This research examined how three elementary school principals conceptualized within the Kentucky Education Reform Act (KERA) of 1990 the development of teacher leaders. Two major criteria were used to select these principals: (a) their schools had continuous student achievement for three consecutive biennia despite high levels of student poverty; and (b) principals had a minimum of 3-year tenures. The design of the study was the case study. Data were collected through observation, interviews, and document mining. Three individual case studies were followed by a cross-case analysis. Three key findings emerged. Principals: (1) established a clear communication system around common goals; (2) embedded a culture of professionalism; and (3) institutionalized the basic tenets of KERA by modeling collegial partnerships. There were several individual findings specific to the three schools. The focus of this paper is to present the key finding involving the institutionalization of the basic tenets of KERA. Principals in the schools studied here clearly recognized and endorsed teacher leadership. Shared leadership countered student poverty, facilitated accountability, and exploited the autonomy provided by KERA comprehensive school reform. Pacesetter status was a byproduct. Appendices contain a description of Kentucky accountability methods, and principal and teacher-leader interview questionnaires. (Contains 66 references.) (RT)
Principals as Teacher Leaders in the Kentucky Education Reform Act Era:
Laying the Groundwork for High-Achieving, Low Income Schools

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Paper presented at the annual meeting of the American Educational Research Association
New Orleans, April 1 – 5, 2002

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Abstract

This research examined how three elementary school principals conceptualized within the Kentucky Education Reform Act (KERA) of 1990 the development of teacher leaders. Two major criteria were used to select these principals: (a) their schools had continuous student achievement in for three consecutive biennia despite high levels of student poverty; principals had a minimum of three-year tenures. The design of the study was the case study: Data were collected through observation, interviews, and document mining. Three individual case studies were followed by a cross-case analysis. Three key findings emerged. Principals (a) established a clear communication system around common goals, (b) embedded a culture of professionalism, and (c) institutionalized the basic tenets of KERA) by modeling collegial partnerships. There were several individual findings specific to the three schools. The focus of this paper is to present the key finding “institutionalized the basic tenets of KERA.” Principals in the schools studied here clearly recognized and endorsed teacher leadership. Shared leadership countered student poverty, facilitated accountability, and exploited the autonomy provided by KERA. comprehensive school reform. Pacesetter status was a by-product.
Principals as Teacher Leaders in the Kentucky Education Reform Act Era: Laying the Groundwork for High-Achieving, Low Income Schools

The hypothesis of this study was that principals themselves could not improve instructional outcomes for low-income students. The complexities and demands of the position have become overwhelming (Hurley, 2001). The most prescient principals now understand that they need to develop teacher leadership to accomplish genuine reform, change, and improved student outcomes within this accountability environment (Holmes Report, 1986; Rosenholtz, 1989). Principals are now dependent upon sharing leadership with teacher leaders, because continuous improved student outcomes requires improvement of instruction. Kentucky’s Commonwealth Assessment and Testing System (CATS), for example, requires that all schools by 2014 attain an index of 100 which is an average of a proficient rating for all students (see Appendix A). Schools receive rewards or sanctions based on student outcomes every two years. The expectation for continuous improvement from every school is ongoing because the accountability index is determined biennially, and schools must always show improvement over their new baseline scores (KRS 158.645). The Kentucky biennial bar is one example of how policy makers are pushing the envelope and insisting on educator collaboration at the school level.

The purpose of this study was to investigate through observation, interviews, and document analysis how principals shared leadership and helped develop teacher leaders in three Kentucky schools where policy drives collaboration. The research question was “How did principals share leadership with teachers and help develop teacher leaders in low-income, high achievement Kentucky schools in an accountability environment?”

Framework of the Study: Shared Leadership in a Reform Era

As implied above, principals if for no other reason than accountability for student outcomes are being forced to enlist the involvement of teachers in leadership of the school. Ten years ago the perspicacious Carl Glickman (1991, p. 8) commented upon the line of research known as principal effectiveness research: “In successful schools principals aren’t threatened by the wisdom of others; instead, they cherish it by distributing leadership.” As the pressure for schools to achieve high standards for all students escalates, principals increasingly struggle to complement the managerial responsibility (technical, rational organization theory; Thompson, 1967) with that of leadership (e.g., vision of Bennis & Nanus, 1985). Numerous researchers have advocated the emergence of teacher leadership in achieving success with all learners (A Nation at Risk, 1983). Spillane, Halverson, and Diamond (2001), for instance, use the term “distributed leadership” to identify formal (principal) and informal leaders (classroom teachers) as “stretched over” each school’s social and situational context. “Distributed leadership,” according to Ogawa and Bossert (1995) is operationalized as exchange of social influence throughout a school as an organization and is used by all members. Within the policy environment Lewis (2001, p. 567) claimed that “Teacher instructional behaviors have more to do with student achievement than any other factor,” in part through sharing good practice with colleagues.

Perhaps nowhere is the need for teacher leadership as acute as in the state of Kentucky, whose landmark reform act of 1990 (KERA) specified both accountability for student learning and decentralization through the school council. This omnibus bill clearly executed the best practices for increasing student learning as identified by education researchers (e.g., accountability, autonomy, resources) and included the importance of principal and teacher relationships in the shared leadership of Kentucky schools (e.g., school-based decision making). The bill focused on classrooms in a way that requires the cooperative efforts of principals and teachers.

To achieve continuous improvement over the original baseline scores principals must share leadership decisions with classroom teachers who work daily with students, and are most responsible for student learning (see, e.g., Chrispeels, Brown, & Castillo, 2000). Kelley (1998, p. 24), for example, found that Kentucky’s highest achieving schools had “exceptionally skilled and professionally connected teaching staffs worked collaboratively with principals to focus the curriculum and instruction program.” Significant modification of curriculum, instruction, and assessment was the intent of KERA (Rothman, 1997). The
researcher (the first author of this paper) assumed that the principals selected for this study would relinquish part of their positional role because school-level accountability underscores the need for principals and teachers to work together. The need to understand the deliberate influence of the principal in teacher leadership is particularly important in the shared accountability environment of Kentucky, where the fight to educate the poor gained international recognition.

Method

The researcher collected data through observation, interviews, and document mining and used constant comparative analysis in determining how principals shared leadership and helped develop teacher leaders in three high-achieving Kentucky schools.

Research Design

The design of this study was case study. Three cases were included in because the multiple data collection methods were designed to provide the continuous, comprehensive, and in-depth comparative analysis necessary to clarify all inferences from the data. Studying three principals within the context of their schools allowed for individual analysis of each case as well as for a cross-case analysis.

This study followed Merriam’s (1998) recommendation that, “Qualitative case studies rely heavily upon qualitative data obtained from interviews, observations, and documents” (p. 68). This triangulation, or combination of methods, was chosen because it allowed an in-depth analysis without being obtrusive to the operation of the school while simultaneously minimizing researcher error or site bias (Creswell, 1994).

The case study approach enabled the researcher to look beneath surface perceptions in acquiring a deeper understanding of controlling factors in a given location from multiple perspectives. The school setting allowed the identification and examination of attributes that have become commonplace to principals and teachers who regularly interact in these schools and clarify individual perceptions (Merriam, 1988). This research shows how “all the parts work together to form a whole” (Merriam, 1998, p. 6) which was the intent behind Kentucky’s KERA legislation.

Selection of Schools

A purposeful selection method (Hunter, 1953; Whitaker, 1997) was used to determine school selection. Merriam (1998, p. 8) stated that sample selection for qualitative research should be “nonrandom, purposeful and small.” An in-depth analysis within a small number of schools was consistently recommended for this type of exploratory research (Bossert et al., 1982; Hallinger & Heck, 1996; Hart, 1990; Whitaker, 1997).

The first selection criterion was generating a list of every Kentucky elementary school that accomplished rewards for all three biennia. Longitudinal assessment data from the Kentucky Department of Education Assessment Division indicated that only 28 elementary schools achieved rewards during all three biennia. Those schools are identified here as “high achievement schools.”

The second criterion was poverty rate of the students. For schools to be included in this study, they had to have a student poverty income range of more than the Kentucky average, which was 47.67 percent. Only 11 elementary schools that achieved rewards for all three biennia had a poverty level greater than 47.67 percent. These 11 schools were identified as “high poverty/high achievement” schools.

The third criterion was tenure of the principal. The same principal must have remained in tenure during the past three years for a school to be included in this study. Six of the 11 high achievement schools had the same principal for at least three years.

Fourth, the reputation technique (Hunter, 1953) was used to identify principals with reputations for deliberately sharing leadership with teachers and helping develop teacher leaders. The researcher interviewed individuals who had worked directly with these schools (e.g., Kentucky Department of Education (KDE) Director of Division of Program Resources, KDE Branch Manager of Program Resources, Regional Service Center Director, Regional Service Center Title I Consultant) as to which principals were perceived to have shared leadership among these six schools. Shared leadership was operationalized as “the principal actively engages teachers in authentic and equitable decision making and implements the resulting shared decisions.” At least two of the interviewed individuals had to specify that the principal developed and shared leadership for the school to remain on the list.
Fifth, a telephone interview was conducted directly with these principals to determine that they deliberately shared leadership with teachers. The sixth criterion was applied to schools that met the first five criteria. Highest poverty rate and highest current academic index were final determinants. The size of the school was also a consideration and the study was not limited to schools of any particular size.

These schools, in sum, demonstrated continuously increased student achievement for three consecutive biennia on the Kentucky assessment with high levels of student poverty indexed to free and reduced lunch data. These principals during these six years established reputations for shared leadership, according to interviews with state, intermediate, and local agency personnel. Each selected principal and school was provided a pseudonym: Principal Adams at Arno School, Barnes at Bentley, and Calitri at Cannon.

Data Collection

Massive amounts of information were gathered during comparative, analytical case study because extensive data collection was inevitable. The completeness of the case study was only realized freshly-collected data continuously confirmed pre-existing themes (Yin, 1994). Many researchers limited the number of schools (three in this study) to facilitate better analysis and a more in-depth comparison of data (Hart, 1990; Lightfoot, 1983; Whitaker, 1997).

A school context demographic-data sheet was sent to the school prior to the arrival of the researcher. The principals filled out the sheets and return them to the researcher in enclosed postage-paid envelopes. Data were collected, it was coded by common characteristics. A few examples of this included "informants' sites, demographic variables, time ordering of informants, and role ordering" (Creswell, 1994, p. 154). Codings were standardized by source of data across the three schools. The code BBTL3-1-2-1-1, for example, indicated the school (BB), a teacher leader interview (TL), and the third teacher (3). The sequence of numbers that followed indicated the page number, item number, response number, and line within the response (1-2-1-1). Principal responses were distinguished from teacher leaders by coding (P), and interviews (I) were distinguished from document mining (D), or observation (O). Interview responses from focus group participants were distinguished by the designation (FG). The following section describes organization of the three data collection methods: (a) interviews (both individual and focus group), (b) observations, and (c) document analysis.

Interviews

Interviews were semi-structured (Merriam, 1998). Original interview questions were structured, and appropriate follow-up probing provided participants the opportunities to expand on their responses and allowed me to solicit additional facts and opinions (Merriam, 1998; Yin, 1994). The semi-structured interview allowed the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to the new ideas on the topic (Merriam, 1998, p. 74).

Principals and teachers from a school not in this study read and critiqued the open-ended interview questions for precision of vocabulary and meaning. "Piloting," then, was an essential step for ensuring clarity of interview questions (Merriam, 1998, p. 75). Feedback from the piloting was used to modify the interview questions. While questions varied according to the participant group being interviewed, all questions were designed to create matching response categories from participant groups.

Data from both the individual and focus group interviews were tape recorded (with participants' permission) and later transcribed into computer files for coding purposes (Coffee & Atkinson, 1996). The tape recorder was used in an unobtrusive manner (Holcomb, 1996) during the interviews. Participants were given the option of having only written notes if they were not comfortable with the recorder. No interviewee exercised that option. Two types of interviews were used to collect data for this study (a) personal interview (i.e., principal [Appendix B] and teacher [see Appendix C]) and (b) focus group interviews.

Personal interviews. Interviews allowed the researcher to generate more in-depth information than that which was obtained through observation (Merriam, 1998; Yin, 1994). Sentiments, opinions, impressions, and meanings, for example, could be further clarified during interviews (Merriam, 1988). Very broad, open-ended questions were used to begin all interviews, and cues generated from each response were utilized to probe deeper into the intent behind statements. On-site interviewing for five days per school
allowed data categories to continuously evolve and more informal follow-up questions to be asked of the
principal and teachers throughout the site visit.

Participants for teacher leader interviews were selected in a two-step process. Teacher leaders were
those teachers who were highly respected by other teachers and the principal and who were involved in
improving the school in ways that reached beyond the walls of their classroom. First, the principal
identified the initial group of teacher leaders at their school. Second, the teacher leaders identified other
teachers who should be interviewed. Participation in the interviews was strictly voluntary and anyone could
have chosen not to participate. All teacher leaders who were recommended participated. The possibility for
additional teacher interviews or follow-up questions at a later time also remained open until adequate
patterns had been identified. Follow-up interviews were conducted with the principal and selected teacher
leaders.

**Focus group interviews.** Selected teachers participated in “focused interviews” (Yin, 1994, p. 84).
A purposeful selection process was used to identify participants. The principal and teacher leaders were
each given the description provided earlier and asked to identify teacher leaders. This method was preferred
to random participant selection because those individuals most likely to provide the desired information
could be targeted as participants (Creswell, 1994). Focus group interviews incorporated open-ended
questions that were designed to confirm or deny tentative findings from preliminary data such as interviews,
observations, and document mining. The schedule for focus group interviews was designed to be
convenient to the participants.

Focus group interviews were time-efficient and revealed detailed clarifying information. Further,
the face-to-face interactions between participants could be observed and recorded by the researcher
(Holcomb, 1996; Krueger, 1988). Since a maximum of five individuals were interviewed simultaneously,
this method was more efficient than individual interviews (Krueger, 1988; Marshall & Rossman, 1995).
Assertions that developed from other data sources were confirmed or denied by the teacher leader focus
group responses.

**Observation**

Observations allowed the researcher to notice what had become commonplace to the people who
interacted in the same situations in an ongoing manner and made it possible to "record behavior as it is
[was] happening" (Merriam, 1988, p. 88). The researcher followed suggestions for unobtrusiveness,
passiveness, and obtaining familiarity with the situation (Creswell, 1994; Marshall & Rossman, 1995;
Merriam, 1988). The limitation of having the researcher as the only observer was minimized by researcher
awareness of that problem (Merriam, 1988) and by the use of multiple data sources (Yin, 1994).

Principal-teacher and teacher-teacher interactions were the focus of observations at each site.
Behaviors such as shared vision, common goals, open communication, proactive problem solving, and
student focus defined shared leadership among principals and teachers and formed the conceptual
knowledge base and framework for the study. Tentative categories evolved from data as they were
collected. Initial observations were informal and impressionistic to establish base level data patterns for the
succeeding observations (Merriam, 1998). The researcher became increasingly informed on what to observe
as the clarity of focus increased with continuous analysis of the data (Coffee & Atkinson, 1996). The
research question determined where to begin looking, but additional focus evolved from the data (Merriam,
1998).

Observations took place throughout the five days spent at each school setting. The researcher first
“shadowed" and observed the principal. Emerging categories generated from the principal observation and
initial interviews with teachers formed initial data patterns and categories and determined a more precise
approach for later observations. Observations also included faculty meetings, parent/teacher meetings, and
school based decision-making team meetings. The site-visit was scheduled to maximize data gathering
opportunities. Meeting observations were appropriate for this study because they allowed situations to be
analyzed as they took place and in the context within which they happened (Yin, 1994).

Observation data were collected and then transcribed to the computer immediately following the
end of each school day to maximize data analysis. Some consistent elements of observations included (a)
the physical setting, (b) participants, (c) activities and interactions, (d) conversations, (e) subtle factors (i.e.,
word meanings, nonverbal communications), and (f) my own behavior and thoughts (Merriam, 1998, p. 106). The format also followed Creswell’s (1994) suggestion for “descriptive notes, reflective notes, and demographic information” (p. 152). Observer comments were also “interwoven throughout the recording” (Merriam, 1998, p. 106). Observation data were signified in the coding (e.g., AAO7). Observations were further coded by the page number and detail within the observation (e.g., AAO-7-2-1).

Document Mining

Document mining allowed the researcher to have access to pertinent materials and considered the information within a time frame of the “rhythm of the school.” Limitations included the availability, clarity, and completeness of materials (Creswell, 1994). An additional limitation of document analysis was that sometimes the researcher might not fully understand the information she was reviewing (Merriam, 1988). For this study this limitation was not an issue because the researcher had worked in the planning division at the state education agency and therefore recognized obvious and not so obvious “look for’s” in the documents being reviewed.

The Kentucky Department of Education required schools to have improvement plans, such as the Consolidated Plan (CP) and school based decision-making (SBDM) policies on file. Most schools also maintained (a) meeting agendas, (b) school handbooks, and (c) faculty correspondence including memos, meeting notes, and notes for announcements. These documents were included as sources for document mining. The researcher looked for evidence of focus on student achievement, wide teacher involvement, and responsibilities that were shared by teachers and the principal. A consistent format was used to record information from the documents. Documents were coded by school identification, document number, page number, item number, and identifying information within the item (e.g., AAD7-1-2-1).

Data Analysis

Data were analyzed by the constant comparative method (i.e., iteration between data collection and analysis) as categories both emerged and were modified—as fresh data were collected (Coffee & Atkinson, 1996). Matrix displays (Miles & Huberman, 1984) were used to illustrate themes and categories within each case. Cross case analysis (Hart, 1990) consolidated the multiple case findings as commonalities developed among the cases.

The triangulated, methodological approach fit naturally with continuous data analysis (Glaser & Strauss, 1967), and was “not simply one of the later stages” (Coffee & Atkinson, 1996, p. 11). Organization of the information for this study involved the development of chart or table representations of the categories, continuous data reduction with refined data displays, and conclusion drawing with verification (Miles & Huberman, 1994). The selection of the sample and data gathering were first framed by the research problem, and but the researcher continuously modified both data collection and analysis to respond to the evolving patterns and themes (Coffee & Atkinson, 1996; Silverman, 1993).

The first interview, for example, provided beginning hunches that were refined as the study progressed and data were continually reduced. Category development for this study resembled empirically grounded theory (Glaser & Strauss, 1967; Merriam, 1998; Strauss, 1987; Strauss & Corbin, 1990; Tesch, 1990) and involved multiple levels of data collection and organization. Organizers were fluid enough to allow further refinement to result from constant comparisons with new information (Conrad, 1978; Creswell, 1994; Glaser & Strauss, 1967; Strauss, 1987; Strauss & Corbin, 1990). Coding became increasingly detailed as the categories developed from multiple data sources, as the transcribed notes or documents were coded according to broad developing themes. As additional themes developed, the researcher returned to the original documents for additional coding. Merriam (1998) recommended this method because all notes and documents are part of inductive building of categories.

Various analytical methods such as color-coding by highlighting text and sorting with the computer were employed to reduce, refine, and link together categories and their properties in a manner that continually allowed refined categories to emerge (Bogdan & Biklen, 1992; Merriam, 1988). Coding began by assigning broad organizers to the data but then moved to “conceptualizing the data, raising questions, providing provisional answers about the relationships among and within the data, and discovering the data . . . [in a manner that] open[ed] up the inquiry and move[ed] toward interpretation” (Coffee & Atkinson,
At this point it became clear that both themes and categories existed and at times, subcategories were appropriate.

Emerging themes were continually refined and organized using new data until all data repeatedly confirmed the identified themes (theoretic exhaustiveness) and "congruency of fit" was accomplished (Marshall & Rossman, 1995). In other words, constant comparative analysis of all data was continuous and ongoing. Ultimately looking across identified segments defined the "larger consolidated picture," which was the "final goal" (Tesch, 1990, p. 97).

Inductive analysis was incorporated as the data were considered for the cross-case analysis (Hart, 1990). The patterns identified during the analysis of the first school, for example, were confirmed or denied by data collected at the second school and third sites. Once "key findings" emerged, all data were incorporated in commonalties and dissimilarities among the schools. These descriptions were included in the cross-case analysis.

**Plausibility of Data**

Plausibility of data was determined by whether the findings and conclusions mirror the situation as it really existed (Merriam, 1988). The issue of plausibility was addressed in this study by triangulating both data collection methods and sources of information. This combination ensured that many different perspectives were assessed in multiple ways and that the conclusions made sense. An additional measure was provided by using focus groups to confirm themes and categories tentatively established (Creswell, 1994). Finally, three critical readers, two teachers and the principal at each school, read the findings and responded with their perception of accuracy and plausibility as an additional "check" on the data (Merriam, 1988).

**Limitations**

This research had three limitations. First, only three schools were considered for this qualitative study. The limited nature of this study only provides implications about the settings researched here. Second, this research was conducted solely in eastern Kentucky. Each school was in a very rural setting. The data presented here could not be applied, therefore, to an urban school environment. Third, the researcher's bias from having worked in Kentucky during implementation of KERA could have influenced this research. The research may have been biased because of her professional experiences both as a classroom teacher and later as an employee of the Kentucky Department of Education. No doubt, experiences with schools that embraced KERA, endorsed teacher leadership, and became pacesetter schools colored my thinking.

**Results**

Generally, these principals used KERA as a professional philosophical platform to pressure teachers to move forward into leadership positions. As principals and teachers institutionalized KERA, teacher conceptualization of school-wide shared leadership, in turn, was enhanced. A brief summary of key findings for each case is shared before the cross-case analysis is presented.

**Principal Adams and Arno Elementary School**

Ninety-five percent of the student population at Arno School qualified for either free or reduced lunches. The two-lane paved crooked road that led to Arno School was lined with private residences and the closest town was eleven miles away. Arno School was created in 1990 when two rival schools were consolidated. Student enrollment for kindergarten through grade six in 1999-2000 was two hundred eighty-seven, and transience ranged from two to three percent (AAP15-1-5). Average daily attendance was 95%. A total of twenty-nine certified staff, ten aides, five food service employees, four custodians, two nurses, two family resource center employees, and eleven bus drivers serviced the school.

Principal Adams was in his thirty-first year as an educator and has been a principal for twenty-seven years. Adams was sole principal at Arno in the eleven years the school has existed. He grew up in the area and indicated an interest in educating the "whole child" in both the local and global cultures. Adams's soft-spoken yet straightforward, no-nonsense demeanor immediately announced the seriousness he perceived in his duties as principal of Arno.
earned reputation for shared leadership was, therefore, stated from the beginning of the site visit. Key findings of Adams's shared leadership included these four themes: (a) communication, (b) connectedness, (c) environment of shared respect, and (d) resource provision.

Principal Adams utilized the KERA framework in combining communication and connectedness and foster an environment of shared respect. Arno educators were expected to assume responsibility for making informed decisions about KERA implementation. Adams and teachers at Arno School monitored data and focused on Consolidated Plan (CP) goals to elevate the essential nature of teacher leadership and to make it fundamental to success with school level accountability. Adams and teachers designed CP methods that required teacher leadership.

Principal Barnes and Bentley Elementary School

Bentley School was located in a small community outside an Eastern Kentucky town which still flourishes from the wealth coal mining brought into the area. The school sat on a heavily traveled country road several miles from the town. One section of the well-maintained two-story structure was built in 1998 while another section dates back to 1953. The new section was added when another school was merged with the existing school. The student population was 62% poverty as defined by free or reduced lunches (BBD14-1-1) and enrollment fluctuated from 852 to 960 as documented in the School Report Card (BBD14-1-1). Transience is not a problem (less than five per cent per year). The average daily attendance rate was 95%.

Prior to his term as principal, Barnes was assistant principal at Bentley for ten years and taught high school math in the district for ten years prior to that. He grew up in the area and expressed dedication to having students succeed in the global economy. Principal Barnes indicated he was intent on being a good principal and shared a copy of Standards for School Leaders which he and the assistant "live by" (BBD15-1). Three overarching themes illustrated how Barnes shared leadership with teachers (a) culture of shared commitment, (b) teamwork, and (c) collaborative connections.

A major finding was an established culture of shared commitment at Bentley School, which teacher leaders credited to Barnes's leadership. Barnes and teacher leaders at Bentley were characterized by purposeful collegial interactions in using the Consolidated Plan (CP) and Kentucky Education Reform Act (KERA) to craft a whole-school approach with big picture connections. All teachers at Bentley were part of a focused teamwork approach to achieving targeted academic goals. Shared responsibility supported teacher leadership because all teachers were part of the team. Teacher leaders were communication "conduits" and helped with understanding KERA components while orchestrating curricular alignments. Teachers believed that by working together as a team, they had control over accountability, as opposed to the "state" merely dictating their actions.

Classroom instructional data were fed into a whole-school approach as Barnes and teacher leaders shared information about both the individual and the combined elements of KERA. Data revealed consistent references to the organization of work within the CP. Teacher leadership evolved naturally from related planning and implementation of task responsibilities.

Kentucky Education Reform Act (KERA) accountability was not perceived as problematic at Bentley School because teachers were recognized as experts capable of helping students learn at high levels. Teachers insisted on understanding data and outlining a collective, strategic, and continuous-improvement approach to the CP. Barnes interacted collegially with teachers, accepted responsibilities not normally expected of a principal, and endorsed teacher leadership as an approach to school-wide accountability outlined in KERA.

Principal Calatri and Cannon Elementary School

Cannon Elementary was located in a small Kentucky community in an easily accessible location on a main highway and was opened in 1990 as the result of consolidation. Unlike most county schools located miles from town, Cannon was on the outskirts of the town it served. Enrollment fluctuated between 360 and 370 students (CCD3-1-1). The school structure closely resembled a residential dwelling as a one-story brick building with a front porch entry and white columns on either side of the front door.

The student population had a thirty-percent transience rate and the poverty rate was seventy-two percent (CC4-2-1-4). The school served five housing projects and three low-income rent-subsidized areas.
In one area including, "Forty percent of families indicated difficulty in providing for food, clothing, emergency needs, utilities, etc." (CCD4-1-1-27). The daily rate of attendance (98%) exceeded both the district (97%) and nation (95%) (CCD3-1-1-3). Teacher leaders credited Principal Calatri with the high rate of attendance. Calatri indicated that she worked in multiple ways to encourage students to attend school because she felt attendance was a critical support mechanism for teacher effectiveness.

Three main themes emerged from Cannon School data to define how Principal Calatri shared leadership with teachers and developed teacher leadership: (a) culture of shared teacher leadership (b) purposeful partnerships and a familial approach for teacher leaders, and (c) school organization that supported teacher leadership. Teacher leadership was an expectation at the Cannon School. The supporting culture was deliberate and validated that teacher expertise and leadership was essential and natural. The culture was achieved through the promotion of a shared vision of pacesetter excellence that resulted from collective expectations and an environment of mutual support.

For Principal Calatri at Cannon School, KERA provided tools for orchestrating teacher leadership by shifting the pyramid for leadership expectations to be more inclusive of teachers. She took advantage of the KERA pyramid shift by actively seeking shared responsibilities with teachers who then interpreted the interactions as supportive of their efforts. Calatri and teachers embraced KERA and used the terminology to craft conversations.

In the cross-case analysis three key findings were found to be common in describing how principals shared leadership and helped develop teacher leaders. These principals (a) established a clear communication system around common goals, (b) embedded a culture of professionalism, and (c) institutionalized the basic tenets of the KERA by modeling collegial partnerships. The first two findings are included elsewhere (see McDonald, 2001). This cross case analysis focuses on the third cross-case finding: “institutionalized the basic tenets of KERA by modeling collegial partnerships.”

Cross Case Analysis

Common to all three case studies was that these principals in effect were institutionalizing a basic tenet of KERA by modeling collegial partnerships. At Cannon School, for example, a key finding was forming purposeful partnerships. At Bentley School partnerships were categorized as focused collegiality, and at Arno a teacher leader stated, “It goes back to everyone has a role and we all share... Adams joins in and helps like everybody else” (AATL7-5-4-3). Including all teachers in information sharing, goal setting, and continuous individual professional growth honored and fostered peer equality. A Bentley teacher summarized it best by stating, “Every teacher in the school has a responsibility, is on a committee. Everyone has to do something to contribute” (BBTL1-3-4-7).

Three cross-case findings emerged from the cross-case analysis in conceptualizing to this common theme “institutionalized the basic tenets of KERA by modeling collegial partnerships”: (a) accountability for student achievement made shared leadership essential, (b) the Consolidated Plan was a tool for managing partnerships, collective accountability, and shared decision-making, and (c) principals were analytical guides who provided appropriate internal and external resources and supported teachers as leaders. Each finding is now presented with supporting evidence.

Accountability for Student Achievement Made Shared Leadership Essential

The ultimate intent of KERA was actualized at these schools because school level accountability for student achievement made shared leadership essential. These three principals recognized the potential for school wide accountability within the KERA framework and let teachers know shared leadership was the approach they must take. Adams at Arno described, “It’s like we are in a big circle, working to solve problems at all times” (AAP2-5-22-1-1). A Bentley teacher believed the key was “shared responsibility” that came with “KERA” and required a “whole school effort” for success. Teachers participated in supportive interactions and shared expectations, and teacher leaders accepted responsibilities beyond those which all teachers shared. These principals were not shy in admitting they could not meet accountability goals without shared teacher leadership. Barnes stated, “One of my strengths is the recognition of ability..." (BBP1-2-3-3).

At Arno, connections between data analysis and classroom practices helped teachers see how assessment results were dependent upon what they taught in classrooms (AAO5-20). Teachers at both
Bentley and Cannon admitted approaching the principal and requesting closer analysis of assessment results. Cannon teachers acknowledged, “We went to her [Calatri] and said, “We have to bridge this gap in achievement . . .” (CCTL4-4-14-9).

The state of Kentucky required that all schools adhere to the mandates of KERA. Instead of facing these changes with fear and cynicism, Adams, Barnes, and Calatri made a conscious decision to understand and implement KERA’s basic tenets. This willingness to embrace change encouraged teachers to view KERA as a guide for establishing their roles as teacher leaders and for achieving pacesetter status in their schools.

Consolidated Plan Was a Tool for Managing Partnerships, Collective Accountability, and Shared Decision-Making

Assisting teachers often involved both asking questions to help them think through the numerous KERA requirements and implementing their consolidated plans. The Kentucky Consolidated Plan (CP) is a state-mandated annual school plan based on analysis of student work and test results. Data analysis was thus utilized to acknowledge teacher expertise and critical link to accountability and the school-wide approach indicated in KERA legislation was realized.

The CP was used as an organizational tool which aided these principals in communicating to teachers the influence KERA could have on them as leaders both in the classrooms and the schools. Calatri stated, “Others can give you a perspective on what you won’t be able to see. Therefore, I’m always encouraging teachers to take on leadership roles” (CCP3-1-4-4). Calatri observed, “The plan tells us what goals we need to reach. It is a guideline . . . We work together and help each other” (CCP3-1-4-1-1). These educators didn’t just work together, however. They were all strategically focused on accomplishing common goals.

An Arno School, a teacher stated, “We have school wide goals, a mission statement, and everything we do is based on that” (AATL7-1-4-1). Another teacher spoke of preparing teachers to be future component managers: “We’re getting ready to shadow for new component managers . . . the CP keeps us focused. I know what is expected of me and what we are accountable for” (BBL9-6-3-1).

The Consolidated Plan was a tool for managing collective accountability and shared decision-making. Collective accountability was viewed as a manageable issue when principals utilized the CP as a tool for planning around data analysis. A Bentley teacher equated their planning to an integrated approach “kinda like cooperative learning” (BBTL1-6-7-9). The mission statement of each of these schools included references to “accountability,” and principals and teacher leaders indicated they were not threatened by accountability because they perceived a whole school effort they could collaboratively manage.

Connections between the data analysis required for the CP and classroom practices helped teachers see how assessment results were dependent upon what they taught. A Cannon teacher described that the biggest change since KERA was how the Consolidated Plan distributed accountability to all grade levels, not just the assessment grade levels. KERA legislation did not specify a consolidated plan. The comprehensive planning process was a requirement from the Kentucky Department of Education. These principals and teachers understood how the planning process could distribute accountability throughout the school. Through the planning process they helped others understand that accountability was not limited to the grade levels specified as accountability years.

Teacher leaders confirmed that all three principals encouraged them to make decisions about what worked in their classrooms. In turn, teacher leaders supported the principal in working toward school-wide approaches. A teacher leader at Bentley summed it up, “You can have an administrator with all these wonderful ideas but if the teachers aren’t behind him or her, it won’t work” (BBTL4-3-6-15). Successful partnerships between the principals and teachers were a by-product of this interaction.

Principals Were Analytical Guides Providing Resources and Supported Teachers as Leaders

Principals were analytical guides who provided appropriate internal and external resources and supported teachers as leaders. These principals often responded to teacher inquiries with analytical questions that encouraged teacher decision-making. A Cannon teacher summed it up, “She doesn’t give you the answer but guides you to it. She asks you questions that make you think in a different way” (CCTL7-2-6-2). These questioning techniques were found at all three schools and provided for additional teacher
decision-making and leadership opportunities. Teacher leadership was tapped as essential for success in an accountability environment, and principals recognized their responsibility for teacher support and for removing all barriers for teachers’ self-growth. Calatri stated, “I see my job as being a service to the teachers (CCP2-1-1-7).

Teacher decisions were binding even when they did not parallel those of the principal. Confidence in teacher expertise was evident in statements like the following from Principal Barnes. “They [teachers] have to have the information, and they will take it upon themselves to do what needs to be done...” (BBP1-3-4-3). Support for teacher expertise tapped shared leadership as essential for success in an accountability environment. Teacher leaders shared the responsibility for goal attainment with their peers, worked collaboratively to make decisions, and recognized the importance of teacher decisions. Principals recognized powerful teacher leadership as a reward for surrounding themselves with excellent teachers. A Bentley teacher noted, “There is appreciation and support for the teachers” (BBT7-2-2-1).

Principals provided access to appropriate internal and external resources at their schools. A Bentley teacher observed, “You feel you can go to him. If funding is not available, he will find another way” (BBFG1-3-5-1). Another striking commonality was how these principals accepted no barriers to providing resources teachers needed. An Arno teacher shared, “He gets us any supplies... anything we need to work with in our classroom” (AATL3-6-2-1). Because supplies were plentiful at these schools, teachers shared:

The sharing process underscored the collaborative approach and fostered the evolution to teacher leadership. Professional networking was encouraged both within and outside schools, and success was dependent upon the recognition of teacher time as a valuable resource.

Time was an internal resource that was essential to professional networking. Information dissemination was efficiently handled at these schools because the principals and teachers were strategic about uses of time and utilized every opportunity for sharing information. These educators were not dependent upon formal meetings for professional networking. Informal interactions often served to share vital information.

These schools were successful because both principals and staff recognized the importance of appropriate resource provision and dedicated the time necessary for such discussions. Needs were openly discussed, as Adams exemplified: “All schools get the same amount of money. We talk about how to use it...” (AAP5-2-3-1). When time and resource identification were united, teacher leadership helped issues that affected teachers in classrooms move to the forefront. At Cannon a teacher stated, “She [Calatri] gives us what we need to work with, supports us one hundred percent and supports what we think needs to happen in our classrooms” (CCTL6-1-1-2-2).

Summary and Discussion

These principals institutionalized the basic tenets of KERA by modeling collegial partnerships in three ways: (a) accountability for student achievement made shared leadership essential, (b) the CP was a tool for managing collective accountability and shared decision making (SBDM), and (c) principals were analytical guides who provided appropriate internal and external resources and supported teachers as leaders. These key findings confirmed Kelley’s (1998) above conclusion that in successful Kentucky schools, teachers and principals worked together in ways that were “skilled and professional...to focus the curriculum and instruction” (p. 5).

The reform framework of KERA accountability, in sum, played into the hands of principals who demonstrated by their actions the need to provide teacher leadership. These three principals seized KERA as a positive opportunity to make shared leadership essential. These principals demonstrated an understanding of the basic tenets of KERA and the potential the reform initiative held for high-poverty schools (Sexton, 1995). These principals relied on the student achievement terminology in KERA and the CP to frame communication, since KERA established student achievement goals for each Kentucky school. The following discussion generalizes each of the key findings to current literature.

First, Adams, Barnes, and Calatri acknowledged that they sought out to improve student outcomes in part through developing and sharing leadership with teachers, as opposed to controlling teachers as mangers. The fundamental nature of shared leadership for school success with accountability emerged from data in this study. Principals were purposeful in deliberately sharing leadership with teachers because they
recognized teacher expertise as elemental to success with their students’ assessments. The “indirect influence of these principals” (Glickman, 1991) became apparent when they collaborated with teachers toward achieving common goals in a “results through others” approach.

The three principals worked together with teachers to monitor progress toward accomplishment of those goals. The critical importance of goals in school improvement has been documented for several decades (Chrispeels, Brown, & Castillo, 2000; Schmoker, 1996). Joyce, Wolf, and Calhoun (1993), who established that in every successful school they studied common goals were central to communication and school operation, best illustrated the importance of common goals. These principals actualized the intent behind common goals when working with teachers to collaboratively develop and monitor common goals.

These principals coordinated the expert teachers in their schools and acknowledged that further complications of high poverty and consolidation worsened the threat of accountability at their schools. The requirement of school-based councils implied that shared decision making with teachers was critical for success. While shared decision making was present at all three schools, only one was formally practicing SBDM.

Second, the CP was a tool for managing collective accountability and shared decision-making (SBDM). Principals interpreted KERA and CP as official-policy permission to share leadership. The critical importance of this interpretation is evident when considered simultaneously with Murphy’s (1991) assertion that principals must accept the responsibility for school improvement as outlined in policy and communicate it in a way that causes teachers to accept the leadership responsibility. These principals, “accepted autonomy and accountability on behalf of the school and passed it on through the teaching staff” (Murphy, 1991, p. 26). Principals remained significant to school success (McDonald, 2001).

These principals also understood the impact of poverty on student achievement and knew that KERA originated because of an inequity that included their geographic area. Autonomy balanced with accountability infers planning to monitor student progress. KERA spelled out SBDM but stopped short of providing a vehicle to guide school autonomy. These principals took advantage of the Consolidated Plan (CP) requirement as the organizer for their newfound autonomy. Moreover, they presented accountability as making shared leadership essential. Student achievement almost invariably improves with effective leadership (Corallo & McDonald, 2002; Murphy, 1992), and principals crafted conversations about KERA to explain how principals can only raise student achievement through teacher leadership.

Third, principals as analytical guides providing resources complemented the culture of teacher professionalism and leadership. A major responsibility of these principals was provision of an environment that nurtured teacher leadership. These principals exercised “skillful leadership to ensure that teachers can operate in an environment that values and takes advantage of what they know” (NSDC, 2000, p. 1). In addition to being analytical guides and promoters of teacher leadership, the principals were coordinators, supporters, and encouragers who knew they profited from teacher expertise.

Leadership ambiguity was diminished and the academic freedom to innovate became apparent when teachers perceived principals as partners in leadership responsibilities. Teacher leadership potential was thus realized. Goodlad challenged educators to “maximize teachers’ potential” (1984, p. 186) nearly twenty years ago and remains convinced (2000) that leadership is essential to school success. Intelligent leadership is an awareness of the conditions that have to be put in place, a grasp of the strategies that one has to use to effect change. (2000, p. 85). The missing ingredient has not been leadership, but more specifically teacher leadership (Corallo & McDonald, 2002).

The threat of ambiguity for principals and teachers was diminished when leadership responsibility was shared. Schmoker (1999) explained why:

Principals do not, at the ground level, have to implement instructional changes themselves. Teachers are vividly aware of this. Change has a much better chance of going forward when principals team up with teachers who help translate and negotiate new practices with the faculty. The combination of principals and teacher leaders is a potent combination. (p. 116)

The extensive change required to implement KERA necessitated a clear understanding of responsibilities by all individuals. A principal practitioner recently observed, “Taking a potentially damaging situation and transforming it into a positive experience can often bind a staff...” (Azzard, 2002).
2000/2001, p. 62). These principals augmented their leadership potential by sharing it with teachers. Simultaneously, they made KERA and CP positive endeavors. Murphy (1991) equated the principal to “the nexus of restructuring efforts” (p. 132) and acknowledged that the relationship most changed by current reform efforts is that of the principal and teachers. Murphy (1991) wrote that principals must change from the hierarchical relationships of the past. Principals of successful schools today have been repositioned to the center of collegial relationships and know “The heart of school leadership lies in developing positive personal and community relationships” (Azzara, 2000/2001, p. 64).

Together with teachers these principals manipulated the KERA framework as an organizational tool for galvanizing shared leadership, outlined mutual support and responsibility, and affirmed accountability through collaborative efforts among all individuals at the school. By-products were a “refined focus” and “solidarity and cohesiveness” among teachers (Blase, 1987, p. 602). Shared priorities focused everyone on student achievement results that were collaboratively monitored with data.

**Significance of this Study**

The magnitude of leadership influence on school performance remains at the forefront of school improvement literature nearly thirty years after principal leadership was proven essential to school success (Edmonds, 1979; Purkey & Smith, 1983), but recognition of teacher leadership has also begun to materialize.

This study adds to the understanding of how shared accountability leads to shared leadership and determines how information sharing functioned in the context of school-wide accountability for all students. Shared leadership as a determinant for success with student achievement seemed a “core value” in these schools (Troen & Boles, 1994, p. 286). Principals acted as one player within the autonomous school unit spelled out by KERA and knew teachers were most intimately connected to student learning (Blase, 1989; Hallinger & Heck, 1996). Teachers were given additional recognition and responsibility and rose naturally to the occasion as depicted by earlier researchers (David, 1994; Glickman, 1991; Kelley, 1998).

All three schools included shared leadership as a core value. DeBlois (2000) described: Good leader(s) rely on the talent, commitment, and leadership of many people in the organization. Anyone who thinks that a good school is the responsibility of primarily one person is foolish. No leader or principal can be effective in overseeing, motivating, recognizing, and supporting every key individual in the school or community. (p. 26) Because shared leadership was a core value, all individuals in these schools accepted the responsibility to oversee, motivate, recognize and support.

These seasoned professionals recognized the implications KERA policy had for their schools and made connections to past systemic practices. These principals, for example, began their KERA implementation with knowledge that communication was key, endorsed accountability, and crafted a systemic whole-school planning approach that everyone understood and shared. Principals who were less experienced may have had greater difficulty with KERA implementation.

Two principals further indicated that prior experience with a school-wide planning initiative may have helped lay the foundation for shared teacher leadership. These two principals had participated in a pre-KERA initiative called the Effective Schools Network, which focused on collaboration through school leadership teams and data focused planning. Both principals credited participation in that process with knowing how to implement KERA legislation and achieve successful consolidation of rival schools. The need to understand how shared leadership happens was clearly articulated in the literature review both generally (Bossert, et al., 1982; Hallinger & Heck, 1996; Hart, 1990; Whitaker, 1997) and in Kentucky (Kelley, 1998; Kelley & Prostick, 1997).

**Suggestions for Policy Makers, Practitioners, and Researchers**

Shared leadership was at the core of pacesetter status in these schools. Teacher leadership was clearly recognized and endorsed. For all principals to share leadership and develop teacher leaders, clear communication of the necessity for teacher leadership must be specified with no mixed messages to sustain hierarchical approaches. In the successful schools studied here, shared leadership accommodated student poverty, accountability, and autonomy of comprehensive reform while accomplishing pacesetter status. Suggestions for policy makers, practitioners, and researchers are now proposed.
Suggestions for policy makers. Foremost, for education to receive policy support from informed decision-makers, practitioners must effectively communicate with policy makers. The CP referenced throughout this research is not mandated in KERA policy or Kentucky State Board of Education policy, even though the document is required for federal and state funding. Policymakers directed SBDM, for example, but did not link shared decision making policy to the Consolidated Plan. Educators in schools studied here made the critical connections between planning and implementation without policy support. CP should be formally written into policy.

Second, this study suggests that policy makers should strengthen shared leadership by specifically targeting teacher leadership in policy. When student achievement drives accountability, it sends a message about the necessity of teacher leadership. This message is often implied when it should be specified. In Kentucky, for example, policy directed implementation of school based decision making (SBDM) but did not specify teacher leadership. Teacher leadership is rarely outlined as a specific policy expectation.

The third suggestion for policy makers is to outline specific expectations for principals and teachers to participate in “research and development.” This participation translates to the monitoring of data that affects student learning including, but not limited to, formal assessment results. Adams, Barnes, and Calatri gave teachers time and worked with them to understand data and to link it to school level accountability. Data analysis was suggested by teacher leaders as a method for working with their peers, making connections between policy and classroom instruction, and facilitating shared leadership. In Kentucky, data monitoring would be best accomplished within the framework of the existing CP because each school’s needs assessment already provides these data. To date, no policy spells out such action.

Suggestions for practitioners. Supportive state department of education actions make local practice attainable. The tenets of KERA and the CP were executed in an expert manner at these three schools because responsibility was understood and shared. These educators credited their success to outlining curriculum, instruction, and assessment with related task expectations within the CP. It is suggested that KDE support local practitioners in moving to teacher leadership by helping them develop and implement plans in the CP format.

Professional development was a critical element of the shared leadership in this study. Both principals and teachers should be specifically identified as decision-makers during professional development. Teacher leadership flourished when teams at these schools made data based decisions about the type of professional development required to positively affect student learning. Often teachers needed time for study groups or action research as outlined in their consolidated plan.

Principals might be encouraged to help teachers conceptualize required changes. These three principals responded and helped teachers understand how KERA policy was translated to their classrooms. Fullan (1991) determined that teachers failed to conceptualize what it takes to improve schools because they did not independently make such connections. These principals made that conceptualization clear to teachers, thus reducing the ambiguity that has plagued school reform for decades. They did so by encouraging collegiality, by combining theory and practice, and by assisting teachers as they “learn[ed] to initiate rather than just react to constant change” (p. 136). Pacesetter schools were the result.

Suggestions for researchers. Research should be conducted to clarify the implications of distinguishing individual teachers as leaders. Future researchers must carefully examine the effect of stipends and recognition on teacher leadership potential. Finally, if teacher leadership is to flourish, researchers must identify what public relations are necessary to elevate teacher leadership as an essential component of school success. These principals and teacher leaders wanted a natural evolution to teacher leadership so they carefully guarded perceptions of roles that were not accessible to every teacher. According to teacher leaders interviewed in this study, the suggestion to pay teacher leaders a reasonable stipend, as suggested by Goodlad (2000) and Schmoker (1999) would cause problems.

Researchers might determine how perceptions are most effectively altered to accommodate teacher leadership. The educators in this study believed schools were strategic organizations. Even though they used data to make education an exact science, educating each individual student was their objective. To achieve this goal, leadership opportunities were made available to every teacher. Both principals and
teachers realized that the hierarchical leadership practices of the past must be abandoned in order to move through the extensive changes outlined in KERA.

Educators in these three schools took seriously the declaration that “Each child, every child, in this Commonwealth must be provided with an equal opportunity to have an adequate education” (Rose vs Council for Better Education, 1989). In their determination to comply with KERA, these professionals established a system of teacher leadership that benefited every individual in the school. The schools in this study not only accomplished shared teacher leadership and achieved “rewards” status; they embodied KERA.

Conclusion

The study hypothesis (that principals are becoming dependent for their schools’ instructional success on teacher leaders) was confirmed by this case study. These three principals were not shy in admitting they could not meet accountability goals without shared teacher leadership. Barnes stated, “One of my strengths is the recognition of [teacher] ability. . . . “ The Commonwealth of Kentucky requires that all schools adhere to the mandates of KERA. Instead of facing these changes with fear and cynicism, Adams, Barnes, and Calatri made conscious decisions to understand and implement KERA’s basic tenets. This willingness to embrace change encouraged teachers to view KERA as a guide for establishing their roles as teacher leaders and for achieving pacesetter status in their schools. The intent of KERA was actualized at these schools because accountability for student achievement made shared leadership essential.

While educators in most states fear they will never have the policy support KERA provided for Kentucky, the current Elementary and Secondary Education Act (ESEA), sometimes referenced as “No Child Left Behind” outlines policy that effectively promotes much of the KERA intent. ESEA provides an excellent opportunity for policy to inform and frame both state and local educational action.
References


Appendix A
Kentucky Accountability for Continuous Improvement

Kentucky schools that score at least one percent above their thresholds and move 10 percent of students scoring “novice” to a higher performance level receive financial rewards, which are divided according to the wishes of the majority of educators at the school. Schools not achieving their thresholds receive varying levels of assistance and/or sanctions depending upon how close they come to their threshold.

The KERA accountability index is based on a formula that weights student performance in terms of four performance standards (a) Novice-0, (b) Apprentice-.4, (c) Proficient-1.0, and (d) Distinguished-1.4. Novice students recall some relevant information but show minimal understanding of core concepts, for example, while distinguished students demonstrate in-depth understanding of concepts and/or processes and solve challenging problems using innovative and efficient strategies.

A given accountability index is calculated by multiplying the percent of students at each performance level by its corresponding weight, and then adding the products. When 100% of students are proficient, the index is 100 (i.e., the concluding goal). The accountability index indicates how many students in a given school are performing in terms of the percent of novice, apprentice, proficient, and distinguished.

The graduated elevation of assessment scores every two years is referred to as the biennial bar. The Kentucky performance-based assessment program ensured school accountability for student achievement of the broad goals set forth in KERA. The performance assessment was first administered during the 1991-92 school year, and those results were used to determine a baseline accountability index for every school. The baseline was then used to set a progressively increased threshold (i.e., goal) that the school must reach by 1993-94 school year to obtain rewards or avoid sanctions.
Appendix B
Initial Principal Interview

1. Please describe your vision for this school. (Smith & Andrews, 1989)
2. Has the historically established hierarchy with principal as sole leader of the school changed to accommodate teacher leadership since KERA? (Fullan, 1994) If so, please explain.
3. Explain the relationships among you as principal, the teacher leaders, and other teachers both prior to and following KERA? (Smylie & Denny, 1990)
4. Who are the teacher leaders in this school?
5. How did formal teacher leadership roles evolve? (Troen & Boles, 1994)
Appendix C

Initial Teacher Leader Interview

1. What guides the work of teacher leaders in this school? (Smith & Andrews, 1993)
2. What defines the support for the role of the teacher leader in this school? (Troen & Boles, 1994)
3. How is the role of the teacher leader defined in this school? (Troen & Boles, 1994)
4. What activity has the principal performed that you think most contributed to increasing student achievement? (Schmoker & Wilson, 1994)
5. How did individual teachers assume responsibility for different elements of change in this school before and following KERA? (Fullan, 1994)
6. Explain the relationships among the principal, teacher leaders, and other teachers in this school? (Smylie & Denny, 1990)
7. How do teacher leaders deal with the norms of teacher professional independence and shared status among teachers? (Troen & Boles, 1994)
8. Explain information sharing in this school? (Schmoker & Wilson, 1994)
9. What are the weaknesses in leadership in this school? (Troen & Boles, 1994)
10. Who are other teacher leaders in this school?
11. How did formal teacher leadership roles evolve? (Troen & Boles, 1994)
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