In 1995, a 5-year collaborative research and development project began examining conditions and practices in Kentucky schools that are linked most strongly with improvement in a school's writing score on the statewide portfolio assessment. An examination of over 1,200 schools with complete writing portfolio scores for 1992-96 identified 42 schools with consistently improving scores and 18 with consistently declining scores. Site visits were conducted at 29 of these schools (22 with improving scores and 7 with declining scores). Schools selected for site visits included elementary, middle, and high schools; were located primarily in rural areas and small towns; and reflected the state's geographic and socioeconomic makeup as well as the three writing-accountable grade levels (4, 8, and 12). Over 100 teachers, 200 randomly selected students, and 50 administrators were interviewed. Qualitative analyses of the site visit reports yielded 36 indicators that discriminated between improving and declining schools. Statistical analysis revealed that consistently improving schools had significantly higher scores on 35 of 36 indicators. The indicators include measures of administrative support, quality of professional development, family and community involvement, and various instructional strategies. Each of the indicators is described, including narrative guidelines for high, medium, and low scores and examples drawn from site visit reports. The value of students as informants, the benefits of collaborative research, and recommendations for dissemination and replication are discussed. (Contains 13 references.) (SV)
Development and Validation of Successful Writing Program Indicators Based on Research in Continuously Improving and Continuously Declining Schools: Report of the Kentucky State Writing Project

Study of Writing Instruction in Kentucky Schools

A Collaboration between AEL, Inc. and Kentucky Department of Education

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Development and Validation of Successful Writing Program Indicators Based on Research in Continuously Improving and Continuously Declining Schools: Report of the Kentucky State Writing Project

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May 1999

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AEL's mission is to link the knowledge from research with the wisdom from practice to improve teaching and learning. AEL serves as the Regional Educational Laboratory for Kentucky, Tennessee, Virginia, and West Virginia. For these same four states, it operates both a Regional Technology in Education Consortium and the Eisenhower Regional Consortium for Mathematics and Science Education. In addition, it serves as the Region IV Comprehensive Center and operates the ERIC Clearinghouse on Rural Education and Small Schools.

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This publication is based on work sponsored wholly or in part by the Office of Educational Research and Improvement, U.S. Department of Education, under contract number RJ96006001. Its content do not necessarily reflect the views of OERI, the Department, or any other agency of the U.S. government.

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EXECUTIVE SUMMARY

Introduction

Since 1990 Kentucky schools have been implementing comprehensive education reform as mandated in the Kentucky Education Reform Act (KERA). Among the most successful components of this broad reform, in the view of many educators and parents, is the Writing Portfolio Program. Overall, Kentucky students write far more than in pre-KERA days and their writing has improved, according to writing scores on the state assessment. Yet, performance varies widely among schools. In some schools writing performance has improved dramatically, in others only casually, and in still others it has remained stable or even declined (Kentucky Department of Education, 1996). In 1995 researchers at AEL, Inc., and Kentucky Department of Education Writing Program staff, including regional writing consultants, began a five-year collaborative research and development project to discover what school conditions and practices appeared to be linked most strongly with improvement in a school’s writing score on the statewide portfolio assessment and then use that information to help all schools improve student performance on writing portfolio development.

The first phase of this applied R&D project concerned identifying features of writing programs and practices that discriminated schools with improving writing portfolio scores from schools with declining writing portfolio scores. The objectives of this phase of the study were to (1) identify K-12 schools across Kentucky with consistently improving portfolio scores and those with consistently declining writing portfolio scores for the years from 1992 through 1996; (2) select a representative sample from each group for site visits; (3) develop processes and protocols for examining the writing program in the sample schools; (4) conduct site visits to the selected schools; (5) identify writing program features, or indicators, that seemed to be common in continuously improving schools; and (6) develop a rubric for scoring both improving and declining schools on the identified indicators.

Methodology

This collaborative project combined qualitative and quantitative research methodologies. More than 1,200 K-12 schools in Kentucky had complete writing portfolio scores for 1992-96. Of those, 42 schools had consistently improving writing portfolio scores, while 18 had consistently declining scores. Schools selected for site visits included elementary, middle, and high schools and reflected the state geographic and socioeconomic makeup as well as the three writing accountable grade levels (4, 8, and 12). The research team developed and pilot-tested interview protocols for use in site visits to the selected schools. These included interview protocols for use with students, principals, district administrators, and teachers with diverse responsibilities—English/language arts, other content areas, grade levels other than portfolio accountable grades, writing leaders in the school/district.
After an initial baseline study to determine the feasibility of the site visit protocols and processes, teams of two or three members conducted one- or two-day site visits in three main time periods of spring 1997, fall 1997, and spring 1998. In the end, 22 continuously improving and 7 continuously declining schools were visited. The collaborative research teams interviewed more than 100 teachers, 200 randomly selected students, and 50 administrators in the 18-month data collection phase. Site visit reports were written in a common format, based on the completed interview protocols. Qualitative analyses of the site visit reports yielded common indicators of schools with continuously improving scores. A rubric for scoring each school's report on the indicators was developed utilizing a 1-7 Likert-type scalar form. The scoring work included narrative guidelines for low, medium, and high scores on each indicator and also relevant examples/illustrations drawn from the site visit reports.

Findings

Each school report was scored by two members of the research team; any differences were resolved. The consensus score for each of the 36 indicators was entered into an SPSS file for analyses. Frequency and distribution analyses were completed for each indicator for each school, then for the two main groups of schools—improving and declining. Bar charts were prepared to illustrate the large differences in mean scores. T-tests revealed that the consistently improving schools had significantly higher (.05 level or less) scores on 35 of the 36 indicators.

Some of the indicators reflecting schools/district support of the writing program include (1) the district demonstrates commitment to the writing program by allocating resources to professional development or technical assistance, by assigning program oversight to qualified personnel and allocating sufficient time for effective oversight, by compensating cluster leaders through additional pay or release time, and in some districts by establishing policies requiring portfolio completion for promotion or graduation; (2) the principal actively supports writing instruction by providing resources, technical assistance, and/or professional development, etc.; (3) a high degree of collegiality is evident among teachers; (4) language arts teachers at the accountability grades are confident of their understanding of writing portfolio requirements; (5) school writing leaders are satisfied with the level of training and support they have received to assist other teachers with portfolio development; and (6) most language arts teachers at the nonaccountability levels participate in professional development on writing instruction and portfolio development.

Some of the indicators reflecting instructional strategies include the following: (1) students write frequently in all subjects, and the writing is integrated into instruction; (2) teachers in most grades and content areas give writing assignments that have the potential of contributing to students' writing portfolios; (3) teachers promote peer conferences as well as student-teacher conferencing; (4) teachers spend substantial time on prewriting activities; (5) teachers focus on developing writers rather than developing portfolios; (6) teachers provide latitude for students to choose topics and/or formats when they write; (7) teachers model parts of the writing process as
they work with students; and (8) the mechanics of writing [grammar, spelling, punctuation] are taught in the context of writing rather than as unrelated drills and worksheets.

In schools with continuously improving portfolio scores: students commonly speak of themselves as writers rather than students who must complete writing assignments; speak of writing as a routine part of their school day rather than as separate tasks done to produce a portfolio; expect that writing competence will be necessary in adult life, whatever career path they may follow; describe substantive ways their writing has improved from one year to the next, including choices of topics, organization, use of supporting details, spelling, grammar, and punctuation; express confidence that most students—including themselves—can become proficient writers with sufficient effort.

Conclusions

Several conclusions are drawn from this project. First, it is possible to identify and validate writing program indicators that distinguish schools with continuously improving portfolio scores from those with continuously declining scores. Second, including students as informants about writing instruction proved invaluable in identifying common practices in the schools. Student perceptions about the value of writing, its place in the school, and common writing practices helped to validate teacher and administrator perceptions. Third, the collaborative nature of the study provided unique benefits. The researchers brought, in addition to research strategies, the neutral attitudes and cautions required for scoring well-founded conclusions from the data. Regional writing consultants brought deep knowledge of the writing program from their experiences as classroom teachers and as people charged with providing technical assistance in writing to classroom teachers. Kentucky Writing directors brought awareness of the political and regulatory contexts of the program, as well as the ability to gain Department of Education support for research activities and access to schools. Last, this project developed guidelines that may encourage similar collaboration in the future.

Recommendations

Regarding recommendations, the results of this study should be disseminated within Kentucky and nationally. These results have implications for school and district administrators, as well as classroom teachers. They also have implications for preservice education as well as in-service professional development. The protocols and instruments developed in this effort can be used by others in replications or for adaptations to other content areas. Due to the strict definitions governing the two school groups studied (continuously improving and continuously declining over the same four-year period), a similar study should be conducted among the schools excluded from the sample—this includes the majority of Kentucky schools. Finally, as one means to help satisfy the Kentucky Department of Education’s need for a process by which schools can assess their own writing programs, it is recommended that the instruments and processes used in this research phase be developed into a writing program self-study, then piloted and field-tested in other Kentucky schools.
INTRODUCTION

Background on the Kentucky Education Reform Act (KERA)

Writing portfolios are a critical component of writing instruction in Kentucky, where education reform is driven by a high stakes performance-based assessment. The architects of KERA, perhaps the most extensive state-level education reform ever initiated, mandated this new assessment format in order to encourage changes in teachers' instructional practices as one means of improving education in the state. Although some educators would disagree with the premise that assessment drives instruction, KERA is very much based on that premise, as demonstrated both by the new assessment design and by the school-level rewards and sanctions that are largely determined by student performance on the new tests (Kifer, 1994). Evidence from early studies involving several rural Kentucky districts indicates that the reform is indeed impacting instruction and that impact is largely due to the design and accountability weight of the assessments (AEL, 1994).

Another part of the reform that also aims to impact instructional practices is the increased funding of professional development for teachers. The reform designers recognized that changing instruction would necessarily go hand-in-hand with intense professional development efforts. In order to support this substantial need, legislators increased professional development funds from the level of $1 per student at KERA's inception to the 1999 level of $23 per student. Professional development options have not only increased significantly, but many focus directly on helping teachers attend to the demands of the new tests (AEL, 1996). Professional development in writing is provided largely through the state writing program. The Kentucky Writing Program is strongly influenced by the National Writing Project, which began in northern California in the mid-1970s. Eight university-based summer institutes using the National Writing Project model have been available in Kentucky since before KERA, and other state professional development in writing is infused with understandings about the process of writing from that model.

For those unfamiliar with Kentucky's accountability system, a brief description follows. A school's accountability index is largely determined by student scores on the open-response sections of the test and the writing portfolio. Student scores on science, reading, mathematics, and social studies, and scores from the writing portfolio section of the test comprise the great majority of the accountability index. In 1991-92, the first year of the assessment, the writing portfolio formed the entire writing index. Starting in 1996 and continuing, scores from the on-demand writing section of the test were included in the writing score, but the on-demand section still determines only a small portion of a school's writing index. Therefore, from the beginning of the assessment, the writing portfolio scores have comprised a significant portion of the accountability index.

For this discussion, it is also important to note that rewards and sanctions are determined by comparing an individual school's performance to its own past performance. In order to receive rewards, a school must demonstrate sufficient improvement over the past year's performance.
Sanctions in the form of additional technical assistance and dollars occur when schools fail to improve sufficiently or demonstrate lowered student performance.

The writing portfolio assessment has been in place for eight years. Over those years, personnel from the Kentucky Department of Education (KDE), especially those involved in the Kentucky Writing Program, have noted some obvious patterns in individual school scores. Some schools have demonstrated continual improvement in their writing scores over the years, while other schools' writing scores have fluctuated. The current study was initiated in order to identify indicators of successful schools' writing programs.

Research on Writing Program Indicators

The research literature offers little guidance in the search for school-level writing program indicators. Lipson and Mosenthal, in a paper presented at the 1997 AERA conference, looked at indicators by the instructional style and pedagogical stance of individual teachers in relation to Vermont's writing portfolio assessment. They reported that the writing portfolio assessment changed how the teachers in their study taught writing, but that the amount and type of change depended on the perspective of the teacher. A conclusion of the study, which included surveys, observations, and interviews, was that "the diversity of teachers and the variety of their teaching contexts must be taken into account" by policymakers attempting to influence practice. (Lipson and Mosenthal, 1997, p. 14)

While the Lipson and Mosenthal study attempted to determine indicators that influence individual teacher practice, Rand studies in both Vermont and Kentucky focused on implementation at the state level (Koretz, et al., 1992, 1993, and 1996). Teacher surveys revealed that even though a significant portion of teachers reported that the assessment was overly burdensome, changes in instruction varied widely among teachers. However, none of these studies examined school writing programs or attempted to determine indicators that differentiate more successful from less successful schoolwide programs. Other researchers have identified state-level indicators of enacted curriculum, and of mathematics and science instruction in particular. They offer guidelines for determining and using such indicators (Blank, 1993, 1997; Porter, 1991; Smithson, 1994). The literature is silent, however, on the subject of writing program indicators. An ERIC search produced no documents that addressed the topic.

Project Purpose

The ultimate purpose of this project is to develop a process that will prepare Kentucky teachers to facilitate improved student writing as assessed through writing portfolios. The purpose was identified in 1995 by then Commissioner of Education Thomas Boysen, key KDE staff, and key AEL staff. Boysen's successor, Commissioner Wilmer Cody, continued support for the project, designed as a five-year collaborative applied research and development effort. The
16-member R&D team, formed in the spring of 1996, includes 12 Kentucky members and four AEL members. All continue to be actively engaged in project planning and implementation, even though the percentage of time allocated by all personnel is less than 1.5 FTE per year. This paper addresses the first project phase: identifying writing program indicators that distinguish schools with continuously improving portfolio scores from schools with continuously declining scores.

The nature and focus of this work was refined in a March 1996 meeting between key KDE R&D and writing program staff and AEL staff. KDE staff were concerned that, as evidenced in portfolio scores, some schools' students were making no progress in writing, and progress in other schools was slowing. Department staff felt that early progress might reflect instructional changes that were easiest to implement, such as increasing the amount of writing students do or the amount of instructional time given to writing. They suspected that continued progress would require more substantive programmatic and instructional changes. They wanted to discover what writing program features were common among schools that had shown steady progress in writing portfolio scores, in order to inform professional development in writing. AEL staff were interested in designing and implementing a collaborative applied R&D project with a state education agency. Each agency in this collaboration had a vested interest in its outcome. Each brought unique information and expertise to the collaboration, the synthesis of which allowed insights and developed knowledge neither could have achieved separately.

Audience

The primary audience for this report is the collaborative research team of the Kentucky Writing Portfolio Project (i.e., the Kentucky Department of Education Writing Program staff, Kentucky regional writing consultants, and AEL staff members assigned to the project). Secondary audiences are the Kentucky State Caucus of the AEL Board of Directors, which acts as an advisory group to this project, and the federal Office of Educational Research and Improvement, the AEL funding agency. Other audiences include those interested in school self-studies of curricular programs and those interested in school writing programs.
METHODOLOGY

Goals and Objectives

The first phase of this applied R&D project concerned identifying features of writing programs and practices that discriminated improving schools from declining schools, as defined by writing portfolio scores. Its objectives were to (1) identify K-12 schools across Kentucky with consistently improving writing portfolio scores and those with consistently declining scores for the years from 1992 through 1996; (2) select a representative sample from each group for site visits; (3) develop processes and protocols for examining the writing program in the sample schools; (4) conduct site visits to the selected schools, (5) identify writing program features, or indicators, that seemed to be common in continuously improving schools; and (6) develop a rubric for scoring both improving and declining schools on the identified indicators.

The expectation was that the research would lead to professional development products, especially a self-assessment tool for school use. The research phase was completed in the spring of 1998. The research team identified, through both qualitative and quantitative measures, school conditions and practices linked to consistent writing improvement.

Perspectives and Theoretical Framework

The methodology used in the research phase of the project combined qualitative and quantitative procedures. The conceptual framework for the qualitative methodology was grounded theory (Strauss & Corbin, 1990), a cyclical process of moving from theory to inquiry to further theory based on the inquiry. The research into portfolio writing was conducted from the perspective of the Kentucky Writing Program, which is based in large part on that of the National Writing Project. The findings, based on empirical observation and supported through tests of interrater reliability, were subjected to frequency and distribution analyses; then t-tests on each indicator were conducted. These theoretical and methodological tools resulted in an unusually rigorous process.

A team of eight people, four from AEL and four from KDE, designed the research. The research team combined the perspectives of practitioners and researchers both in its design and implementation. Initial site visits were made by one AEL researcher and two KDE writing program staff members. The first protocols, while based on Kentucky’s Writing Program guidelines, were global in nature, in order to capture elements of practice not directly related to writing instruction but of possible consequence. Qualitative instruments were developed and improved through collaborative work at the conclusion of every round of school visits. Researchers learned a great deal about the teaching of writing from practitioners, and practitioners learned about the research process as they participated in it. The qualitative fieldwork not only generated indicators of effective writing instruction, but also produced copious...
anecdotal evidence that was used when disseminating findings and illustrating rubrics to assess the indicators. A detailed chronology of the methodology follows.

The first step of the research was to identify schools in Kentucky, at any level, that had either consistently improving or consistently declining scores on the writing portfolio portion of their school accountability index. The population of Kentucky schools for this identification process included all schools with writing portfolio scores for the years of 1992 through 1996. Over 1,200 schools had complete data. Consistently improving and consistently declining were defined operationally as steady changes in writing scores either up or down, regardless of the 1992 starting point. That is, one school’s scores might have begun at 50 (of 140), then moved to 54 in the next year, then 63, and finally 67. Another might have started at 18, then scored in subsequent years, 22, 30, and 40. Declining schools were similarly identified. Of the 1,200 schools, 42 were consistently improving and 18 consistently declining. Ultimately, 22 of the 42 schools with consistently improving scores and 7 of the 18 schools with consistently declining scores were visited. The schools selected for site visits included elementary, middle, and high schools and reflected the state’s geographic and socioeconomic makeup as well as three accountable grade levels (4, 8 and 12). Too, schools were selected to represent various enrollment sizes.

The second step in the project involved the development of processes and protocols for collecting detailed writing program information from the identified schools. The research team developed and pilot-tested protocols for use in site visits to the targeted schools. These included interview protocols for use with students, principals, district administrators charged with writing program oversight, and teachers with diverse instructional responsibilities—English/language arts, other content areas, grade levels other than portfolio accountable grades, writing leaders in the school and/or district. Interview protocol questions ranged from specific classroom activities to broad program issues such as level of professional development in writing instruction and program funding. A data collection protocol elicited information about resources available for writing instruction, both material and human. These initial protocols went through many refinements as they were employed in the various stages of school visits. This process of discussing interviewees’ responses and honing questions for subsequent school visits produced the indicators of successful school writing programs.

After an initial baseline study to determine the feasibility of the site visit protocols and processes, teams of two or three members, including researchers and practitioners, first visited selected schools with continuously improving scores, and subsequently visited schools with declining scores. These one- to two-day visits occurred in three main time periods of spring 1997, fall 1997, and spring 1998. The visits included data collection and interviews with people from the role groups identified earlier.

Names of students to be interviewed were drawn at random and stratified by grade levels. This stratified random selection was weighted toward students in portfolio accountable grades. Students were interviewed in groups of two or three, although their responses were recorded...
individually. All adults were interviewed individually. More than 100 teachers, 200 students, and 50 administrators were interviewed in the 18-month data collection period. After each school visit, the research team developed a summary report from an analysis of the interviews and resource inventory. These reports, organized by the refined questions, were the bases for developing the indicators of successful school writing programs.

The final steps of this process were to devise a rubric by which schools could be assessed on each indicator, complete the assessments, and compute the group mean score on each indicator for the continuously improving and continuously declining sets of schools. A seven-point Likert scale (1 = low, 7 = high) was used to rate each school on each indicator. The scoring rubric included narrative guidelines for low, medium, and high scores for each indicator. Also, accounts of behaviors or conditions found in school visits were interspersed in the narrative for selected potential indicators. These illustrations were collected purposely during the site visits. Thirty-six writing program indicators were identified at this point.

Each school report was individually scored by at least two members of the research team. Scorers then met to resolve any scoring differences. Those reports that contained indicator ratings that could not be resolved were scored by a third team member. The consensus score for each indicator from each school was entered into an SPSS data file for analysis. Frequency and distribution analyses were completed for each indicator for each school, then for the two main groups of schools—improving or declining. Bar charts of each indicator by school and by the means of the two school groups were prepared for the research team. Lastly, for each indicator t-tests were conducted on the differences between mean scores for the improving versus declining groups of schools, and the results were summarized.
FINDINGS

The findings are presented in two sections. The first section presents the qualitative research results. It identifies the indicators that distinguished continuously improving from continuously declining schools and presents descriptions of high, middle, and low performance for each indicator. It also includes brief accounts of situations or activities seen during site visits that illustrate performance levels on some of the indicators. The second section displays the indicator results in descriptive and inferential statistics format. The reader will note that in the second section the indicators are identified by their computer program variable names and shortened titles.

Qualitative Findings

The qualitative research in continuously improving and continuously declining schools yielded a set of indicators that appeared to distinguish the more successful from the less successful school writing programs. All but one of these indicators was later strongly verified through statistical analysis, and that indicator is also reported below, because the lack of statistical significance may easily be an artifact of the small number of schools visited.

Indicators. Following is a brief description of each indicator (describing the highest level of implementation observed during school visits).

1. Administrative support

A. District level support

Administrative support includes any formal or informal evidence that the district administration gives the writing program high priority in the district curriculum. Such support may look different from district to district depending on the resources of the district, the number of central office staff, and local history and culture. The key criterion is that, for this district, consistent effort is going into proactive encouragement of the writing program.

High—The district gives verbal support to the writing program and institutes district policies intended to stimulate writing improvement (e.g., requiring a completed portfolio at a specified minimum performance level for high school graduation); encourages and supports school initiatives to improve writing (e.g., providing funds for professional development above that expected by the state, providing release time for mentoring); recruits and/or trains expert, facilitative central office staff to provide technical assistance and mentor school staff; organizes portfolio scoring for the district to ensure accuracy; organizes cross-school or cross-grade conversations about writing instruction.
Example: A western Kentucky district provides funds so that groups of teachers can attend conferences or visit other schools. The district also facilitates meetings and work sessions for teachers from all schools to work together. This practice reduces interschool competition and encourages sharing ideas. The principal of one small elementary school and the district have organized a resource center containing professional journals and other resources. The center is open to all teachers in the district until 6:00 p.m. daily during the school year.

Other types of district support were observed more rarely but seemed very effective (for instance, cross-school meetings to align curriculum and to score at the district rather than the school level). These meetings provide extensive technical assistance to writing teachers. Some districts have created a writing resource teacher position. This individual organizes scoring sessions and provides technical assistance throughout the year.

Medium—The district gives verbal support to the writing program, providing assistance that is perceived by the school staff as more facilitative than is provided in other curriculum areas (for instance, encouraging schools to provide more training for teachers than is generally expected but requiring them to use school professional development funds for the purpose), identifying some of the more successful practitioners to facilitate the writing program at the district level.

Low—The district does only the minimum required by the state, assigning portfolio oversight to personnel who lack clear qualifications or successful practice, maintaining bureaucratic oversight of schools' writing programs with little or no technical assistance.

Example of a medium to low district we have visited: The district had a cluster leader who served as mentor to the writing leader in the school but subsequently reassigned that staff member to a different position that prevents her from visiting schools and mentoring writing leaders. The district encourages schools to use their professional development funds to send the writing leader and intern teachers to intensive professional development workshops not available to most teachers but does not make any district funds available for the purpose. No stipends are provided, but expenses are paid—in sharp distinction to what is provided for “extra” professional development in other areas.

B. School level support

Administrative support includes any formal or informal evidence that the school administration gives the writing program high priority in the school curriculum.
High—School administrators provide active leadership; change schedules to allow additional time for planning, conferencing or dialogue among teachers or time for instructional aides or volunteers to conference with students; provide extra time and/or payment for lead teachers; encourage generous allocations for professional development and instructional resources in writing in the school budget and find additional funds when needed to take advantage of unanticipated opportunities; participate in professional development with teachers; serve as readers for student writing, participating in portfolio scoring, initiating efforts to bring student work to real world audiences.

Examples from schools we visited: To illustrate that active principal leadership need not always be hands-on, we visited a school where the principal did not personally participate in the writing program but encouraged teachers at all grade levels to take as much training as possible in the writing process and in portfolio development. In addition, he persuaded the school council to allocate a full-time aide to the fourth grade, to allow extra planning time for fourth-grade teachers and an additional adult to conference with students about their writing. He delegated full responsibility for the writing program to the fourth-grade teachers, who were regarded as the school’s writing leaders, but he made sure they had more resources than teachers at other grade levels (for instance, were able to take more field trips if they felt it was necessary for the writing program) and celebrated their creative ideas to stimulate student writing and to share that writing with real-world audiences for purposes that were important to the students.

Administrative support for the writing program can take forms other than books, equipment, and dollars, as reported by an eastern Kentucky middle school. To help “reluctant writers,” teachers contact parents and make every effort to encourage the students to complete their writing assignments. If these efforts do not work, the principal schedules a principal/teacher/student conference. The principal leads the conference, after reviewing background information from the teacher. If this conference is unsuccessful, the principal assigns the student to “Saturday School” to complete the missing writing pieces and sends a message home to the family about the required attendance. This four-level process usually results in completed work. Teachers say they appreciate this level of administrative support for the writing program.

At a K-4 school in central Kentucky, fourth-grade teachers get support for writing portfolio development activities in their classrooms. With the encouragement of the principal, the faculty voted to hire an instructional assistant for those teachers, using the school’s instructional funds. Primary teachers are willing to forego some of the resources they might otherwise have in order to support the teachers who are “on the line.”
Medium—School administrators make sure that teachers are provided with up-to-date information, professional development, and hands-on technical assistance from competent district staff; provide release time or stipends for extra duties associated with the writing program, such as portfolio scoring; allow and encourage teachers to participate in professional development over and above that called for in the school’s PD plan; but let the central office take the lead in encouraging the writing program and do not change the school’s staffing or organization to improve the writing program.

Example: We visited a high school where the principal had no direct involvement in the writing program but rather delegated responsibility for encouraging the program to an assistant principal and the cluster leader. The cluster leader took the initiative to approach the KDE Writing Program with questions about whether particular types of real-world writing were appropriate to include in the portfolio. She was able to involve non-language arts teachers in the writing program to an unusual degree, but primarily on the basis of her own reputation in the school, not administrative support.

Low—School administrators obey state directives at a minimum level, perhaps monitoring implementation of the writing program without actively assisting it, failing to encourage professional development in writing for most teachers, and providing no special resources to enhance writing instruction or portfolio development.

2. Availability and use of quality professional development/technical assistance

This indicator refers to the entire writing program, not just portfolio development and/or scoring. It considers both formal and informal opportunities. Formal professional development denotes planned experiences led by one or more experts in the field. Informal professional development denotes mentoring relationships, coaching, electronic networks, peer dialogues about writing instruction sustained over time, technical assistance provided on request to individual teachers. The first three indicators below require a global assessment of the quality and quantity of professional development (in the broad sense) received by teachers at the school. The remaining indicators under this heading require judgments about specific types of training or informal professional development opportunities of particular interest to this project.

A. Professional Development at the school level for writing leaders (cluster leaders or other teachers assigned responsibility for the writing program)

High—The writing leader has—with the principal’s support in the form of stipends, release time, and/or other substitutes—attended professional development in writing beyond what is offered to others. In turn the leader provides workshops to school colleagues, and has time to coach and mentor other teachers. The leader has in-school
access to and reads professional journals and books on writing instruction, and shares information with colleagues.

**Medium**—The leader is allowed to get professional development beyond what is available to other teachers, but is only occasionally provided support for participation. He or she provides resources to colleagues as she or he discovers them, but has no reliable source of information. The leader may meet briefly once or twice a year with other teachers to provide updates on the writing program or demonstrate a strategy, but doesn’t have time to offer ongoing assistance.

**Low**—The writing leader’s primary role is as a conduit of information and a portfolio manager. He or she is not expected to provide assistance or training to other teachers or to seek professional development beyond what is offered in the school or district.

**B. Professional development at the district level for writing leaders (cluster leaders or others teachers assigned responsibility for the writing program)**

**High**—Writing leaders are encouraged to participate in much more than the minimum professional development on writing expected of those in their positions. They seek out appropriate conferences and workshops to attend; have a support network (within the district, with peers in other districts, with consultants, with KDE Writing program staff); they have district on-demand technical assistance and/or coaching. In turn they provide training and support to their colleagues beyond what is required.

**Medium**—Writing teachers are encouraged to seek out appropriate conferences, workshops, and technical assistance but are unable to avail themselves of all appropriate opportunities because of district limitations (e.g., financial limits, lack of substitutes) or personal limitations (e.g., a demanding family situation). Opportunities to share what they have learned with teachers in the school may also be limited, for some of the same reasons. They have a limited network to call on.

**Example:** In one school a teacher was the designated writing program leader. He was permitted to attend conferences and workshops but had limited knowledge of what was available. He was unaware of a summer writing program workshop at a nearby university, for instance. Not being a cluster leader, he did not have access to the resources provided through the state department of education. He had structured the school’s writing program around writing instruction in his own field (Title 1), and he clearly understood the writing process better than his colleagues.

**Low**—Writing leaders have attended the minimum amount of professional development on writing expected of people with their responsibilities. They have either not sought or have not had the district level support necessary to participate in additional training. They
have formed no support networks. They have distributed district information about writing to other teachers in the school, but have offered no other assistance.

C. **Overall professional development for portfolio accountable teachers** (teachers responsible for teaching writing at the accountable grade)

**High**—Teachers responsible for writing at the accountable grade level have participated in much more than the minimum professional development on writing expected of those in their positions (including training in portfolio scoring). They attend conferences, have a support network, and are able to use on-demand technical assistance and/or coaching. They feel some responsibility to let other teachers who are less accountable for student portfolios know how to work with students to improve portfolios.

**Medium**—Only some teachers of writing at the accountable grade level have received extensive training; others have had professional development in the writing process and in portfolio scoring but tend to rely on a few leaders who have developed a support network to rely on, and who are willing to support the less involved teachers.

**Low**—Writing teachers have attended the minimum amount of professional development on writing expected of people with their responsibilities (if they are cluster leaders) or no more professional development than most other Kentucky writing teachers (if they are not cluster leaders). They have either not sought or have not had the support necessary to participate in additional training. They have formed no support networks. They have provided minimum support to other teachers in the school.

D. **Overall professional development for other teachers** (teachers in subject areas other than language arts and language arts teachers in nonaccountable grades)

**High**—Teachers have participated in much more than the minimum professional development on writing expected of those in their positions (often because the school or district has sponsored extensive in-service professional development in the writing process). They attend conferences, support one another routinely, and have resources for on-demand technical assistance and/or coaching that they find helpful.

Example: The primary teachers at an elementary school we visited worked together to design and develop a cumulative portfolio, starting with a few pieces in the first year of the primary program and adding pieces each year, so that students entering fourth grade had full working portfolios. The fourth-grade teachers worked closely with the primary teachers to develop these portfolios. Students reported that assembling their final primary portfolio was a more rigorous learning experience than putting together the fourth-grade portfolio.
Medium—Most teachers interviewed have participated in workshops or other professional development on the writing process and on scoring portfolios, but content area teachers at other than the accountable grade level make little use of the training. Instead, they depend on writing teachers at the accountable grade to take responsibility for the writing program and for portfolios. Networking is limited to writing teachers talking with other teachers about what they can do to strengthen students’ writing skills and their portfolios.

Example: At most of the departmentalized schools we visited, writing in the content areas was the most problematic part of the writing program, even when the content area teachers were convinced that writing was important to their disciplines. Finding appropriate professional development opportunities was often difficult. In a high school where the great majority of the content area teachers cooperated willingly with the English department in writing instruction, the English teachers asked that the content area teachers follow the writing process only through the first draft stage. If the piece was considered appropriate for a portfolio, it was sent to the English department teachers to help the student edit and publish the piece for the portfolio. At other high schools, language arts teachers complained that content area teachers would send them writing pieces that were not good enough to be included in a portfolio or that were based on inadequate prompts.

Low—Teachers have attended the minimum amount of professional development on writing expected of teachers in their content area or grade. They either have not sought or have not had the support necessary to participate in additional training. They have formed no support networks. They have provided minimum support to other teachers in the school.

E. Attention to writing that is appropriate for content areas other than language arts

High—Recent professional development opportunities for all teachers have featured ways to incorporate writing authentically into content areas other than language arts, and the school writing leader or leaders have followed up with continued technical assistance to help teachers use the instruction. In addition, teachers in content areas other than language arts may have been encouraged to take intensive instruction in writing for their content areas and have subsequently shared what they have learned with others in the school.

Example: In a mid-sized high school, the language arts faculty serves as a cadre of teachers and mentors for the entire faculty in writing portfolio development. These teachers receive an extra planning
period, so that they can have time to work in small groups or individually with teachers in other content areas. They help prepare open-ended questions and develop rubrics to enhance writing across the curriculum. Each content area is required to submit two portfolio-ready pieces of writing per year. Building in-house capacity has benefitted the faculty as well as the students.

**Medium**—Some but not all teachers have had the opportunity for professional development emphasizing how to incorporate writing into content areas other than language arts. These opportunities may have been made available only to non-language arts teachers who have expressed a particular interest in using writing to enhance their instruction.

**Low**—There is no evidence that attention to writing that is appropriate for content areas other than language arts has been identified as a school need, and no one appears to be seeking professional development in this area.

**F. Teacher training (and participation) in portfolio scoring**

**High**—All teachers in the school are trained annually and participate in portfolio scoring (at either the accountable grade level or other grade levels where completed portfolios are required by the school or district). (If teachers are scoring portfolios at non-accountable grade levels, they may be trained by a writing leader other than the cluster leader or district assessment coordinator.)

Example: One of the schools we visited has a scoring team consisting of all the fourth-grade teachers. Students at all grade levels (primary and upper elementary) are required to keep portfolios, and each grade-level team of teachers scores its own students' portfolios. Teachers at the non-accountable grade levels are trained by the grade-level scoring team, after it has had updated training each spring.

**Medium**—Portfolio scoring training is available to all teachers in the school but is voluntary for teachers who are not on the scoring team. The portfolio team includes teachers from subject matters other than language arts and/or from non-accountable grade levels, and the team's membership changes fairly frequently, to encourage participation by any teacher who is interested in participating.

**Low**—Only teachers who are on the scoring team receive training in portfolio scoring; the team consists only of those who teach writing at the accountable grade level, and the composition of the team has changed minimally over the years (frequently only as teachers move from one grade level to another or retire).
G. Ongoing mentoring and informal professional development

High—Teachers are members of formal teams (subject-matter teams, grade-level teams, primary “families,” special purpose teams) that have adequate time for meeting and planning. In addition, networks with teachers outside the school are encouraged through sending teachers to appropriate professional development opportunities at regular intervals (e.g., professional association annual meetings, summer institutes, and the like), providing e-mail access for electronic networking, providing release time if needed to network with peers outside the school, etc. Informal networking and mentoring within the school are also encouraged and celebrated.

Medium—Teams of teachers within the school are given common planning time, but the teachers report either that it is inadequate for substantive work or that they do not make consistent use of it. Networking with teachers outside the school is possible if a teacher persists in following up opportunities, but is not a school priority. Informal mentoring and networking within the school are tolerated but not encouraged.

Low—There is minimal communication between teachers and administrators, mostly formal communications concerning the school. Teachers seldom talk among themselves about issues of teaching and learning, and any discussion of students is at a superficial level.

H. Level of strategic collaboration in professional development

This indicator refers to degree to which the school faculty participate together and support one another in professional development experiences linked with identified school needs.

High—The school faculty has participated together and supports one another in professional development experiences linked with identified school needs. Teachers show awareness of the school’s professional development plan and its connection with school weaknesses; most have had a part in developing the plan. Professional development is often school-wide. Teachers who attend conferences or workshops beyond school-based professional development attend as representatives of their school and are expected to bring learnings back to their colleagues. Teachers describe instances of giving and receiving help from one another.

Medium—Teachers are aware of the professional development plan but most were not involved in developing the plan and they appear to know the specifics only so far as they are directly affected. Collegiality is encouraged, and there is informal collaboration (self-selected groups who share), but these groups appear to be mutually exclusive and not everyone participates. There is no formal mechanism—or encouragement—for teachers to support one another in professional development experiences.
Low—Decisions about professional development are commonly made individually, and teachers may be unaware of the specifics of the professional development plan developed at the school. When teachers are trained together, they are in role-alike and/or grade-alike groups. Teachers are generally unaware of their colleagues’ level of training or expertise, and they are not encouraged or required to share what they learn in workshops with other teachers. They do not mention instances where teachers have helped one another and they do not appear to link identified school needs with professional development.

3. Coordination across grade and subject areas

Since writing is an area in which students should be making steady, ongoing improvement, coordination of the writing program across grade and subject areas is an asset to the program (but was not found consistently even in schools with steadily improving writing scores).

High—In departmentalized schools, teachers from different subject area departments share in the same professional development on writing and compare notes on a regular basis to ensure that the writing program is implemented in a planned, consistent manner to produce integrated, well designed writing instruction. In all schools, teachers from adjacent grade levels compare notes on a regular basis to ensure that writing instruction is consistent as students progress from grade to grade and that student progress in writing is well documented as they move from grade to grade (for instance, through the development of a cumulative portfolio). Feeder schools provide the schools that students move to with adequate information about each student’s progress in writing and meet to ensure that the writing program at the higher level school builds on the program at the feeder school.

Medium—In departmentalized schools, teachers from different subject area departments are encouraged but not required to participate in the same professional development on writing and to confer with one another periodically about the way writing is used in each subject area. Some teachers do this, but others do not. Similarly, teachers at adjacent grade levels may or may not coordinate their writing programs; usually some effort is made to ensure that student writing moves with the student from grade to grade, but the effort is not always successful. Teachers at the accountable grade levels are usually the most conscientious about coordination with other teachers.

Low—No effort is made to coordinate writing instruction across subject areas or across grade levels. Individual teachers may express frustration at the lack of coordination.

4. School climate/communication

This indicator includes any evidence that relationships among administrators, teachers, students, and parents are friendly, collegial, and facilitate the development of the writing program.
High—Frequent, relaxed and cordial communication occurs among administrators, teachers, aides, and support staff; there is evidence of mutual respect and liking among faculty, staff and students, as well as any parents who may be present. School displays and conversation show that writing is valued as a worthwhile and enjoyable activity. Teams of teachers who clearly work well together are another sign of a positive school climate.

Example: An elementary school we visited has a large number of students whose parents transport them to school and some students were consistently tardy. Now the school starts every morning with an assembly to get the day off to a happy, enthusiastic start. Teachers are responsible for planning the assembly, which generally features either a speaker from the local community or students who have done something worth exhibiting. If students are late, it does not disrupt instruction, but students are now pressuring their parents to get them to school on time because they enjoy the assembly, and parents occasionally stay to attend the assembly with their children. The school has an extremely diverse student population, both ethnically and economically, but the administrators and staff reach out to all students and all parents in ways that appear to make all feel welcome and included.

Medium—Cordial but businesslike relationships exist among administrators, teachers, staff, and support aides, with little emphasis on teamwork or meeting the needs of the “whole child”; there may be an emphasis on academic excellence but not on teamwork to produce academic excellence.

Low—Hallway, lunchroom, and teachers’ lounge conversations are generally unrelated to instruction; there is minimal and formal communication between teachers and administrators, with support staff always clearly subordinate to teachers; there is an emphasis on order (and usually silence) in the hallways and in the classrooms, with exchanges between adults and students in non-classroom settings primarily directive rather than social. Hall and classroom displays appear to be mostly adult-created (or “cookie-cutter” student work), with little apparent value given to student writing.

5. Communication with families and family support of the writing program

High—The school recruits and trains volunteers to help in the classroom (for example, to free teachers for conferencing, to read and give feedback on student writing, to share their own writing, to talk about the kind of writing necessary in their jobs). In “family night” sessions, through newsletters, or through formal training, the school provides information to families about the writing levels expected of students and ways parents can help at home. A conscious effort is made to help parents feel comfortable in the school.
Example: An elementary school we visited provides classes for parents through the library program. The first class last fall gave instruction in the writing process and appropriate ways for parents to work with children at home on writing. At the same school, one of the children we interviewed described how she herself had instructed her mother in appropriate conferencing techniques.

At another school, a high school senior reported, “I conference with my mom because she opens the key to my mind.”

Medium—The school provides written information to parents about the writing process and suggests ways they can help students at home with writing assignments, but does not actively recruit parents to help in the classroom. Individual teachers may encourage parents to volunteer in the classroom or give them pointers on how to work with children at home on writing.

Low—Any communication to parents about the writing process stresses what they should not do (e.g., make suggestions that usurp the child's ownership of the writing) rather than active ways they can help. Parents are not encouraged to volunteer in the classrooms, although a few active parent volunteers may be tolerated. No effort beyond required reports is made to explain to parents how a child's writing skills are progressing.

6. The school uses community resources in the writing program

High—The writing leader actively seeks resources for such programs as having a writer visit the school for a period and work with students on writing as well as explaining how he/she makes a living as a writer. Individual teachers are encouraged to invite into the classroom people in the community who use writing in interesting ways in their adult careers. Such people may also be asked to judge school writing competitions or projects. Community firms or businesses may be asked to support the school's writing program in various ways (for instance, exhibiting student writing or providing prizes for a contest). Relatively few schools were ranked high on this indicator.

Example: Each year at a small town elementary school the fourth-grade students organize a blood drive for the local health department. They make all the arrangements for a blood drive at the school, and then they write persuasive pieces to convince members of the community to participate. Before the drive, they parade through their small town leaving these persuasive pieces at each store, to be distributed to the patrons. They also talk to their parents and neighbors about the blood drive. The blood drive requires expository writing that describes how to organize a blood drive, and discusses research on blood types, the need
for blood, and how the blood will be used. Some students write personal narratives or fiction based on the research they have done.

Medium—Individual teachers seek out community resources to enrich the writing program from time to time, but it is not a school priority.

Example: The writing leader at a small, rural elementary school invited the school superintendent to visit the school and talk to the students about the many ways in which writing had played a part in his career. She wanted to find some way to support a writer in residence program but, to date, the visit by the superintendent was the only effort made at the school to use community resources to enhance the writing program.

Low—There is no evidence that community resources are used in the school's writing program.

School/Classroom Strategies

7. Focus and intensity of writing instruction programs

This indicator requires a global assessment of the degree to which writing and/or writing portfolios are a clear school priority.

High—There is abundant evidence that the school communicates to students the importance attached to writing. Student writing is prominently displayed in the hallways and in classrooms, and classroom walls display posters emphasizing various aspects of writing instruction/portfolio development. Interviews with administrators, teachers, and students are consistent in revealing the importance placed on writing at the school—and interviewees agree that writing well is an important life skill. If events outside the control of the school administrators interfere with instruction, an effort is made to ensure that it does not interfere with students’ opportunity to work on writing.

Medium—Writing is a clear school priority, but there is a lack of focus in the writing program. Students do not articulate the importance of writing as clearly as teachers and administrators do, or they may report that teachers are not actually using all the strategies in teaching writing that they report to the interviewer. There is a clearer focus on portfolio development than on writing as a valuable part of education, and writing may be a focus only part of the year. Teachers may draw a clear distinction between writing assignments meant for the portfolio and other writing assignments. Teachers are ambivalent about the value of writing, on the one hand considering it valuable but on the
other hand resenting the time it takes away from other subject matter, since writing is not well integrated into instruction.

Low—Writing appears to be stressed only at the accountable grade levels and only for the purposes of developing writing portfolios as part of the state assessment program. Teachers and students resent the demand to assemble writing portfolios and many dislike writing.

8. Use of The Writing Portfolio Teacher's Handbook as a resource by all teachers teaching writing

This indicator is strongly related to the overall priority placed on writing at the school and the leadership abilities of cluster leaders and other writing leaders in the school. If a school uses a district-produced Handbook rather than that produced by the state Writing Project, it should be examined or described well enough so that a judgment can be made whether it is or is not equivalent.

High—Every teacher in the school receives the Handbook and guidance in using it as part of professional development, and the writing leader(s) in the school continue to work with teachers to demonstrate productive uses for the Handbook. Teachers at all grade levels and in all subjects report using the Handbook consistently, though they may turn to the Handbook only during certain parts of the year (for instance, when introducing students to the benchmarks for the various performance levels or when preparing to score portfolios). If they do not turn to the Handbook frequently, they report that they are familiar enough with the content so that they do not need it for general reference purposes any more. Students exhibit familiarity with the benchmarks and the criteria for the various performance levels.

Medium—All portfolio-accountable teachers have copies of the Handbook and use it as described above, and a few other teachers who have a particular interest in the writing process may have a copy. Other teachers have guides to teaching writing that are not as extensive as the Handbook (often produced by a local writing leader) or have gained their knowledge of portfolio development entirely from professional development workshops. Some teachers are not aware that the full Handbook exists.

Low—Only the teachers who are on the portfolio scoring team have copies of the Handbook, and they refer to it only when preparing to score portfolios.

9. Teachers and students focus on writing

A. Evidence that writing is the focus of the writing program, not just portfolios

It is to be expected that any school in Kentucky will focus on completing writing portfolios. There should also be a focus on writing for its own sake or as an important
part of instruction. A key criterion here is the degree to which portfolio writing is integrated into classroom instruction or is treated as separate from classroom instruction (inevitably taking time away from other instruction).

**High**—Writing is part of instruction at all grade levels and in all subject areas. Writing to learn and writing to exhibit learning are stressed as valuable, in addition to portfolio-appropriate writing. Writing assignments are not differentiated into portfolio assignments and other assignments, and potential portfolio pieces may come from a wide variety of sources, including writing the student has done for non-school-related purposes. Students are exposed to a variety of ways in which writing is needed for adult life and in vocational areas. Teachers are conscious of developing their own writing skills and of the importance of students’ enjoying writing. Both teachers and students can describe their progress as writers.

**Medium**—Writing is part of instruction at all grade levels but some subject matter teachers resent any demand that they incorporate writing into their instruction and refuse to do so. There is more emphasis on writing in the accountable grades and during the time that portfolios are being prepared than at other times, although students do some writing throughout the school year and in every grade. Although students speak of themselves as writers and often write when they are not required to for school assignments, teachers generally do not write except when they need to for clearly defined purposes.

**Low**—Writing is neglected in the school curriculum except for the preparation of writing portfolios—and sometimes for practice in answering open response questions. Writing assignments are clearly identified as portfolio assignments and are not integrated into instruction.

B. **Teachers require more challenging work from students than they once did because students come better prepared**

**High**—When asked to account for the improvements in student writing, most teachers mention that writing has been well taught in previous grades so they are able to work with students at a higher level than previously. Both teachers and students describe particular assignments that require more than students previously would have been asked to do at that grade level.

**Medium**—Teachers report that student writing has improved over the years and that they now require more of students than they used to, but add that some students have always had the capacity to do the work now required and that some students come to them still lacking the skills to do the work they now require.

**Low**—Teachers report that teachers at previous grade levels have not done a good job of teaching writing and that this hampers portfolio development because they must spend time working on basics that the students should have learned previously.
C. Evidence of students' confidence that they can eventually reach proficiency

**High**—All students interviewed at the school report that the portfolio standards are not too high for all (or most) students to reach—though they require hard work from most students. Students may add that not all students are willing to put forth the effort required, but they consider themselves good writers and report that they are making the effort personally. Teachers and administrators agree that most students—over time—should be able to reach the standards and feel responsible for helping them do this. Teachers do not justify students' failure to reach proficiency by lack of innate talent or family traits.

**Medium**—All or most of the students interviewed at the school report that the portfolio standards are not too high for all (or most) students to reach—though they require hard work from most students. Students may add that not all students are willing to put forth the effort required, but they consider themselves good writers and report that they are making the effort personally. Most teachers have reservations about the ability of some students to become proficient, either because they lack the ability (some have writing talent and some don't) or because they lack motivation or an adequate home environment. (Teachers may give other, less self-serving reasons for their reservations: e.g., the schools will never have adequate support or time to bring all students to the proficient level; or they may criticize the performance level itself, e.g., "proficient" is developmentally inappropriate at their grade level.)

**Low**—Students express doubt that they will ever become proficient or say that a number of other students will not be able to do so. Teachers have major reservations of the sort described under "Medium."

D. Students speak of themselves as writers, not just as completers of writing assignments

Students feel an ownership of their writing and use writing for purposes they feel are important. When students speak of completing assignments or talk about what they "had to do" for the teacher or to complete a portfolio, they imply that they see themselves as obliged to complete work for a grade rather than as having personal motivations to write. Students who describe work in which they take pride, who talk about showing their work to others (family and friends as well as classmates), who want reactions from people other than teachers, or who submit their work for publication outside the school are speaking as writers. Students who give examples of writing they do that are not required for class assignments (journals/diaries kept at home; poetry for friends and family; reports or letters for clubs, churches or other extracurricular activities, for example) also are speaking as writers.
High—Most of the students interviewed speak as writers rather than simply as completers of writing assignments. Student ownership of writing appears to be the school norm.

Medium—Some students (half or fewer) speak of themselves as writers, but others do not. It may be clear that students of some teachers have ownership of their writing, but students of other teachers consistently do not speak as writers.

Low—Few students speak as writers. Those who do appear to belong to an elite student group who consider themselves to be or are considered unusually talented writers.

E. Students are able to cogently compare their current writing with writing done earlier, even in previous years

The opportunity to compare current with past writing increases students' sense of ownership and pride in their work. It allows them to rely on their own judgment about how they have improved rather than relying on external measures, such as grades. Some students may not be able to make such judgments without access to a "working portfolio" that follows the student from grade to grade. But when a school makes explicit provision for students to compare their current work with their past work, the chances that most students will increase their ability to critique their own work are greatly enhanced.

High—All or most students describe substantive improvements in their writing from the beginning of the year or from one year to the next (such as improved organization, use of supporting details, and style—word choice, better sentence structure). In most cases where this is the school norm, the school assists students by routinely collecting writing the students value in "working portfolios" that may include work from a variety of content areas, formats, and stages of development. The "working portfolio" travels with the student from grade to grade and becomes a resource when the student needs to select pieces to develop for the assessment portfolio. Presence or absence of a "working portfolio" is a strong indicator of students' ability to compare current with past writing, but should be looked at only in conjunction with students' ability to describe their growth, since not all "working portfolios" are used in equally helpful ways and some students may keep their own work together, whether or not the school assists.

Medium—When students speak of the improvement in their writing, most refer primarily to superficial improvements, such as improved spelling and mechanics or writing longer papers. Even if students keep their writing in a "working portfolio," it may not travel with the student from grade to grade, or the student may not have easy access to it.

Low—Most students don't know whether they've improved or say that their writing has declined (perhaps for lack of practice), or are unable to support a feeling that they have improved with specific details. Portfolios are used only in composition or language arts classes and only at accountable grade levels.
10. Evidence that students routinely use and can describe the steps in the writing process

A. Students describe the steps in the writing process and assess their importance, when asked to do so

**High**—All students interviewed name the essential steps of the writing process, often before they are asked to do so, and discuss cogently their importance in the students’ development as writers.

**Medium**—Some of the students interviewed are highly aware of the steps of the writing process and can discuss their importance, while others must be asked fairly specific questions before they discuss them. Most students, however, exhibit some awareness of the various components of the writing process and have gone through them with at least some of their teachers.

**Low**—Students fail to discuss some steps of the writing process at all (for instance, pre-writing or publication) and generally seem unaware that the various components of the process are important to help them develop as writers.

B. Students are aware of criteria for judging portfolios (and ways in which they learned these criteria)

**High**—All the students interviewed report that each year one or more teachers reviews the criteria with them, going over and discussing benchmarks or particular pieces of writing that exemplify a particular performance level. Students are given written material reminding them of the criteria for each performance level, and the criteria are displayed or reviewed periodically as portfolios are being prepared. Students may report using the benchmarks on their own to assess their own work.

**Medium**—All students report having at least one teacher during the accountability year go over criteria for the various performance levels, or the criteria may be displayed but not addressed consistently. Students feel free to ask their writing teachers if they need any additional information.

**Low**—Students are not introduced to the criteria at all or are presented them in such simplified form that they are not really sure how their writing pieces are going to be judged.

C. Use of computer to facilitate writing

**High**—The school has sufficient computers so that students may have access to them at all stages of the writing process. Students have learned keyboarding skills at an early age,
have access to the Internet at school, and use computers to find information; they feel comfortable working on computers. Students have been encouraged to use the computer at all stages of the writing process and have learned from experience that this improves their writing, so most of the students interviewed choose to use the computer at all stages of the writing process, even if they do not have computers at home. At the time of our research, few schools had enough computers to rate high on this indicator.

**Medium**—The school has sufficient computers so that students may have access to them at all stages of the writing process, but this is a recent development and not all teachers or students have grown accustomed to their use. Students who have computers at home still are more comfortable using the computer than those who do not and are more apt to use the computer at all stages of the writing process, but teachers are aware that students would benefit from greater use of the computer in writing.

**Low**—The school either does not have enough computers for all students to use them at all stages of the writing process or they are not yet sufficiently accessible to students. Teachers are generally unaware of the advantages of using the computer at all stages of writing so do not encourage students to do so. Students who have computers at home are at an advantage in using computers for writing over students who do not. Computers at school are used mostly to produce final copy, and some students may not have access to them even for that purpose. Teachers may input copy for students rather than insisting they do it themselves, or students may use handwritten copy in their portfolios.

**D. Use of feedback to improve writing (conferencing with teachers, family, or other students)**

**High**—Teachers and students both report that students conference with peers as well as with teachers as they revise their writing pieces and that the feedback they receive from both sources is helpful. Students show no reluctance to share their writing with peers, even students they may not know well; they say that students at the school all know what sort of questions are helpful. Students share their writing with family members and friends outside of school and ask for their feedback (teaching them how to ask helpful questions, if necessary). Neither teachers nor students report problems that prevent students from receiving as much feedback as they need during the writing process. Students clearly feel ownership of their writing.

Example: Teachers at one elementary school we visited taught primary students appropriate methods of conferencing and then made it clear that, since teachers and aides were not always available to conference with students, students who needed feedback were to find other students at about the same stage of composition and request a conference. Before they entered fourth grade, students had developed the habit of independently seeking feedback from other students as they worked on writing pieces. It was understood that they were supposed to do this, and they had the freedom to seek quiet places for the conferencing, including working quietly in the hallways.
Medium—Teachers and students report that students are expected to seek feedback from other students as well as teachers, but most students exhibit some reluctance to share their writing during intermediate stages. They may report avoiding conferencing with other students or seeking feedback only from close personal friends or students they trust to give good feedback. Teachers as well as students report that students seem to get more out of conferencing with teachers than out of conferencing with peers. They may have developed systems to increase the amount of time available for students to conferencing with adults (for instance, increasing the amount of time instructional aides can spend working one-on-one with students) but still feel there is a problem finding enough time for conferencing with students.

Low—Even if teachers report that students do peer conferencing, the students report that they are seldom required to do this and that they can successfully avoid it most of the time. Teachers have little time to conferencing with students when they need help at various stages of the writing process, and they have not developed systems for increasing the amount of time instructors or aides are available to provide feedback to students. When they—or parents—do provide feedback, it tends to be primarily directive, so that students sometimes feel a piece of writing is no longer their work.

11. Teacher writing

Teachers who are not confident of their own ability as writers will presumably have difficulty helping students become proficient. Teachers who write with students appear to have a powerful effect on students' interest in writing and confidence that they can become proficient.

A. Teachers write with or share their writing with students

High—All teachers interviewed at the school can describe instances when they temporarily abandon the role of "teacher" to write with students. Often this will be journal writing, but to rate a "high" rating on this attribute, teachers should be able to describe occasions when they write at the same time as the students and share what they've written at the same time that students are sharing.

Medium—Some of the teachers interviewed can describe instances when they write with students—but this is usually journal writing only. Some teachers report that they occasionally share with students a piece of writing that is similar to an assignment given the students. Students may also describe instances, but it is clear that such instances are occasional.
Example: The power of teachers sharing their own writing with students was illustrated during interviews with three ninth-grade students in a rural school district. When asked if they remembered any of their eighth-grade teachers sharing writing with them in class, all three recalled that their eighth-grade language arts teacher had read to them a narrative she had written about her granddaughter. Although interviews were conducted in May of their ninth-grade year, that memory was still vivid.

Low—Neither teachers nor students describe any instances of teachers writing with students, other than writing on the chalkboard and requiring students to copy what they have written.

B. Teachers introduce students to the many functions of writing in adult life

High—Teachers report that they frequently talk with students about the ways they use writing in their everyday life and point out adult tasks and activities that require writing. From time to time, they invite adults in a variety of occupations to the classroom to discuss the role of writing in their work. Students are aware of a large number of ways in which writing is needed in adult life and can describe them to the interviewer.

Medium—Some of the teachers interviewed discussed specific instances in which they brought to students’ attention the need for writing in one adult role or another. On rare occasions, an adult may have been invited to the school to enhance writing instruction by talking about the role of writing in their life and work. Students are aware that they will need to write as adults and can describe to the interviewer at least a few ways they anticipate writing as adults.

Low—There is no evidence from either teachers or students that there is any discussion in the school of the role of writing in adult life and work.

C. Evidence that teachers write frequently and for reasons other than teaching the writing process

High—Most teachers, particularly language arts teachers, can easily give examples of personal writing, such as journals, letters, professional reports, and even poetry or fiction. It is clear from responses that most teachers regard writing as part of their personal and professional lives, not just as an instructional responsibility.

Medium—Some teachers can easily give examples of personal writing. Others can provide one or two examples. However, the examples are few and mostly include obligatory writing such as reports required in their jobs.
Low—One or two teachers may give examples of personal writing. Most respond with minimal examples such as writing "to do" lists.

12. Evidence of student choice of topics and formats for particular writing assignments

High—All teachers interviewed at the school report that most assignments provide students with choice (appropriate to the subject area). Some assignments provide students with a format and a range of subjects within a particular prompt, but others allow students to choose the format to address a particular topic or allow for choice of both format and topic. Students are also encouraged to add to their writing folders pieces they have written not for school assignments but for real-world purposes outside school. Students agree with the teachers that they have many opportunities for choice of both format and topic in their writing and that most teachers give them opportunities for choice.

Medium—Most teachers interviewed report giving assignments that specify format and the general topic area but allow students to make specific choices within the general area. Teachers may provide students with a list of possible topics or may brainstorm possible topics with the class and allow students to select from the list or choose a similar topic themselves. A few teachers report giving students a greater range of choices than this. Students agree with the teachers' reports.

Low—All teachers interviewed report giving students a very narrow range of choices (for instance, specifying format and giving student three possible topics to choose among). Many writing assignments allow for no choice at all. Students agree that they exercise very little choice in their writing.

13. Evidence of real-world writing

A. Evidence of students having the opportunity to use writing for real-world purposes

High—Teachers interviewed report that students have frequent opportunities to write to real audiences and that these communications are intended to have actual results (for instance, letters to the school board asking for specific improvements in the building or the lunch program, or pamphlets—later delivered—explaining the school's rules to an entering class). Students tell detailed stories about this type of writing, including the purpose for writing, what they wrote and why, and what the response was.

Example: In one elementary school we visited, students were assigned to write to their parents prior to Christmas to ask for a particular present the child wanted very much but knew the parent might not be able to afford. The letters were mailed to the parents, and the children were able to tell the interviewer how his/her parents had responded to it.
Teachers report a variety of assignments to write to real audiences, but the letters are generally informational and not intended to produce particular results (for instance, letters to pen pals in other states or other countries). Teachers may also report a variety of assignments to write for imaginary audiences and may not differentiate sharply between the imaginary and the real audiences, understanding both as “real-world writing.” Students’ accounts agree with those of their teachers, except that students are normally quite aware which audiences are imaginary and which are real.

Example: Offered as examples of real-world writing were letters to authors expressing appreciation for their writing. While such assignments are addressed to a real audience, they frequently have no purpose that is meaningful to the students, nor are they likely to produce a response beyond a form thank-you letter.

Example: Some teachers asked students to write letters about current events that were not intended for mailing, or asked students to pretend they were characters in a novel or people living during a significant historical event writing letters to other fictional or historical characters. They sometimes offered such assignments as examples of real-world writing.

Neither teachers nor students mention writing for real-world purposes to actual audiences at all, and they do not describe such writing even when specifically asked about it. Teachers either do not understand the term “real-world writing” or describe writing for imaginary audiences when asked about it.

B. Evidence that students are aware of the audiences for which they are writing and that the audiences are important to them

Students discuss audience when asked to describe the writing process, and they differentiate clearly between imaginary or abstract audiences and actual audiences. They describe clearly what real audiences they have addressed in their writing, how they shape their writing to the audience, and why they think it's important to communicate with those audiences. They report that teachers encourage them to incorporate pieces they have written to real audiences for real-world purposes in their writing portfolios.

Most students talk about audience only when prompted by the interviewer, but it is clear that they do write at least occasionally to audiences who read what they write. Students may or may not be able to describe the audiences' reaction to what they wrote and may or may not think it is important to communicate with those audiences.

Neither teachers nor students report writing to real audiences as part of the writing program. Teachers may describe imaginary audiences in response to questions about real audiences.
14. Evidence of integration of writing instruction into general instruction

A. Teachers using reading as a source of ideas and models for writing for a variety of purposes

**High**—Teachers and students who are interviewed consistently talk about reading (in language arts or any of the other subject areas) as models for writing in that area and as a source of ideas for formats and topics.

**Medium**—Some teachers and students who are interviewed can talk about particular ways in which classroom reading has served as a source of ideas for formats or topics or as a model of a type of writing.

**Low**—Teachers and students discuss writing as totally separate from reading and do not draw the connection even when asked about reading as a source of ideas for writing.

B. Language arts teachers teach mechanics in the context of writing

**High**—Teachers and students who are interviewed report that mechanics are taught in the context of writing, primarily in mini-lessons as needed. Students speak of improved spelling and punctuation as part of the overall writing process.

**Medium**—Teachers report that they use Daily Oral Language (DOL) as their primary method of teaching and reinforcing knowledge of mechanics. They report reinforcing these DOL lessons in the context of particular writing assignments or stressing in the DOL lessons mechanics they know will be important to upcoming writing assignments.

**Low**—Teachers report teaching mechanics (spelling and grammar) as separate subjects. In teaching mechanics they follow the order of the textbook and do not make a special effort to teach mechanics with which students are having difficulty in their writing assignments. They may complain that time spent writing limits the amount of time for grammar instruction.

15. Students receive consistent messages, consistent with Kentucky Writing Program principles, from all teachers

**High**—Teachers interviewed at the school talk about the writing program as an integrated whole, even if teachers in different subject areas have different contributions to make to it. Their description of the objectives and progress of the writing program at the school reflects high-quality professional development and is essentially consistent from teacher to teacher and consistent with the way students describe the writing program.
Medium—A few teachers (usually language arts teachers) take the lead in implementing the writing program and have a clear vision among themselves, but the vision is not shared with other teachers; teachers in different subject areas or at different grade levels may have very different conceptions of the school’s writing program. Students report different understandings of the school’s writing program, depending on the teachers they have, or their account of writing instruction differs from their teachers’ accounts.

Example: In a high school we visited, two language arts teachers appeared to be largely responsible for the school’s success in improving portfolio scores. Their students, when interviewed, were articulate about the various steps in the writing process and described challenging, interesting writing assignments, while students of other language arts teachers described only “cookie-cutter” assignments and appeared unaware of the writing process as a whole.

Low—Students may receive consistent messages about writing, but the messages are that writing is not a school priority, and few or none of the faculty teach the writing process in the ways recommended by the Kentucky Writing Program.

16. Communication by students of an awareness that becoming a good writer is a long-term process

High—All the students interviewed at the school describe clearly how their writing has progressed over the past several years and make it clear that they expect to continue to improve.

Medium—Students express an awareness that their writing has improved but do not project this awareness into the future, and some express disinterest in writing and no desire to continue to improve.

Low—Students express little awareness of changes in their writing over time.

17. Consistency among student/teacher/administrator perspectives

This indicator requires a global judgment about the degree to which students, teachers, and administrators tell the same story in response to the same or similar questions.

High—There are virtually no inconsistencies in what students, teachers, and administrators say; all describe the writing program in the same way, discussing a variety of writing assignments and telling revealing anecdotes about writing instruction. (It is possible, if not likely, to have a highly consistent depiction of writing in the school even when that depiction is negative.)
Medium—Students, teachers, and administrators describe the writing program in generally similar terms. There are inconsistencies, but for the most part they do not involve key indicators or add up to a grossly inconsistent story. If administrators have a different perception of the writing program, but teachers and students have consistent perceptions, the school is probably in the medium range on this indicator.

Low—Descriptions of the writing program by students and teachers are so different they might be talking about different schools. Administrators may tell the same basic story as the teachers, or they may have a different perception of what is going on than the teachers.

Statistical Findings

Figure 1 displays the 36 indicators' mean scores in bar chart format for the 22 continuously improving schools. The mean scores ranged from a low of 3.3 (Q10C, Use of computer to facilitate writing) to the high of 5.7 (Q7, Focus and intensity of the writing program). For the 36 indicators, there were 3 means in the 3s, 22 in the 4s, and 11 in the 5s. The pattern of means was for the first half of the figure to have more high means with a smaller range of scores than the second half of the figure. For example, for the first 18 indicators, there was just 1 mean in the 3s, 8 means in the 4s, and 9 means in the 5s; while for the second 18 indicators, there were 2 means in the 3s, 14 means in the 4s, and just 2 means in the 5s. After the highest mean of 5.7 (Q7), the next highest was 5.6 (Q4, School climate and communication), followed by 5.5 (Q1B, Administrative support—school level), followed next by 2 tied at 5.3 (Q2A, Professional development for writing leaders—building, and Q2E, Teacher training and participation in portfolio scoring). At the low end, after the lowest mean of 3.3 (Q10C, Use of computer to facilitate writing), the next lowest mean was 3.5 (Q5, Communication with families), followed next by 3.8 (Q13B, Evidence students are aware of audiences). All other indicator means for this continuously improving group of schools were 4.0 or above.

Figure 2 displays the 36 indicators' mean scores for the seven continuously declining schools. The mean scores range from a low of 1.2 (Q6, Use of community resources) to a high of 3.7 (Q2E, Teacher training and participation in portfolio scoring). For the 36 indicators, there were 7 means in the 1s, 22 means in the 2s, and 5 means in the 3s. As was the case for the previous grouping of schools (continuously improving), the pattern of means was for the first 18 indicators to have more high means with a smaller range of scores that the second 18 indicators. For example, in Figure 2, all of the first 18 indicator mean scores were at or above 2.2, except for the aforementioned Q6 at 1.2. However, for the second 18 indicators, there were 8 means at 2.2 or less, and the 2 highest means were 3.1 (Q9C, Student confidence of reaching proficient) and 3.0 (Q14B, Mechanics taught in context of writing).

See Figure 3 for a display of the 36 indicators' mean scores by the two groups of schools. This figure shows the comparison of the indicators' mean scores for the continuously improving and the continuously declining schools.
Figure 1:
Continuously Improving Group: Means for all Indicators
Figure 2:
Continuously Declining Group: Means for all Indicators
Figure 3:
Means for all Indicators by School Group
Table I displays the observed score differences, t-values, p-values, and significance levels of all 36 indicators between the continuously improving and the continuously declining schools. On the 7-point value scale, the observed score differences ranged from the low of 1.120 (Q11A, Evidence teachers write and share with students) to the high of 3.149 (Q6, Use of community resources). The t-values ranged from the low of 1.799 (Q11A) to a very high 8.872 (Q1C, Evidence teachers write frequently and independently). The probability values ranged from the largest of .083 (Q11A) to the smallest of .0001 (18 indicators). The last column shows only 1 indicator (Q11A) to be not significant at the .05 level or less. Of the 35 indicators significant at the .05 level or less, 4 were significant at .05, 9 were significant at .01, 4 were significant at .001, and 18 were significant at .0001. Following the pattern of means in the figures above, the majority of indicators significant at the .0001 level were in the first page (Q1A to Q9B). Further inspection of the descriptive statistics regarding indicator Q11A, the only non-significant one, revealed the reason for this result. For the 22 continuously improving schools, their mean on indicator Q11A (teachers write with students) was 3.977 with a standard deviation of 1.358, while the mean for the 7 continuously declining schools was 2.857 with a standard deviation of 1.676. One continuously declining school had a score of 6.0 and another had a score of 4.0 on the 7-point scale. These two scores, out of the seven in this group, contributed greatly to the non-significance between the two groups on indicator Q11A. In the school in the declining group that scored at 6.0 on this indicator, a teacher reported writing with students, and then using that writing as the model for students to follow, rather than examining the models provided in the teacher’s writing handbook that illustrated benchmarks of writing competence.

In addition to examining rating scores for high and low performing schools, an attempt was made to correlate 1995 school writing portfolio scores with factors such as school and class size, number of grades in the school, and socioeconomic status of students. No report is made of correlations between scores and geographic or ethnic descriptions due to the fact that most schools were in rural environs and most were mono-ethnic. Analysis found low correlations between portfolio scores and class size, school size, number of grades, or SES. None of the correlations was statistically significant. Distinctions between schools with improving and declining scores appeared to be based primarily on writing program practices and features identified by the indicators, rather than on school structures or social circumstances.
Table 1: Observed Score Differences, t-Values, p-Values, and Significance Levels of all Indicators Between the Continuously Improving and Continuously Declining Schools

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Observed Score Diff.</th>
<th>t-Values</th>
<th>p-Values</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1A</td>
<td>Administrative support--district level</td>
<td>2.165</td>
<td>3.414</td>
<td>.002</td>
<td>Sig. at .01</td>
</tr>
<tr>
<td>Q1B</td>
<td>Administrative support--school level</td>
<td>1.929</td>
<td>3.326</td>
<td>.003</td>
<td>Sig. at .01</td>
</tr>
<tr>
<td>Q2A</td>
<td>Professional development for writing leaders--building</td>
<td>2.912</td>
<td>5.233</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q2B</td>
<td>Professional development for writing leaders--district</td>
<td>2.521</td>
<td>4.225</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q2C</td>
<td>Professional dev. for portfolio accountable teachers</td>
<td>2.310</td>
<td>4.057</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q2D</td>
<td>Professional development for other teachers</td>
<td>1.943</td>
<td>4.002</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q2E</td>
<td>Professional development specific to content areas</td>
<td>2.402</td>
<td>4.439</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q2F</td>
<td>Teacher training and participation in portfolio scoring</td>
<td>1.595</td>
<td>3.165</td>
<td>.004</td>
<td>Sig. at .01</td>
</tr>
<tr>
<td>Q2G</td>
<td>Ongoing mentoring/informal professional development</td>
<td>2.736</td>
<td>5.237</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q2H</td>
<td>Strategic collaboration in professional development</td>
<td>2.350</td>
<td>3.841</td>
<td>.001</td>
<td>Sig. at .001</td>
</tr>
<tr>
<td>Q3</td>
<td>Coordination across grade levels and subject areas</td>
<td>2.286</td>
<td>5.459</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q4</td>
<td>School climate/communication</td>
<td>2.711</td>
<td>5.926</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q5</td>
<td>Communication with families</td>
<td>1.312</td>
<td>2.604</td>
<td>.017</td>
<td>Sig. at .05</td>
</tr>
<tr>
<td>Q6</td>
<td>Use of community resources</td>
<td>3.149</td>
<td>4.696</td>
<td>.001</td>
<td>Sig. at .001</td>
</tr>
<tr>
<td>Q7</td>
<td>Focus and intensity of the writing instruction program</td>
<td>2.990</td>
<td>5.827</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q8</td>
<td>Use of <em>Writing Portfolio Teacher's Handbook</em></td>
<td>1.640</td>
<td>2.780</td>
<td>.010</td>
<td>Sig. at .01</td>
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<tr>
<td>Q9A</td>
<td>Focus on writing vs. portfolios only</td>
<td>2.432</td>
<td>4.408</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q9B</td>
<td>More challenging work required</td>
<td>2.746</td>
<td>6.961</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
</tbody>
</table>
Table 1 (continued)

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Observed Score Diff.</th>
<th>t-Values</th>
<th>p-Values</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q9C</td>
<td>Student confidence of reaching proficient</td>
<td>1.857</td>
<td>2.969</td>
<td>.008</td>
<td>Sig. at .01</td>
</tr>
<tr>
<td>Q9D</td>
<td>Student identity as writers</td>
<td>2.390</td>
<td>3.591</td>
<td>.001</td>
<td>Sig. at .001</td>
</tr>
<tr>
<td>Q9E</td>
<td>Student opportunity to compare own writings</td>
<td>1.412</td>
<td>2.272</td>
<td>.031</td>
<td>Sig. at .05</td>
</tr>
<tr>
<td>Q10A</td>
<td>Student description of writing process steps</td>
<td>2.267</td>
<td>3.953</td>
<td>.001</td>
<td>Sig. at .001</td>
</tr>
<tr>
<td>Q10B</td>
<td>Student awareness of portfolio evaluation criteria</td>
<td>1.964</td>
<td>3.667</td>
<td>.002</td>
<td>Sig. at .01</td>
</tr>
<tr>
<td>Q10C</td>
<td>Use of computer to facilitate writing</td>
<td>1.412</td>
<td>3.323</td>
<td>.003</td>
<td>Sig. at .01</td>
</tr>
<tr>
<td>Q10D</td>
<td>Use of feedback to improve writing</td>
<td>2.357</td>
<td>4.231</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q11A</td>
<td>Evidence teachers write and share with students</td>
<td>1.120</td>
<td>1.799</td>
<td>.083</td>
<td>Not Sig.</td>
</tr>
<tr>
<td>Q11B</td>
<td>Evidence teachers introduce adult life writing</td>
<td>2.632</td>
<td>5.415</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q11C</td>
<td>Evidence teachers write frequently and independently</td>
<td>2.833</td>
<td>8.872</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q12</td>
<td>Student choice of topics and format</td>
<td>1.643</td>
<td>3.068</td>
<td>.005</td>
<td>Sig. at .01</td>
</tr>
<tr>
<td>Q13A</td>
<td>Student opportunity for real-world writing</td>
<td>2.526</td>
<td>6.003</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q13B</td>
<td>Student awareness of audiences</td>
<td>2.190</td>
<td>4.634</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q14A</td>
<td>Reading used as a source of ideas</td>
<td>2.462</td>
<td>4.831</td>
<td>.0001</td>
<td>Sig. at .0001</td>
</tr>
<tr>
<td>Q14B</td>
<td>Mechanics taught in context of writing</td>
<td>1.344</td>
<td>2.238</td>
<td>.036</td>
<td>Sig. at .05</td>
</tr>
<tr>
<td>Q15</td>
<td>Consistency of messages from teachers</td>
<td>2.175</td>
<td>5.094</td>
<td>.0001</td>
<td>Sig. at .0001</td>
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<tr>
<td>Q16</td>
<td>Student awareness that long-term process</td>
<td>1.571</td>
<td>2.632</td>
<td>.014</td>
<td>Sig. at .05</td>
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<tr>
<td>Q17</td>
<td>Consistency among students/teachers/administrators</td>
<td>1.929</td>
<td>3.297</td>
<td>.003</td>
<td>Sig. at .01</td>
</tr>
</tbody>
</table>
CONCLUSIONS AND RECOMMENDATIONS

At the completion of the research phase of this project, we draw four conclusions and make eight recommendations. The conclusions and recommendations concern both the identified indicators and the process by which those indicators were identified, as we believe both process and outcome have utility.

Conclusions

First, we conclude that it is possible to identify and validate writing program indicators that distinguish schools with continuously improving portfolio scores from those with continuously declining scores. Interestingly, indicators with statistically significant differences in mean scores between improving and declining schools are not limited to classroom practices of teachers charged with writing instruction, and the professional development of those teachers. They include indicators of the importance of writing in the school, and the involvement of non-Language arts teachers in professional development on writing. They also include indicators for which no school, whether improving or declining, received high scores. These may point to program features that need increased professional development if schools are to continue improvements.

Second, including students as informants about writing instruction proved invaluable in identifying common practices in the school. Teachers sometimes reported—and believed—that they were using a strategy effectively, yet their students seemed unaware of the strategy and could not exhibit knowledge or skills the strategy aimed to teach. Conversely, students sometimes demonstrated knowledge and skills beyond what teachers had anticipated. Student perceptions about the value of writing, its place in the school, and common writing practices helped to validate teacher and administrator perceptions. Consistency among the three role groups generally was a feature of a strong program.

Third, the collaborative nature of the study provided unique benefits. Each group listened to and learned from the others. The researchers brought, in addition to research strategies, the neutral attitudes and cautions required for drawing well-founded conclusions from data. Writing consultants brought deep knowledge of the writing program from their experience as classroom teachers and as people charged with providing technical assistance to classroom teachers. They provided researchers with understandings of the complexities of school practice. Kentucky Writing Program directors brought awareness of the political and regulatory contexts of the program, as well as the ability to gain KDE support for research activities and school access. Each group had a vested interest in the research outcome and relied on the others to contribute to its success. At critical moments in the project, each relied on the credibility of the others to further the work. KDE staff relied on the dispassion of AEL as a research organization to support the credibility of preliminary findings presented to Kentucky legislators. AEL staff relied
on the writing consultants’ program understanding in validating school ratings on indicators. They also relied on Writing Program staff to lend authority to preliminary findings disseminated to school personnel, the KDE personnel, and the state legislature.

Lastly, this collaboration is unique among Regional Educational Laboratories. More typically, laboratories—and other R&D institutions—carry out work that may be conceptualized collaboratively, but that is implemented independently. This project developed guidelines that may encourage similar collaborations in the future. Critical for successful collaborations of this sort is that (1) each agency staff already is accustomed to operating collaboratively, (2) there is a common vision of the outcome, (3) each has a vested interest in the outcome, and (4) each has strengths to contribute that are critical to the project’s success. All four conditions are important, but if the first does not exist, the others may not be enough to overcome its absence.

Recommendations

These findings should be disseminated widely within Kentucky and nationally. They have implications for school and district administrators, as well as classroom teachers. They have the potential to inform preservice education as well as in-service professional development. Since they concern the writing program as a whole, they also are of benefit to legislators concerned with the progress of school reform. Finally, because Kentucky’s writing program has many features in common with the National Writing Program used in other states with writing portfolio programs, they have import nationally.

The instruments developed in this study are available for replication or adaptation in other R&D efforts. For example, it may be worthwhile to develop school-level indicators for other content areas such as social studies or science. Also, the writing program indicators should require little modification to apply to writing programs in other states that assess writing.

A study using these developed protocols and processes should be undertaken in Kentucky schools in urban areas. Although the correlation between demographic factors and writing portfolio scores in this study was low, the relatively few urban schools in the sample makes conclusions based on these data tentative.

Due to the small number of schools in the samples and the strict definitions governing the two school groups (continuously improving and continuously declining over the same four-year period), we also suggest that a similar study be conducted among schools excluded from this sample (i.e., schools with variable results). This population includes the majority of Kentucky’s schools.

As a means of achieving the fourth recommendation, and to satisfy the need expressed by KDE staff for a process by which schools can assess their own writing programs, we recommend
that the instruments and processes used in the research phase be developed into a writing program self-study, then piloted and field-tested in schools not included in the research samples.

Training should be designed that will enable people who provide technical assistance to schools to facilitate the writing program self-study recommended in the previous paragraph.

Future studies of this kind should include student voice as an essential component. While student assessment scores offer an ultimate measure of program success, student perceptions allow insight into program elements and can help identify areas that can be improved to produce higher scores.

The methods used in the research phase of this project are offered for the consideration of research institutions (institutes, centers, universities) as an example of high quality collaborative research and development that might be emulated.
REFERENCES


APPENDIX
Appendix A:

Completed AEL SEDCAR Standards Checklist
AEL SEDCAR Standards Checklist

The *Standards for Educational Data Collection and Reporting* (1991) were used in the development of this (check one):

- ☐ Study group report
- ☐ Field test report
- ☐ Minigrant final report
- ☐ Implementation report
- ☐ Research report
- ☐ Impact study report
- ☐ Other _______________________

The SEDCAR Standards were consulted and used as indicated in the table below (check or mark as appropriate):

<table>
<thead>
<tr>
<th>SEDCAR Standard Number and Descriptor</th>
<th>The Standard was deemed applicable; and, to the extent feasible, was taken into account.*</th>
<th>The Standard was deemed applicable; but could not be taken into account.</th>
<th>The Standard was not deemed applicable.</th>
<th>Exception was taken to the Standard.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Creating an Infrastructure to Manage Data Collection Activities</td>
<td>xxxx</td>
<td>(State approved, no federal involvement)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2 Justifying Data Collection Activities</td>
<td>xxxx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Fostering Commitment of all Participants</td>
<td>xxxx</td>
<td></td>
<td></td>
<td>(LEAs volunteered data)</td>
</tr>
<tr>
<td>1.4 Creating an Appropriate Management Process</td>
<td>xxxx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Formulating and Refining Study Questions</td>
<td>xxxx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 Choosing the Data Collection Methods</td>
<td>xxxx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3 Developing a Sampling Plan</td>
<td>xxxx</td>
<td></td>
<td></td>
<td>(Plan was 50% of identified schools)</td>
</tr>
<tr>
<td>2.4 Assessing the Value of Obtainable Data</td>
<td>xxxx</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.5 Transforming Study Question Concepts into Measures</td>
<td>xxxx</td>
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<tr>
<td>2.6 Designing the Data Collection Instrument</td>
<td>xxxx</td>
<td></td>
<td></td>
<td>(Multiple instruments used)</td>
</tr>
<tr>
<td>2.7 Minimizing Total Study Error (Sampling and Nonsampling)</td>
<td>xxxx</td>
<td></td>
<td></td>
<td>(Mainly non-sampling errors)</td>
</tr>
<tr>
<td>2.8 Reviewing and Pretesting Data Collection Instruments, Forms, and Procedures</td>
<td>xxxx</td>
<td></td>
<td></td>
<td>(Done in 7 pilot test schools)</td>
</tr>
<tr>
<td>2.9 Preparing a Written Design</td>
<td>xxxx</td>
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<td></td>
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<tr>
<td>3.1 Preparing for Data Collection</td>
<td>xxxx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 Selecting and Training Data Collection Staff</td>
<td>xxxx</td>
<td></td>
<td></td>
<td>(Done in teams)</td>
</tr>
<tr>
<td>3.3 Ethical Treatment of Data Providers</td>
<td>xxxx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 Minimizing Burden and Nonresponse</td>
<td>xxxx</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3.5 Implementing Data Collection Quality Control Procedures</td>
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<tr>
<td>SEDCAR Standard Number and Descriptor</td>
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<td>The Standard was deemed applicable; but could not be taken into account.</td>
<td>The Standard was not deemed applicable.</td>
<td>Exception was taken to the Standard.</td>
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<tr>
<td>3.6 Documenting Data Collections</td>
<td>xxxxx</td>
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<tr>
<td>4.1 Planning Systems Requirements</td>
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<td></td>
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<tr>
<td>4.2 Designing Data Processing Systems</td>
<td>xxxxx</td>
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</tr>
<tr>
<td>4.3 Developing Data Processing Systems</td>
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<tr>
<td>4.4 Testing Data Processing Systems</td>
<td>xxxxx</td>
<td></td>
<td>xxxxx (used standard software)</td>
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<tr>
<td>4.5 Planning for Data Preparation</td>
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<tr>
<td>4.6 Preparing Data for Processing and Analysis</td>
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<tr>
<td>4.7 Maintaining Programs and Data Files</td>
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<tr>
<td>4.8 Documenting Data Processing Activities</td>
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<tr>
<td>4.9 Evaluating Data Processing Systems</td>
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<tr>
<td>5.1 Preparing an Analysis Plan</td>
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<tr>
<td>5.2 Developing Analysis Variables</td>
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<tr>
<td>5.3 Applying Appropriate Weights</td>
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<tr>
<td>5.4 Estimating Sampling and Nonsampling Errors</td>
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<tr>
<td>5.5 Determining Statistical Significance</td>
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<tr>
<td>6.1 Presenting Findings</td>
<td>xxxxx</td>
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<td>6.2 Reviewing the Report</td>
<td>xxxxx</td>
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<tr>
<td>6.3 Releasing Data</td>
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<tr>
<td>6.4 Disseminating Data</td>
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<tr>
<td>6.5 Preparing Documentation and Technical Reports</td>
<td>xxxxx</td>
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(signature)

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Relation to Document: Director of Project

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