**Professional Teamwork/Development**

Most professional development decisions reflected:
- Priorities described in the consolidated plan
- A yearly focus area (in most cases, reading)
- Training in use of scoring rubrics and sharing benchmark samples
- Funding being used in a variety of ways.

Preliminary findings also suggested teachers in high-performing schools were provided significantly more hours of paid planning, professional development, and professional teamwork.

**Family Involvement**

Findings for family involvement during Phase I were unclear. Closer analysis of the full data set and case study data during Phase II provided more comprehensive information including:
- Schools have in place strategies for encouraging families to be involved with their child's learning at home (e.g. calendar of family learning activities, homework folder).
- Schools recognize there are some real barriers to family involvement (e.g. transportation, no phone, and no childcare for children with disabilities) and are trying to do something about it (e.g., home visits, scheduling conferences at convenient times).
- Principals made family involvement a priority by opening the school either as a community center where adult education was housed or as an after school center for additional student instruction.

**Transition**

Findings about program transitions were also unclear. Principals indicated this area needed more work and attention. Analysis from Phase I revealed:
- While program transitions from pre K to entry-level primary and from primary to 4th grade are weak overall, high-performing schools are more likely to report parents and children visiting entry-level primary prior to the beginning of the school year and visiting 4th grade prior to the beginning of the school year.
- Some teachers in low-performing schools perceived preschoolers as unprepared for primary.

Data collected during Phase II suggested schools that effectively transition children from preschool to entry-level primary and primary to 4th grade have developed and implemented specific program strategies to promote and facilitate program transition. Teachers are aware of the curriculum and environmental demands at the next level and prepare children to be successful.

**Leadership**

Findings suggest leadership is a critical variable, but one in almost complete
transition. Forty-two percent of the principals surveyed have been employed as a principal less than three years. Preliminary analysis from Phase I revealed:

- Principals in high-performing schools involved teachers in school-wide activities or responsibilities and encouraged them to assume responsibility for committee structures and professional issues while
- Principals in low-performing schools were more likely to involve their teachers in such activities as working ball games or supervising bus duties
- Reading was a primary focus of principals
- Most principals were familiar with the Interstate School Leaders Licensure Consortium (ISLLC) standards and felt they aligned with their work
- There was great diversity among the daily activities of principals across the sample. Principals reported being most comfortable in the area of instructional leadership and least comfortable in public leadership
- Some principals reported spending most of their time dealing with the disrepair of the school and general building safety; while others reported managerial responsibilities consumed much of their time.

Additional Findings

Additional analysis during Phase II yielded information regarding the instruction of children with disabilities in primary programs. Some differences between school categories emerged. Teachers in high-performing schools reported a greater number of children identified with disabilities and were knowledgeable about the IEP objectives for children in their classrooms. In contrast, more than 1/2 of the teachers in the low-performing group reported they were not knowledgeable of the IEP objectives for children in the classrooms. However, teachers across school categories reported that they engage in little or no data collection for IEP objectives and report that they hold little or no responsibility for children’s progress on IEP objectives.

Characteristics and Attributes for Effective Primary Schools

Participants in the case study schools identified eight characteristics and attributes that contribute to the effectiveness of their program.

These characteristics are:

- Attitudes and dispositions
- Individualization
- Sound teaching strategies
- High-quality teachers and staff
- Active family involvement
- Discipline and guidance
- Leadership
- Communication

SUMMARY

The findings from this study support the effectiveness of developmentally appropriate practices within a supportive and comprehensive instructional program in the primary grades. Continued investigation will potentially reveal greater specificity to better understand this broad class of instructional and environmental variables. Continued investigation is also necessary to provide greater understanding of the use of assessment and other strategies such as grouping for individualization in the primary program. Family involvement and program transition are also critical variables requiring continued inquiry. In contrast, the data are quite clear that the quality and quantity of meaningful professional development for primary teachers is correlated with positive educational outcomes for young children.

When fully implemented the primary program has great potential to impact Kentucky education priorities: literacy, closing the achievement gap, and increasing the percentage of Kentuckians who hold a high school diploma. These goals are congruent with those of the reformers who proposed KERA and the Primary program more than a decade ago.
Findings from this study suggest that the critical attributes identified by these educational leaders continue to hold promise for the improvement of education for all children in the primary program.

Future investigations should:

1. Investigate the relationship between beliefs, training, and classroom practices in the primary program.
2. Investigate the characteristics of classrooms in the study that implement the critical attributes of the primary program. What kinds of grouping patterns are used for instruction and to support continuous progress in schools that are implementing all attributes of the primary program?
3. Investigate the program transition of children from preschool to entry-level primary in high-performing schools. Is there a correlation between these transitions and teacher certification? Do gaps between various study populations get wider as students transition to the next level?
4. What are specific child, teacher, family, and leadership variables that lead to high student performance?

REFERENCES
