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ABSTRACT

In 1996, Quest staff began working with teams from school communities in three West Virginia county school districts to invigorate efforts for continuous school improvement. This first learning community consisted of students, teachers, administrators, parents, and community members, who ultimately wrote individual school visions and improvement plans and co-authored a supplemental guide for state-mandated school improvement plans. Tinder Elementary became involved in Quest in 1997 when four staff members and one parent attended the first elementary network rally. The school also involved Quest staff in two co-ventures in learning, during which Quest staff interviewed teachers and students, observed 24 classrooms, and planned with parents the piloting of a series of sessions on Successful, Motivated, Autonomous, Responsible, and Thoughtful (SMART) learners. Although the school was highly involved in the project in many respects, there were some limitations to their participation. The project also had little impact on student achievement, though positive trends in grades 3 through 5 were apparent, and a few statistically significant improvements were located. Student Test of Cognitive Skills/2 total, nonverbal, and verbal scores were consistently higher in 1998 and 1999 than in 1996, when Tinder began its involvement in Quest. Appendixes contain the Quest brochure and framework; interview protocols for individual, group team members, and student focus groups; and a questionnaire, checklist, and instrument. (Contains 44 references and 17 tables.) (DFR)

TINDER ELEMENTARY:
A CASE STUDY OF THE QUEST NETWORK

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July 2000

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INTRODUCTION

AEL's Quest Project

As part of its contract to develop a framework for continuous school improvement in its four-state region, AEL staff designed the Quest project (see Appendix A). Based upon principles of inquiry, collaboration, and action research, Quest proposes to support and investigate ongoing school improvement efforts through twice-yearly conferences (which staff renamed rallies), summer symposia, a Scholars program, visits to participating schools, communication via listserv and mailings, and the creation of a Quest network of schools.

The project draws from literature on school change suggesting that subjectivity and personal growth are essential to the change process (Fullan, 1991). Yet because individual development takes place within a variety of social contexts, including school communities, staff designed the Quest network with attention to the ways shared vision, goals, and sense of community support ongoing school improvement (Barth, 1990; Hord, Rutherford, Huling-Austin, & Hall, 1987; Postman, 1995; Sergiovanni, 1994). Similarly, school culture may impede or enhance significantly the viability of school improvement work (Richardson, 1996; Ryan, 1995). If a school community shares certain norms, such as self-evaluation, curiosity, proactivity, and high performance expectations, reform efforts are hypothesized to fare better than those in school cultures that do not possess such norms. Other research suggests that school administrators must assume a collaborative role in decision-making if reform efforts are to succeed (van der Bogert, 1998), and that instructional and curricular goals must be informed by a diverse contingent of school stakeholders, including parents, students, and community members (Barth, 1990; Sergiovanni, 1994).

Quest staff were also attuned to literature suggesting that honoring the purpose of education enhances school change. Assessment strategies, for instance, ought to serve multiple ends, not the least of which is to provide information for ongoing teaching and learning (Wiggins, 1993). Moreover, education generally and reform endeavors specifically need to nurture a host of attributes enabling students to make use of their education to lead thoughtful lives (Perkins, 1995; Postman, 1995).

In sum, Quest staff sought to create a network of schools committed to continuous improvement, collaboration, and inquiry. Participants would engage in, reflect upon, and assess the reform endeavors their schools undertook with the support of Quest.

Quest Activities

In the summer of 1996, Quest staff at AEL began working with teams from school communities in three West Virginia county school districts to invigorate efforts for continuous school improvement, using a variety of techniques for gathering input from all those with a stake in their local schools (Howley-Rowe, 1998g). This first learning community, called Leadership to Unify School Improvement Efforts (LUSIE), consisted of school teams including students, teachers, administrators, parents, and community members. Ultimately, this group wrote individual school visions and improvement plans and co-authored (with AEL) *Creating Energy for School*

Improvement (1997), a supplemental guide for those poised to write their own state-mandated school improvement plans.

Quest staff also were committed to creating learning communities devoted to exploring continuous school improvement across the AEL region of Kentucky, Tennessee, Virginia, and West Virginia. Hence, staff scheduled a pilot Inquiry Into Improvement conference in April 1997 for selected region high schools. Schools were selected in several ways. Some schools were recommended for the Quest experience by central office staff or school administrators. Other schools were asked to join Quest because they had participated in previous AEL programs. Still other schools were invited because Quest staff believed they were primed for the kind of collaborative inquiries into school improvement that Quest was designed to provide.

In October 1997, in Roanoke, Virginia, another conference was held for designated high schools in the AEL region, this time with an explicit emphasis on forming and nurturing a network of schools (Howley-Rowe, 1998c). A similar conference was held in Nashville, Tennessee, for designated regional elementary schools in November 1997 (Howley-Rowe, 1998a). In order to facilitate the development of a Quest school network and to continue to help invigorate continuous school improvement efforts within network schools, staff planned a sequence of events in 1998 following these initial conferences. Dissatisfied with the conventional and prescriptive connotation of the word conference, Quest staff chose to call these network meetings rallies. Thus, all events previously called conferences are now termed rallies.

The high school network met a second time on February 8-10, 1998, at the Pipestem State Park Resort in West Virginia (Howley-Rowe, 1998d), following which the elementary school network participated in a rally on February 22-24, 1998, in Lexington, Kentucky (Howley-Rowe, 1998b). During the summer, 11 network members participated in the Quest Scholars Program, meeting at a colloquium in Charleston, West Virginia, on July 16-18, 1998, to collaborate with project staff in ongoing efforts to conceptualize, design, and research Quest (Howley-Rowe, 1998e). Finally, in August, network members and other educators in AEL's region participated in a symposium on assessment of student work (Howley-Rowe, 1998f).

From the high school network rally in October 1997 to the August 1998 summer symposium, Quest staff hosted six network events. The Quest network contained an essentially stable membership, although there were differences in the number of school teams that attended each event and in the frequency that school teams attended gatherings. Project staff recently investigated this phenomenon, finding that administrative support for participation in the network was the factor reported to be most important to schools' initial and sustained involvement in Quest (Howley-Rowe, 1999c).

Beginning their second year of network activity, Quest staff invited the elementary and high school networks to attend a rally together on November 2-3, 1998, at the Glade Springs Resort, near Daniels, West Virginia (Howley-Rowe, 1999a). Approximately half of the Quest Scholars met on November 1, 1998, to plan with project staff several rally activities. Scholars from the high school

network met for three hours on February 14, 1999, prior to a high school network rally held on February 15-16 in Roanoke, Virginia (Howley-Rowe, 1999c). A similar rally was held for elementary network members on February 22-23, 1999, in Lexington, Kentucky (Howley-Rowe, 1999b).

A second Scholars colloquium was convened from July 12-15, 1999, at Mountain Lake Resort, Virginia (Howley-Rowe, 1999c). The primary purpose of this colloquium was for Quest staff and Scholars to collaborate in evaluating and writing about the project, ultimately contributing written pieces to a publication about the Quest network. In addition, a second summer symposium was convened in Gatlinburg, Tennessee, July 26-27, 1999 (Parrish & Howley-Rowe, 2000).

The third year of Quest events began with two rallies and a Scholars meeting in November 1999 in Bristol, Virginia. A rally for elementary schools was conducted from November 11-12, 1999. Scholars met to discuss writing and several Quest instruments November 13-14. And a high school rally was held November 15-16. Network high schools met again from February 14-15, 2000, in Roanoke, Virginia. Elementary schools participated in a rally from February 17-18, 2000, in Lexington, Kentucky. Evaluation of these events was not conducted as staff turned their efforts to summative evaluation of the project; Quest and the 1996-2000 REL contract funding the project would come to an end in November 2000.

Summative Evaluation of Quest

Quest staff delineated several evaluation questions they hoped summative evaluation would address. These questions were categorized in terms of inputs and outputs, or independent and dependent variables. In other words, staff wanted to understand the relationships between issues such as the extent of involvement in Quest and school-specific improvement efforts inspired by Quest, as well as the extent to which professional learning community was enhanced or to which participating schools approximated the Quest framework of continuous improvement. More succinctly, Quest staff hoped to learn from summative evaluation what impact participation in Quest had upon schools, individuals within them, and upon the network as a whole.

Summative evaluation questions and the instruments or methods used to answer them are listed in Table 1.

Thus, summative evaluation of Quest is intended to answer the questions delineated in Table 1 formulated by Quest staff and the evaluator. Summative evaluation will describe the impact Quest had upon schools and their school communities, providing some evidence of the effectiveness of the project.

Table 1
Summative Evaluation Questions and Instruments/Methods

Independent variables/inputs	**Instruments/Methods**
To what extent do Quest team members think their schools have enacted Quest components?	Innovation Configuration Checklist
What specific Quest related activities have schools participated in?	History of involvement
What have schools undertaken as a result of Quest?	Faculty focus group Quest team member interviews
Dependent variables/outcomes	**Instruments/Methods**
Has Quest enhanced professional learning community in network schools?	*School Staff as Professional Learning Community* instrument pre- and post-test
To what extent do members of the Quest team think their school approximates the Quest framework, and to what degree is this attributable to Quest?	Reflective Assessment instrument
What have been the changes in student achievement during Quest participation?	Achievement data School report card
What has been the impact of Quest on individuals, schools, and of what value has the network been?	Quest team member interviews
What have schools undertaken as a result of Quest, and what have been the results?	Faculty focus group Quest team member interviews
What have been the results of school projects undertaken due to Quest?	School data about results of school projects
What do network participants report has happened at their schools due to Quest? In what other ways has Quest been effective?	School stories

The primary audience for summative evaluation of the project is Quest staff at AEL. It is intended to offer project staff a summative perspective on the impact of Quest in four disparate schools. Other audiences include representatives of AEL's funding source, the U.S. Department of Education's Office of Educational Research and Improvement (OERI), and policymakers, school administrators, teachers, education researchers, and others interested in strategies to support continuous school improvement.

METHODS

A case study approach was taken for summative evaluation of the Quest project. Given that Quest staff were most interested in understanding the impact of the project on various levels, from the individual to the school to the network, the case study method seemed appropriate. In addition, project staff were committed to understanding project impact from the perspectives of various participants in the network, including students, teachers, parents, and administrators. Case studies involve in-depth "multi-perspectival analyses" (Tellis, 1997) of single systems or phenomena; they rely on clearly delineated boundaries rather than on sampling (Stake, 1995). The focus, depth, and ability to account for multiple viewpoints associated with the case study approach led Quest staff to consider using such a method.

Moreover, formative evaluation had revealed the high level of satisfaction participants had with Quest and the great extent to which the project met its goals at each event (Howley-Rowe, 1999a-c, 1998a-f). Exploratory research also indicated various reasons some schools were more involved in the network than others (Howley-Rowe, 1999d). These sources of information convinced project staff that Quest had made some impact on those involved. Quest staff were, therefore, more interested in summative evaluation that elucidated *in what ways* Quest had been of value to schools and individuals in the project than in evaluation focusing solely on quantitative outcome measures.

Hence, summative evaluation of the Quest project includes case studies of four network schools. The schools were selected for their high level of involvement in Quest, varied interpretations and uses of the project, and diverse locations and demographic constitutions.

For example, while one school used Quest to support parent involvement programs, another discovered a variety of inquiry techniques to improve student writing. One small elementary school is located in a rural, impoverished Appalachian area, whereas a very large high school is in a relatively wealthy suburb of the nation's capital. All four schools, nonetheless, found Quest flexible enough to accommodate their very different goals for improvement and structured enough to provide constructive strategies supporting change.

A strength of case studies is their reliance on triangulation of data to provide a more comprehensive description of the objects of study than might be rendered by use of a single research method. Using several data sources in order to corroborate theses is what Brewer and Hunter (1989) call "multimethod research." This approach posits that the strengths of each method will compensate for the weaknesses in others, ultimately providing a more complete account of that being studied.

On the other hand, the case study approach has been criticized for its "dependence on a single case [which] renders it incapable of providing a generalizing conclusion" (Tellis, 1997, p. 3). Although generalization to populations is certainly compromised by the case study method, generalization to theory is not as problematic if case studies are conducted with sufficient rigor and transparency. Hence, conclusions generated by case studies can be used to generalize by synecdoche as "a claim that the essential features of the larger social unit are reproduced in microcosm within

the smaller social unit, and that by studying them in micro we might make inferences about the macrostructure of which they are a part" (Brewer & Hunter, 1989, p. 123).

Both qualitative and quantitative methods contributed to this evaluation component of the Quest project. During project events, the evaluator engaged in participant observation (Becker & Geer, 1957; Emerson, 1983; Glazer, 1972; Hammersley & Atkinson, 1983; Miles & Huberman, 1994), a method highly suited "for studying processes, relationships among people and events, the organization of people and events, continuities over time, and patterns" (Jorgensen, 1989, p. 12). Furthermore, consistent with the Quest paradigm, participant observation involves "a flexible, open-ended, opportunistic process and logic of inquiry through which what is studied constantly is subject to redefinition based on field experience and observation" (Jorgensen, 1989, p. 23). This method "is a commitment to adopt the perspective of those studied by sharing in their . . . experiences" (Denzin, 1989, p. 156), thereby enabling researchers to evaluate how an event or process appears and feels to participants. Finally, participant observation places the evaluator squarely in the field, rather than in the office or on the phone, allowing for the collection of richer, more directly acquired data (Patton, 1980).

Denzin (1989) describes four variations in participant observation strategies: the complete participant, the participant as observer, the observer as participant, and the complete observer (pp. 162-65). The evaluator played a role more akin to the participant as observer, participating in ongoing project activities as appropriate but not concealing data collection.

In order to corroborate the theses generated by participant observation, the evaluator also performed other data collection and analysis activities. The evaluator and a trained Quest consultant conducted a site visit to Tinder Elementary School to gather data on May 4-5, 2000. Semi-structured individual interviews were conducted with six Tinder Quest team members using a predesigned protocol. In addition, semi-structured group interviews were conducted with approximately 12 members of the school faculty who had been minimally or not at all involved in Quest events. A semi-structured group interview with 12 students was conducted as well. Finally, six Quest team members completed the Reflective Assessment questionnaire.

Pre- and post-test scores on the *School Professional Staff as Learning Community* were analyzed to discern if case study schools had become more like professional learning communities over the course of their participation in Quest. This instrument was first administered to all network schools in December 1997, and again in November 1999, as the project drew to a close. The surveys were sent to a contact person at each network school who distributed the instruments to faculty, then collected and returned completed surveys to Quest staff.

Another instrument completed by Quest participants at the close of the project was an Innovation Configuration Checklist detailing the essential components of Quest as well as variations thereof. All network participants in attendance at the February 2000 rallies were asked to complete the Checklist.

Other data sources included academic aptitude data from the state-mandated standardized Test of Cognitive Skills and data gathered during Tinder participation in Quest sponsored events, including a technical assistance visit and project events.

Identical instruments and individual and group interview protocols were used across the four case study sites to allow for comparative analyses, should staff consider such comparisons useful.

TINDER ELEMENTARY SCHOOL

Context

Tinder Elementary[1] is located in a suburban neighborhood of a mid-size Kentucky city. The school building opened in the fall of 1990 and currently serves approximately 700 students in grades kindergarten through sixth. Located on a 30-acre campus, the school includes 15 acres with walking trails, fitness stations, a playground, wild flower gardens, and a show garden of iris maintained by local iris gardeners.

Eighty-six percent of the student population at Tinder is White, 7% African American, 4% of Asian descent, and 2% Latino. The school does not qualify for Title I funds; 16.2% of the students qualify for free or reduced price lunches.

The school is served by 54 staff, 43 of whom are certified. A principal, assistant principal, 41 teachers, and 11 other instructional staff comprise this group. Classroom pupil-teacher ratios range from 1:22 to 1:28, depending on the class.

Participation in Quest

Tinder became involved in Quest in November 1997 when four staff members and one parent attended the first elementary network rally. The school sent a leadership team to each following rally, with membership of five to seven. One team member participated in the 1998 Scholars colloquium, and two in the 1999 Scholars program. Ten Tinder school community members attended the July 1999 summer symposium.

The school also involved Quest staff in two co-ventures in learning, during which Quest staff interviewed teachers and students, observed 24 classrooms, planned with parents the piloting of a series of sessions on SMART[2] learners and SMART parenting, and provided technical assistance with the implementation of student-led conferences.

In October 1999, Tinder staff collaborated with AEL on an action research project concerning math instruction. In addition, the school adopted the SMART learner component of the Quest framework as a theme, using the phrase in hallway displays and on tee-shirts.

At the November 1998 elementary and high school rally at Glade Springs Resort, Tinder principal Dr. Dottie Baldwin shared the school's use of the SMART learner theme:

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[1]All school and personal names used in this report are pseudonyms in order to protect the anonymity and confidentiality of participants.

[2]Developed by Quest staff, SMART is an acronym for Successful, Motivated, Autonomous, Responsible, and Thoughtful.

> "At 2:07, the facilitators introduced another form of sharing within the network. Dottie [Baldwin], a principal from Tinder Elementary, shared with participants a slide show of her school, telling the story of its development and current undertakings. Notably, several slides showed bulletin boards depicting the SMART learner theme. Participants appeared very attentive during the slide presentation; one participant, in fact, grinned widely throughout. Attendees applauded Dottie loudly as she concluded" (Howley-Rowe, 1999a).

When participants at the November 1998 rally were asked for their assessment of presentations made by network schools on the final evaluation form, 27 of the 35 respondents made unambiguously positive comments. These included, "Tinder [Elementary] was great!," "I thought this was wonderful and I always enjoy hearing from other schools," "loved talking with Fred! He always offers so much!" and "always the best! Dottie and Fred did great!" (Howley-Rowe, 1999a).

At the 1999 Scholars colloquium at Mountain Lake Resort, Virginia, one Scholar discussed the impact working with Dottie and other network participants had made, noting that networking for him meant that "if I face something difficult, I stop and think, 'I could call Dottie or Evelyn.' It calms me down . . . to know they're out there." Later, this Scholar added, "Some of you in this room have really become my heros. I think, 'What would Dr. Baldwin do?'" He continued, noting a characteristic he associated with each of several other Scholars, describing how they peopled his mind during difficult moments at school.

With the assistance of parents at the school, Tinder staff developed a video about their experience in the Quest network. Ultimately, this production was viewed by all regional laboratory directors and U.S. Department of Education staff at a meeting in September 1999 in Washington, D.C. In addition, principal Dottie Baldwin was a featured presenter at the October 1999 AEL Board meeting. There, she received an award in recognition of her continuous improvement efforts.

FINDINGS

Innovation Configuration Checklist

Quest staff developed an Innovation Configuration Checklist (ICC) specifying the essential components of the project and variations thereof. The ICC was administered to Quest leadership team members at the February 2000 rallies for elementary and high school networks to gather participants' assessments of the degree to which their schools had been involved in the project. With a Cronbach alpha of .78, the overall scale possessed sufficient reliability for this administration. Items 1-7 provide four variations for respondents to select among; item 8 provides 3 options. For purposes of analysis, items 1-7 were converted to a 4-point Likert-type scale, with 3 representing the most ideal variation of components and 0 representing the least satisfactory variation. Similarly, item 8 was converted to a 3-point Likert-type scale. The overall scale score ranges from 0 to 23.

Three Tinder Quest team members completed the ICC. The overall scale score of 18.00 (SD .61) indicates that the respondents felt their school had approximated the Quest specifications fairly well.

Table 2
Innovation Configuration Checklist Descriptive Statistics

Abbreviated Items	N	Mean	SD
Quest School Leadership Team	3	3.00	.00
Administrative Support	3	2.33	1.15
Participation in Network Events	3	3.00	.00
Participation in Co-ventures in Learning	2	2.00	1.41
Involvement with Other Quest Schools	3	2.00	1.73
School Improvement/Action Research	3	2.67	.58
Change in Schoolwide View of School Improvement	2	1.00	.00
Engagement in Related School Improvement Efforts	3	2.00	.00
Scale	3	18.00	.61

The Tinder Quest team members gave a mean rating of 3.00 (SD .00) to the first ICC component, indicating that their school leadership team was inclusive with administrator, teacher, and parent membership; had been fairly stable over time; and had assumed active school leadership in taking the quest for continuous improvement back to the school community. The standard deviation indicates that respondents were in complete agreement about this. Also receiving a high

mean rating was the category of participation in co-ventures in learning (3.00, SD .00), in which a wide cross-section of the school community had participated. Again, respondents were in total agreement. Moreover, with a mean of 2.00 (SD .00), respondents unanimously indicated that their school had been actively engaged in other school improvement efforts, the results of which has been recognizable.

Respondents were in somewhat less agreement about the extent of administrative support for involvement in Quest. With a mean of 2.33 (SD 1.15), Tinder participants felt that one or more of their school's administrators had been members of the leadership team and had been occasionally involved in Quest activities. Respondents also believed that a limited number of their school community–primarily administrators, teachers, and staff–had participated in a Quest co-venture (2.00, SD 1.41), although the standard deviation—the second largest—indicates that there was some disagreement about this.

Involvement with other schools also received a mean rating of 2.00, again with a large standard deviation (SD 1.73), representing the most diverse set of responses on the instrument. The mean indicates that respondents thought individuals from their school had visited another Quest school or had hosted a visit by a Quest school to their campus.

With a mean of 2.67 (SD .58), the presence of school improvement or action research projects at Tinder was rated fairly highly. This rating suggests that Tinder had implemented a school improvement project in connection with their involvement in Quest and collected data to demonstrate its impact on student learning.

Least highly rated was the item concerning changes in the schoolwide view of school improvement (1.00, SD .00). This rating indicates that respondents unanimously thought members of the Quest leadership team had been affected by the Quest approach to continuous improvement. However, the rating also indicates that respondents did not believe that a wide cross-section of the school had been significantly impacted by the Quest approach, nor had they become committed to work on one or more of the framework components.

Reflective Assessment Findings

Six Quest team members completed the Reflective Assessment questionnaire. This instrument asks respondents to rate their school's convergence with a description of a school representing a "100" on a scale of 0-100 in increments of 10 with respect to each component from the Quest framework from continuous improvement. They are then requested to cite evidence or examples supporting their rating and describe the ways, if any, in which Quest made an impact on their school's development with regard to the component under consideration. Finally, respondents are asked what factors other than Quest have influenced their school's development.

Table 3
Reflective Assessment Descriptive Statistics

Quest Framework Component	N	Mean	SD
Strengthening the Learning Culture	6	87.50	11.73
Broadening the Learning Community	6	85.00	10.49
Sharing Leadership	6	77.50	8.80
Shared Goals for Learning	6	93.33	5.16
Assessing and Demonstrating Learning	6	94.17	4.92
Enabling SMART Learners	6	93.33	5.16

Quest team members assigned the highest mean rating (94.17, SD 4.92) to the degree to which Tinder approximated the description of a school excelling with regard to assessing and demonstrating learning. This item also had the smallest standard deviation, suggesting that team members were in some agreement about their school's status in terms of the component.

Three of the six respondents provided multiple replies when asked to cite evidence of their school's commitment to assessing and demonstrating learning. Noted twice was Tinder's administration of the state mandated standardized test early in the school year and again at the end of the year. As one staff member put it, "We go beyond our district's call for assessing our students on the CAT5, for we pretest and posttest to measure concept achievements."

Also noted in two instances was the lack of time provided staff for reflection on assessment results, despite the school's efforts to produce such data. On the other hand, one respondent reported providing opportunities to allow students to consider the implications of their performance.

Multiple kinds of student data are generated, according to one staff member. Two respondents also indicated that student data of various kinds are shared with school entities such as the site based decision making council.

Professional development is planned around areas of need suggested by student data, reported one Tinder respondent. Another noted that the action research on math instruction and achievement had been inspired by staff analysis of math scores over time; Quest staff introduced Tinder to Eisenhower Math/Science Consortium staff who collaborated in the effort.

When asked in what ways Quest made an impact on the school's growth in terms of assessment, one team member offered a reply with multiple themes. Two respondents mentioned the ideas they had acquired during project events and interactions. Another staff member added that Quest staff had provided research and opportunities for sharing ideas.

According to one respondent, participation in the Quest network had enabled Tinder staff to "look at the successes and failures of others and gain knowledge and inspiration from them." Another team member reported that the project had convinced school staff of the importance of reflection, writing, "We have a much stronger sense of the critical nature of providing time for reflection on self study. We need to take time to *think*."

Student-led conferences had contributed to the school's approach to assessment, said one respondent. Another noted that the action research undertaken in conjunction with Quest around math had made an impact.

Only one respondent replied to the query soliciting information about other factors influencing Tinder's growth in terms of assessing and demonstrating learning. This respondent noted that the principal's involvement with and knowledge of assessment innovations had been a "*strong* reason for our strength in this area."

Receiving the lowest mean rating was the component of shared leadership (77.50, SD 8.80). Four respondents gave multiple answers when asked to cite evidence of the degree to which their school approximated the description of a school committed to sharing leadership. Although two team members reported many forums allowing for faculty, staff, parent, and student input, two respondents expressed dissatisfaction with the extent to which leadership is shared at Tinder. Said one, "I feel as though the concerns I have represented from our faculty have not been given the thought that a shared leader could [give them]."

Two other respondents were more ambivalent, noting that concerns were addressed but that school administrators retained the right to make decisions "they deem best." Another staff member noted being too busy to stay apace of opportunities for shared leadership.

Several challenges to sharing leadership were reported. The principal shared that communication with staff was a priority for her, but that "I still fall short in this area." Another respondent felt that most school community members—"the silent majority"— were not as committed to "be[ing] heard" as were others. Yet another felt that time for participating in shared decision making was a concern.

On the other hand, one respondent reported that teachers "take an active role in school leadership through committees and council work . . . Student leadership is encouraged and very active. It is mentored through the leadership program and student council."

Only three team members replied to the query about what ways Quest had made an impact on shared leadership at Tinder. Two comments indicated that Quest had reinforced the importance of including student voice in decision making and leadership. As one respondent said, "We have learned through student-led conferences to really listen to our children . . . To listen to what they say, how they say it, and sometimes what they don't say." A third respondent reported that Quest had increased awareness of the "need to keep everyone involved" and had provided "tools to do so."

Professional Learning Community Findings

In March 2000, Tinder staff completed a post-test of the *School Professional Staff as Learning Community* survey developed by Hord (1997; Meehan, Orletsky, & Sattes, 1997). This instrument consists of five main subsections: shared leadership, shared visions, collective creativity, peer review, and supportive conditions and capacities (Cowley, 1999). Subsections contain several individual items respondents are asked to rate using a 5-point Likert-type scale, with anchor points of low (1) and high (5). However, the field test of the survey revealed that it measures one overall construct rather than five distinct factors (Meehan, Orletsky, & Sattes, 1997). This construct could be described as the extent to which school staff constitute a supportive professional learning community. Therefore, an overall score is calculated for the instrument; the higher the score, the more respondents feel their school is a positive learning community. The instrument contains 17 items, and the overall score may range from 17-85 points.

The mean post-test score was somewhat lower than the February 1998 pre-test score. The pre-test score (65.00, SD 12.18) indicated that Tinder faculty believed they were a professional learning community in many ways, although they had room to grow. The post-test score of 62.41 (SD 10.57) was 2.59 points lower than the pre-test score.

Table 4
***t* Test Results for the Professional Learning Community Instrument**

Administration of Professional Learning Community Instrument	N	Mean	SD	*t*	Sig.
Pre-test Total	22	65.00	12.18	.696	.490
Post-test Total	17	62.41	10.57		

A *t* test of total Professional Learning Community pre- and post-test scores revealed that the differences were likely not attributable to chance. It should be noted that the assumptions of the *t* test were violated in this study. The sample was not random, nor was it assumed that the data were drawn from a normally distributed population. Phillips (1982) contends, however, that "since those assumptions now appear to be far less important than originally thought, the recent trend toward increasing use of distribution-free tests is currently being reversed" (p. 139). Likewise, Glass and Hopkins (1984) report research suggesting that violation of the assumptions of normality and homogeneity of variance has little impact upon the robustness of *t* tests. For these reasons, Quest staff chose to use the *t* test to explore the statistical significance of pre- and post-test differences on the Professional Learning Community instrument.

The *t* value of .696 was not significant at the .05 level of statistical significance. In other words, the difference in pre- and post-test scores were more likely due to chance than to a substantive change in Tinder as a learning community.

California Achievement Tests, Fifth Edition

The California Achievement Tests, fifth edition (CAT5), are a battery of tests measuring students' development in reading, language, math, spelling, science, social studies, and study skills. Normed in 1991 and published in 1992, the CAT5 is available as a Complete Battery and a shorter, less reliable Survey Battery. The Complete Battery is administered to students in grades 2 through 6 at Tinder Elementary. According to Nitko (1998) and McMorris, Liu, and Bringsjord (1998), the test possesses adequate validity and reliability; hence, CAT5 scores serve as useful indicators of student achievement.

Tinder CAT5 scores from spring administrations of the test were analyzed for 1997, 1998, and 1999. Data for spring 2000 were not available at the time of this writing. For each grade level tested, mean national percentile scores were generated for each CAT5 area subtest. Total reading, total language, total math, and total battery scores were also calculated. CAT5 descriptive statistics were generated for the whole school, as well.

For Tinder as a whole, national percentile scores dipped somewhat during the 1998 school year (see Table 5). However, scores for many CAT5 sections were higher in 1999 than in 1997, including reading vocabulary, reading comprehension, language mechanics, total language, math concepts and application, the total reading and math battery, and social studies. Scores on the total math battery declined a bit in 1998, but closely approximated 1997 levels in 1999. Mean national percentiles increased steadily between 1997 and 1999 on the total reading battery. Science percentile scores remained stable during 1997 and 1998, but then increased in 1999. Differences between 1997 and 1999 mean national percentile scores ranged from .75 percentile points for the math concepts and application section of the CAT5 to 4.44 on the science section.

Scores for other sections on the CAT5 decreased somewhat. Mean national percentiles were a bit lower in 1998 than they had been in 1997 for the language expression and spelling sections of the test. Scores climbed slightly for these sections in 1999 but did not reach their 1997 levels. Math computation scores declined somewhat each year, although only by 1.79 percentile points.

CAT5 mean national percentile scores for second grade show steady declines between 1997 and 1999 in all areas except math concepts and application, total math battery, total core area battery, word analysis, science, and social studies (see Table 6). In these six sections, scores fell between 1997 and 1998, and then rose somewhat in 1999, although not to their previous levels. Scores dropped from between 4.07 (math computation) percentile points to 14.37 (science) in CAT5 areas showing steady decline.

Table 5
Tinder Elementary CAT5 Mean National Percentile Scores, 1997-1999

CAT5 Section	Administration Year	N	Mean	SD
Reading Vocabulary	1997	488	63.47	28.16
	1998	532	62.56	27.50
	1999	505	64.75	25.93
Reading Comprehension	1997	487	65.51	29.90
	1998	532	64.52	29.05
	1999	505	66.72	28.93
Reading Total	1997	487	65.75	28.80
	1998	532	66.38	40.64
	1999	505	67.49	27.46
Language Mechanics	1997	488	69.49	28.34
	1998	532	68.28	27.99
	1999	503	71.29	27.06
Language Expression	1997	488	66.09	47.68
	1998	532	62.59	30.02
	1999	504	65.28	29.97
Language Total	1997	488	68.08	29.89
	1998	532	66.74	29.21
	1999	503	69.54	28.40
Math Computation	1997	490	66.46	28.84
	1998	532	65.93	27.34
	1999	504	64.67	28.75
Math Concepts and Application	1997	489	72.16	27.25
	1998	532	70.49	27.59
	1999	504	72.91	26.18
Math Total	1997	489	71.96	27.71
	1998	532	70.47	27.66
	1999	504	71.51	27.48
Total Battery	1997	487	70.15	29.01
	1998	532	68.72	28.47
	1999	503	71.44	27.37
Spelling	1997	488	64.56	43.80
	1998	532	64.20	44.40
	1999	505	61.62	30.36
Science	1997	488	66.65	27.61
	1998	531	66.40	26.54
	1999	504	71.09	25.84
Social Studies	1997	487	67.59	27.25
	1998	531	65.95	27.46
	1999	504	69.20	25.85

Table 6
Tinder Elementary Grade 2 CAT5 Mean National Percentile Scores, 1997-1999

CAT5 Section	Administration Year	N	Mean	SD
Reading Vocabulary	1997	101	66.83	25.81
	1998	113	59.02	27.10
	1999	99	58.59	26.51
Reading Comprehension	1997	100	72.22	28.35
	1998	113	67.05	31.32
	1999	99	66.43	30.27
Reading Total	1997	100	72.45	27.33
	1998	113	71.44	70.03
	1999	99	65.25	29.72
Language Mechanics	1997	101	75.12	23.30
	1998	113	70.26	26.03
	1999	98	72.47	26.98
Language Expression	1997	101	72.22	26.60
	1998	113	66.35	28.41
	1999	99	65.21	29.94
Language Total	1997	101	76.00	24.09
	1998	113	69.84	26.47
	1999	98	70.27	28.09
Math Computation	1997	101	72.24	24.77
	1998	113	70.00	25.63
	1999	99	68.17	28.30
Math Concepts and Application	1997	101	78.68	23.54
	1998	113	71.10	28.51
	1999	99	76.39	25.63
Math Total	1997	101	78.67	23.46
	1998	113	72.96	27.40
	1999	99	75.72	26.91
Total Battery	1997	100	78.31	24.36
	1998	113	71.00	28.77
	1999	98	72.82	27.14
Word Analysis	1997	101	61.54	26.29
	1998	113	63.46	27.85
	1999	99	60.30	29.31
Spelling	1997	101	73.16	75.07
	1998	113	64.32	55.14
	1999	99	58.79	30.29
Science	1997	101	77.40	25.29
	1998	113	69.15	26.69
	1999	99	74.44	25.92
Social Studies	1997	101	75.30	26.55
	1998	113	70.64	30.25
	1999	99	73.13	26.11

Table 7
Tinder Elementary Grade 3 CAT5 Mean National Percentile Scores, 1997-1999

CAT5 Section	Administration Year	N	Mean	SD
Reading Vocabulary	1997	106	65.03	29.74
	1998	115	66.57	29.41
	1999	103	69.48	26.26
Reading Comprehension	1997	106	62.39	30.47
	1998	115	65.22	29.70
	1999	103	70.33	29.27
Reading Total	1997	106	64.57	30.04
	1998	115	67.19	29.90
	1999	103	71.60	27.96
Language Mechanics	1997	106	62.66	30.26
	1998	115	60.01	30.47
	1999	103	65.82	28.75
Language Expression	1997	106	66.83	32.66
	1998	115	65.60	31.68
	1999	103	68.11	32.01
Language Total	1997	106	65.88	31.94
	1998	115	65.01	31.38
	1999	103	68.09	30.47
Math Computation	1997	107	62.81	27.82
	1998	115	68.59	27.02
	1999	103	68.62	26.03
Math Concepts and Application	1997	107	69.49	27.20
	1998	115	69.62	28.70
	1999	103	74.15	22.85
Math Total	1997	107	69.37	27.69
	1998	115	71.28	28.80
	1999	103	74.28	24.39
Total Battery	1997	106	67.74	30.50
	1998	115	69.46	30.20
	1999	103	72.81	27.74
Word Analysis	1997	106	59.14	30.90
	1998	115	62.18	30.55
	1999	103	65.09	29.07
Spelling	1997	106	57.77	33.48
	1998	115	60.46	32.74
	1999	103	64.02	29.25
Science	1997	106	66.20	26.82
	1998	115	67.90	26.09
	1999	103	73.60	24.45
Social Studies	1997	105	68.18	26.06
	1998	115	66.40	25.38
	1999	103	73.10	24.28

Tinder third grade CAT5 scores reveal a pattern very different from that found in second grade scores (see Table 7). Third grade mean national percentile scores increased consistently between 1997 and 1999, with the exception of language mechanics, language expression, total language battery, and social studies sections. In these areas, scores declined somewhat in 1998, then exceeded 1997 achievement levels in 1999. Increases for all areas ranged from 1.28 percentile points in language expression to 7.94 points in reading comprehension.

All 1999 fourth grade CAT5 scores were higher in 1999 than they had been in 1997, most increasing steadily (see Table 8). Mean national percentiles for math computation, math concepts and application, total math battery, spelling, study skills, and social studies rose in 1998 and then declined somewhat in 1999, although remaining higher than in 1997. These scores increased between 3.72 percentile points (science) and 9.32 points (total math battery) between 1997 and 1998. Declines for these areas ranged from 2.11 percentile points (math concepts and application) to 5.29 percentile points (spelling). For those sections in which Tinder fourth graders showed consistent improvement between 1997 and 1999, mean national percentile increases ranged from 4.29 percentile points (reading comprehension) to 8.22 (total language battery).

Overall, Tinder fifth grade CAT5 scores increased in most areas (see Table 9). Reading vocabulary, total reading battery, language mechanics, science, and social studies all increased steadily between 1997 and 1999. Increases for these areas ranged from .37 percentile points (language mechanics) to 15.81 (science). In another five CAT5 sections, mean national percentiles fell in 1998, then rose in 1999. In addition, scores for all five areas in 1999 were higher than 1997 scores (reading comprehension, total language battery, total core area battery, spelling, and study skills).

Two areas showed consistent decline over the three years, however. Math computation scores in 1999 were 7.99 percentile points lower than they had been in 1997, and total math battery scores were lower by 4.82 percentile points. In two other sections, scores dipped in 1998 before rising in 1999, although not reaching 1997 levels. Language expression scores were 13.96 percentile points lower in 1998 than in 1997; in 1999, mean national percentile achievement had increased by 8.48 points. In 1998, math concepts and application scores dropped by 5.57 percentile points then rose by 4.09 points in 1999.

All 1999 CAT5 mean national percentile scores were lower in 1999 than they had been in 1997 (see Table 10). In all but the spelling section of the test, scores dropped in 1998, then increased in 1999, many nearing 1997 achievement levels. Declines in 1998 ranged from 3.03 percentile points (language mechanics) to 12.92 points (math computation). Scores rose again in 1999, ranging from a 1.6 percentile point for math concepts and application to 8.36 for math computation.

Table 8
Tinder Elementary Grade 4 CAT5 Mean National Percentile Scores, 1997-1999

CAT5 Section	Administration Year	N	Mean	SD
Reading Vocabulary	1997	102	63.01	24.88
	1998	115	66.28	24.73
	1999	100	67.63	23.50
Reading Comprehension	1997	102	64.56	30.03
	1998	115	68.32	24.81
	1999	100	68.85	29.94
Reading Total	1997	102	64.84	27.32
	1998	115	69.09	23.77
	1999	100	70.27	26.56
Language Mechanics	1997	102	63.94	31.55
	1998	115	68.21	27.13
	1999	100	71.08	25.26
Language Expression	1997	102	55.74	31.42
	1998	115	61.94	28.01
	1999	100	63.15	30.22
Language Total	1997	102	60.54	32.71
	1998	115	66.34	27.85
	1999	100	68.76	27.77
Math Computation	1997	102	61.09	32.32
	1998	115	69.74	27.07
	1999	100	66.13	27.36
Math Concepts and Application	1997	102	69.44	28.70
	1998	115	77.00	23.52
	1999	100	74.89	27.02
Math Total	1997	102	67.00	30.34
	1998	115	76.32	24.36
	1999	100	73.38	26.63
Total Battery	1997	102	64.30	30.62
	1998	115	71.66	24.59
	1999	100	72.32	27.35
Spelling	1997	102	59.28	32.13
	1998	115	68.38	29.21
	1999	100	63.09	31.11
Study Skills	1997	102	67.16	25.94
	1998	115	75.59	20.23
	1999	100	73.19	22.00
Science	1997	102	66.45	27.20
	1998	115	70.81	24.29
	1999	100	70.84	25.94
Social Studies	1997	102	65.79	29.52
	1998	115	69.51	28.70
	1999	100	67.04	29.34

Table 9
Tinder Elementary Grade 5 CAT5 Mean National Percentile Scores, 1997-1999

CAT5 Section	Administration Year	N	Mean	SD
Reading Vocabulary	1997	81	62.28	32.65
	1998	99	63.33	27.17
	1999	108	68.37	24.38
Reading Comprehension	1997	81	65.46	30.05
	1998	99	63.13	29.01
	1999	108	68.31	27.32
Reading Total	1997	81	64.41	29.34
	1998	99	64.93	27.79
	1999	108	70.03	25.28
Language Mechanics	1997	81	74.16	26.30
	1998	99	74.17	26.54
	1999	108	74.53	26.76
Language Expression	1997	81	72.65	94.83
	1998	99	58.69	30.49
	1999	108	67.18	27.58
Language Total	1997	81	68.88	28.76
	1998	99	67.20	30.22
	1999	108	71.93	27.24
Math Computation	1997	81	55.48	27.52
	1998	99	53.62	27.13
	1999	108	47.79	25.04
Math Concepts and Application	1997	81	72.30	26.77
	1998	99	66.73	27.36
	1999	108	70.82	24.99
Math Total	1997	81	67.13	28.21
	1998	99	62.56	28.01
	1999	108	62.31	27.01
Total Battery	1997	81	69.18	28.23
	1998	99	66.18	28.75
	1999	108	70.48	26.28
Spelling	1997	81	65.87	27.74
	1998	99	64.41	64.81
	1999	108	66.41	29.57
Study Skills	1997	81	68.34	24.24
	1998	99	65.17	26.37
	1999	108	70.67	22.49
Science	1997	81	57.01	26.65
	1998	99	64.13	26.73
	1999	108	72.82	25.17
Social Studies	1997	81	64.45	26.72
	1998	99	65.61	25.45
	1999	108	69.91	24.07

Table 10
Tinder Elementary Grade 6 CAT5 Mean National Percentile Scores, 1997-1999

CAT5 Section	Administration Year	N	Mean	SD
Reading Vocabulary	1997	98	59.77	28.01
	1998	90	56.28	28.10
	1999	95	58.91	27.25
Reading Comprehension	1997	98	63.06	30.10
	1998	90	57.13	29.49
	1999	95	59.05	26.99
Reading Total	1997	98	62.25	29.46
	1998	90	57.11	28.80
	1999	95	59.55	26.46
Language Mechanics	1997	98	72.98	26.99
	1998	90	69.95	27.91
	1999	94	72.56	27.09
Language Expression	1997	98	64.30	29.86
	1998	90	59.15	31.43
	1999	94	62.32	30.25
Language Total	1997	98	69.45	29.25
	1998	90	65.06	30.51
	1999	94	68.43	28.75
Math Computation	1997	99	79.04	25.55
	1998	90	66.12	27.06
	1999	94	74.48	30.08
Math Concepts and Application	1997	98	71.10	29.09
	1998	90	66.65	29.08
	1999	94	68.20	29.99
Math Total	1997	98	77.05	26.80
	1998	90	67.54	28.33
	1999	94	72.62	30.74
Total Battery	1997	98	71.32	29.29
	1998	90	63.94	29.89
	1999	94	68.68	28.77
Spelling	1997	98	67.44	27.02
	1998	90	63.26	28.39
	1999	95	54.98	30.89
Study Skills	1997	98	70.25	27.17
	1998	90	59.33	27.43
	1999	94	62.80	25.27
Science	1997	98	64.22	28.78
	1998	89	57.77	27.81
	1999	94	63.11	26.75
Social Studies	1997	98	63.48	26.06
	1998	89	55.19	24.37
	1999	94	62.27	24.04

Tests of statistical significance were run to discern any significant increases in student performance over several years of Tinder's participation in Quest. Via analyses of variance (ANOVA), only three statistically significant increases at the .05 level in CAT5 national percentile scores were found within tested grades. Only one statistically significant increase was located within the overall school data: Science national percentile scores were higher in 1999 than in 1997 and 1998 (*F* ratio of 4.978, *F* probability of .01). These findings are presented in Table 11.

Table 11
CAT5 ANOVA Results

CAT5 Subsection	df	*F* ratio	*F* prob.	Significant Differences by Test Year
4th Grade Math Total Battery	2 314	3.291	.04*	1999 > 1997
4th Grade Study Skills Subtest	2 314	3.865	.02*	1998 > 1997
5th Grade Science Subtest	2 285	8.646	.00*	1999 > 1998, 1997
Whole School Science Subtest	2 1520	4.978	.01*	1999 > 1998, 1997

* Statistically significant at the .05 level.

Statistical significance alone, however, does not indicate the meaningfulness of findings; rather, it indicates the rareness of findings. The calculation of effect size allows the conversion of statistically significant results into the standard deviation metric, providing a better analysis of practical significance.

With an effect size of $d = .14$, improvements in fourth grade total math battery scores were small. Similarly, fourth grade study skills scores had a small effect size of $d = .16$. The largest effect size of $d = .25$ for increases in fifth grade science scores between 1997 and 1999 was nonetheless small, according to conventional classifications of the meaning of effect sizes (Cohen, 1988). With an effect size of $d = .08$, improvements in science scores for the whole school were quite small.

In sum, Tinder students' achievement showed some gains, particularly in the third and fourth grade trends between 1997 and 1999. But overall, little statistically significant change took place, and declines were found as well, particularly in the second and sixth grades. Where statistical significance was found, effect sizes revealed that such improvements were not substantial.

Quest appears to have had little bearing on standardized student achievement at Tinder, although an improvement trend was noted in the third and fourth grades, and somewhat in the fifth grade. This relative lack of impact is not surprising, however, given that many of the school's efforts undertaken through Quest were not squarely and clearly directed at increasing achievement scores, as school staff found other foci to be of greater relevance.

Test of Cognitive Skills

The Test of Cognitive Skills, second edition (TCS/2), published by CTB/Macmillan/McGraw-Hill, is administered yearly to Tinder students in grades 2 through 6. This standardized instrument is intended to assess general academic ability via four subtests: one verbal; two nonverbal, which are combined for a composite score; and one memory. The nonverbal components of the instrument include items on sequences and analogies. A total score, or Cognitive Skills Index, is also yielded for the entire test. The TCS/2 was normed in 1991 and has not been normed since. Scores are thereby presented as national percentiles by grade. According to Kamphaus (1998), the instrument was developed with sufficient rigor to yield meaningful measures and "sets a high standard with respect to diligent and thoughtful test development procedures for academic ability testing."

The TCS/2 is administered to groups of students and takes approximately one hour to complete. Kamphaus's review of the instrument indicates that administration guidelines for examiners are "clear and succinct" (1998, p. 1027). He also suggests that test items are unambiguous and well organized in response booklets.

The TCS/2 was administered to students in grades 2-6 in 1996, 1997, and 1998. It was administered to students in grades 3-6 in 1999. Higher 1999 scores should be interpreted with some caution; they may be an artifact of the somewhat older students in the1999 sample.

As shown in Table 12, mean national percentile by grade scores on the TCS/2 nonverbal composite rose steadily between 1996 and 1999. The mean difference between 1996 and 1999 scores was 6.86 percentile points. Consistent increases were not observed, however, with regard to the memory subtest, although 1999 means were higher than 1996 and 1998 scores (see Table 13).

Mean national percentiles by grade increased consistently between 1996 and 1999 on the verbal subsection of the TCS/2, rising from 48.52 (SD 31.15) to 55.74 (SD 31.08). The mean difference in scores was 7.22 percentile points. Table 14 displays these data.

As seen in Table 15, mean national percentile by grade scores grew from 52.64 (SD 29.30) in 1996 to 60.25 (SD 29.16) in 1999. This represents a mean difference of 7.61 percentile points.

Table 12
TCS/2 Nonverbal Composite Mean National Percentiles by Grade

TCS/2 Nonverbal Composite Administration	N	Mean National Percentile by Grade	SD
1996	502	54.91	29.61
1997	536	57.54	29.62
1998	497	60.94	28.79
1999	400	61.77	28.22

Table 13
TCS/2 Memory Subtest Mean National Percentiles by Grade

TCS/2 Memory Subtest Administration	N	Mean National Percentile by Grade	SD
1996	502	53.20	30.00
1997	536	56.26	31.28
1998	497	54.49	31.66
1999	402	55.09	30.90

Table 14
TCS/2 Verbal Subtest Mean National Percentiles by Grade

TCS/2 Verbal Subtest Administration	N	Mean National Percentile by Grade	SD
1996	502	48.52	31.15
1997	536	50.33	31.65
1998	497	52.40	31.25
1999	401	55.74	31.08

Table 15
TCS/2 Total Cognitive Skills Index Mean National Percentiles by Grade

TCS/2 Total Cognitive Skills Index Administration	N	Mean National Percentile by Grade	SD
1996	502	52.64	29.30
1997	536	55.72	30.28
1998	497	58.18	29.36
1999	400	60.25	29.16

ANOVAs were conducted to compare the variance between and within groups of respondents based upon the testing year. Three statistically significant differences were located at the .05 level of statistical significance. Tukey HSD post hoc tests were conducted to determine among which of the four testing years the statistically significant differences were located. Statistically significant ANOVA results are presented in Table 16.

As noted earlier with regard to the use of *t* tests to examine differences in scores on the Professional Learning Community instrument, the assumptions of ANOVA were violated in this study. The sample was not random, nor was it assumed that the data were drawn from a normally distributed population or that the samples had homogenous variances. Despite arguments that such violations do not compromise the robustness of ANOVA to the extent previously thought, all findings should be interpreted with caution.

Table 16
TCS/2 ANOVA Results

TCS/2	df	*F*-ratio	*F* probability	Significant Differences by Test Year
Nonverbal Composite	3 1931	5.57	.00*	1996<1998, 1999
Memory Subtest	3 1933	0.87	.46	N/A
Verbal Subtest	3 1932	4.36	.00*	1996<1998, 1999
Total Cognitive Skills Index	3 1931	5.65	.00*	1996<1998, 1999

* Statistically significant at the .05 level.

These data are particularly interesting given changes in Tinder's attendance zone, which combined suburban subdivisions with a public housing project. Unfortunately, student demographic data are not available to disaggregate findings.

With an *F* ratio of 5.57 (*F* probability of .00), mean national percentiles by grade were statistically significantly higher in 1998 and 1999 than in 1996, the year prior to Tinder's participation in Quest. Mean national percentiles by grade on the verbal subtest were also statistically significantly higher in 1998 and 1999 than in 1996 (*F* ratio of 4.36, *F* probability of .00). Finally, with an *F* ratio of 5.65 and an *F* probability of .00, mean national percentiles by grade increased by a statistically significant amount on the total TCS/2: As with the verbal and nonverbal subsections, scores were higher in 1998 and 1999 than in 1996.

Effect sizes for the three statistically significant TCS/2 increases were calculated to determine how sizeable they were. With $d = .09$, national percentiles by grade on the nonverbal component of the instrument were higher by only .09 of a standard deviation between 1996 and 1999. The effect sizes for scores on the verbal subtest ($d = .08$) and the total Cognitive Skills Index ($d = .09$) were similarly small.

In sum, it appears that national percentile increases on the TCS/2 at Tinder Elementary over the course of the school's participation in Quest were likely not due to chance or sampling error. However, the increases themselves were relatively small, accounting for approximately only a tenth of a standard deviation.

ANOVAs were also conducted to determine where statistically significant differences lay within each grade level tested (see Table 17). Second grade scores on the TCS/2 were statistically significantly higher in 1997 and 1998 than in 1996 on the nonverbal subtest (*F*-ratio of 5.57, *F* probability of .00). Although the ANOVA indicated that the increase in third grade scores on the nonverbal composite was likely not due to chance (*F*-ratio of 3.31, *F* probability of .02), Tukey HSD post hoc tests failed to locate any statistically significant differences among testing years. With an *F*-ratio of 3.79 and an *F* probability of .01, fourth grade scores were determined to be statistically significantly higher in 1999 than in 1996.

Significant differences were found with respect to the verbal subtest of the TCS/2 in only the third grade scores. National percentiles by grade were statistically significantly higher in 1999 than in 1996 (*F*-ratio of 3.64, *F* probability of .01).

Statistically significant differences were located in the second, third, and fourth grades on the total Cognitive Skills Index. With an *F*-ratio of 3.20 (*F* probability of .04), scores on the total index were higher in 1996 than in 1997 for second graders completing the instrument. Third graders scored statistically significantly higher on the total index in both 1998 and 1999 than in 1996 (*F*-ratio 3.74, *F* probability of .01). Fourth grade national percentiles were statistically significantly greater in 1999 than in 1996 (*F*-ratio of 4.03, *F* probability of .01).

Table 17
TCS/2 Statistically Significant ANOVA Results by Grade

TCS/2	Grade Level	df	*F*-ratio	*F* probability	Significant Differences by Testing Year
Nonverbal Composite	2	2 299	5.57	.00*	1996 < 1997, 1998
	3	3 445	3.31	.02*	No significant differences by year located
	4	3 385	3.79	.01*	1996 < 1999
Verbal Subtest	3	3 445	3.64	.01*	1996 < 1999
Total Cognitive Skills Index	2	2 299	3.20	.04*	1996 < 1997
	3	3 445	3.74	.01*	1996 < 1998, 1999
	4	3 385	4.03	.01*	1996 < 1999

* Statistically significant at the .05 level.

No statistically significant differences in scores were located on the memory subtest of the TCS/2. In addition, no significant differences were discovered in fifth and sixth grade scores between 1996 and 1999.

Effect sizes were calculated to explore the practical significance of statistically significant findings within grades tested. Within grades, effect sizes were only slightly larger than those for the statistically significant increases for the entire school. The effect size for second grade nonverbal subtest scores was $d = .19$; for second grade total Cognitive Skills Index scores, $d = .14$. For both the verbal subtest and the total index, the effect size for third graders was $d = .16$. In terms of fourth grade scores, the effect size for the nonverbal subtest was $d = .17$ and $d = .18$ for the total Cognitive Skills Index.

Effect sizes were therefore somewhat larger within grades two through four than for the entire school. However, even the highest effect size of $d = .19$ for second grade nonverbal subtest scores is conventionally considered small (Cohen, 1988).

Focus Group and Individual Interview Findings

Personal Impact of Quest

Participants in individual interviews, a faculty focus group, and the Quest team discussion were asked what impact participation in Quest had engendered on the personal and professional level. Respondents offered 25 replies constituting 11 themes. One reply was coded twice as it contained two distinct themes.

Mentioned five times by parent interviewees was the way in which Quest had enabled them to learn more about educational issues, processes, structures, and jargon. Said one such respondent, "I think my involvement in Quest has enabled me to become a lot more reflective about education. I have had the opportunity to be around educators which has allowed me to understand more closely all of the details involved in carrying out the day to day activities that are involved in teaching children. Uh, definitely the exposure to the literature in the educational field has been a very positive aspect of Quest for me." Another commented, "Going to Quest and listening to these people and looking at the different research has given me what I feel at least are the beginnings of foundation of understanding to help people learn and of the educational process." Such insight into the workings of the educational process is important because, as one interviewee put it, "It has helped me understand them and how they operate, and it's helped me to see their relationship with my child. It has also helped me see their relationship with each other and Dr. Baldwin and how that whole process works. I mean that's, that's a real mystery to parents, you know, how things get done in school."

Similarly, in two instances team members reported that the proximity to teachers afforded by inclusive Quest teams had enabled them to establish new relationships and gain insight into teachers' work lives. As one indicated, "I think probably what Quest has allowed me to do is to get

into the mind set of the educator a little bit, not a lot, but a little bit, and to understand that they're people too. They have lives, they have things that they have to do, and you know, the needs that they have as far as their students are concerned. You know, so many . . . when I was a kid you'd look at your teacher and think, 'They don't have a life . . . They stay at school.'"

Focusing on how to share leadership in the school was noted in four instances. The principal, for example, reported that this issue had been of particular concern to her during Tinder's tenure in Quest. She shared, "How do you really share leadership? Delegation of authority seems like a very easy kind of thing or delegation of responsibility. But it's more than that. It's being able, and this is . . . a tough thing to do I've found . . . to step out of the role you're in to become a member, a colleague, and become a member of a problem solving group and say, 'This is where we need to go. Now let's talk about.' I mean, 'We've agreed this is where we need to go. Now let's talk about what it's going to take to get us there for the children. And characteristically administrators are not viewed as people that do that . . . Administrators are viewed as people that tell you what to do, and you either like or you don't like it but, but you don't have a whole lot of voice in it . . . I personally have to remember that there are good ideas out there that aren't mine, because for years administrators were expected to come up with the best ideas and the good way of doing it and that's what leadership was, and that's not what leadership is. Leadership, I have discovered, is trying to get everybody headed north at the same time."

Dr. Baldwin elaborated on the ways Quest had changed her approach to leadership. She reported, "I have learned to step back and to listen to the faculty rather than press my ideas and to not . . .be put on the offensive or the defensive when there is disagreement. And I have learned that that's an okay thing. Yeah, I think I've always felt before that everybody always had to agree and always had to be in step with everything in order to have a good working faculty, and I found out . . . that's not the case. And, that it's not my mission any longer to try to convince everybody to think alike. As a matter of fact it's much healthier and more productive to have people thinking differently because then what you get is this wonderful divergence of ideas and when you can finally marshal all of that and bring it together, then the solutions that you arrive at are really rich and unique."

Participants mentioned three times that they had become more reflective as a result of their involvement in Quest. For one Quest team member, this meant,"It's that kind of thing, when, if we're going to add that [program] what do we take away, and that's part of what this whole business is that I ponder about. I mean you don't go into things blindly any more. I don't simply accept them at face value . . . I try to spend time thinking about the ramifications and what it's going to mean." Another reported a sense of responsibility to think about and share information received at Quest events, although she also felt ambivalent about the depth of her efforts: "But that kind of thing has been very challenging . . . I almost feel . . . just this weight of I need to share this. And so Quest has made me very reflective and very responsible, although I haven't, you know, necessarily felt that I've been affected enough in sharing the parent perspective."

Indicated twice was the way in which Quest had offered validation for participants' perspectives on education and change. Such validation then led participants to feel more confident

about their views and philosophical commitments. According to one team member, "One of the things that Quest has done for me is to validate my perceptions about school leadership and my philosophy about how schools should operate and, and what their focus should .... For a long time I have felt as though I march to a different drummer ... in this school district for a long time .... And so too have other people from other places saying, 'You're right, and this is, this is what ought to be done,' has been very, very reinforcing and reassuring." In addition, "I'm a whole lot more in perspective about those things than I used to be and I think, I think part of it comes from the assurance that that's an okay place to be. I think I shared in one of the rallies, education is the process of going from cocksure ignorance to thoughtful uncertainty, and I'm somewhere on the continuum. I hope [I'm] moving toward the thoughtful uncertainty, but I think I probably came in at the cocksure ignorance one, thinking I knew this is how you do things. Uh, so I think, I think Quest has done that for me."

Mentioned in two instances was the usefulness of Quest presentations on the implications of brain-based research for teaching and learning. Three other comments praised aspects of Quest, including the professionalism of project staff and the opportunities that Quest events provided for reflection on practice. One such respondent reported appreciating "the latest research that they [project staff] could give us in just that little bite sized pieces along the way and then you think about it and you hear it again at the next rally and that really does, it helps me a lot."

The five remaining comments were unique. One team member reported feeling more able and entitled to participate in the educational process at Tinder: "I think that what Quest has done for me it has empowered me to become an active participant in the education as it relates to school, and I think that's had, that's been a very positive impact of Quest." Another suggested that Quest had assisted her in becoming more flexible, noting, "I think it's made me more flexible ... I think a result of that is due to AEL and Quest, that, that I'm more apt to be flexible ... I'll be flexible and try this or anything that's going to help ... my students." A parent participant indicated that involvement in the project enabled her to communicate more effectively with clients: "I think the information that I've gotten from Quest has allowed me to communicate to the students I have (because I teach on a part time basis),[it] has allowed me to communicate with them probably more on a one-on-one basis. And I've used some of things that I've learned in Quest, some things on brain-based learning ... and that has really helped me. And I think too, uh, when I produce a television program for the education department, I understand a lot better what's going on there and some of the language they use and the ideas and where they're coming from."

Finally, one team member reported designing personal professional development around an area discussed at Quest events: "I have professional development I'm working on this summer. One of my professional development days will have to do with technology and trying to enhance my teaching and the students learning through the, you know, the Internet. I have used the Internet for research this year as a result of what I learned, was learning and watching being done at Quest."

In addition, two respondents discussed the personal impact implementation of student-led conferences had made. A parent noted that listening to her child's presentation had "allowed me to

understand what my [child] goes through on a day-to-day basis . . . You know, we've gone through parent conferences, you know, for the last four years, and you get a lot of information out of those from the teacher. But you don't really hear much from the child. And with the student-led conferences done by Mr. Cook my [child] has had to speak up for himself for the first time in five years."

Another Quest team member described how student-led conferences had been a source of professional development: "The student-led conferences have just been really awesome. I did, I had a graduate class at [a local university], and for my master's . . . I did my whole research in that class based upon those and so it was great to have, have a lot of background information so that when I implemented in my classroom, I felt I was preparing my students better than I could have otherwise."

Two respondents also noted ways in which Tinder's focus on enabling SMART learners had affected them individually. For one interviewee, this focus led her to better understand one of her students. She reported, "I think it also forces teachers to look at the SMART ways and what each child has that might be different. I'm thinking about one of my little boys that, you know, is not able to do paper pencil activities and . . . I know in the past you know that that was your only measure. You would just have chalked this kid up, and yet when you give him the same thing orally you know that he has learned and he has obtained that information and that he is a very SMART learner. But he just learns in a different way."

One teacher discussed having personally designed a weekly reflection for students about the meaning of SMART learning. It was recounted as follows: "We have really put that into practice. The weekly reflection that I have shown with . . . I think often in education, I, we, give students things and expect them to understand. But I, we, really had to break apart SMART. And still I have fifth graders at this school —I think you know I have a lot of really above average intelligence—and so I had, we had to really, really break down those parts and understand what successful meant and motivated and so forth, but that, that was important."

Impact of Quest on the School

General Impact of Quest

Tinder staff reported the impact Quest had made upon the whole school. Fourteen such comments were made, falling into one of seven categories of themes. Mentioned five times was the helpfulness to faculty of information and research presented by Quest staff. "[Quest staff] have time to read them and tell us the important things. And then if we want to know more, we can go read the book," said one respondent. Another reported, "I think for, at least as far as the teachers are concerned, they're bombarded daily with new information. You know, there's always a new magazine, there's an article . . . I think that what Quest has done is take that bombardment and taken that information and put it in . . . useable areas, or in useable language, or in groupings or, you know, the things that are useful on a day-to-day basis . . . It really has allowed them to take the information that

they wouldn't, couldn't, normally get to see, read . . . Well, what Quest has done is not only have you given us the news bulletins, but you've given us, you know, the information that goes with it. And you can pick and choose what you, what you want and what will work within the framework you already have."

Two respondents cited a list of needs assessment and self-analysis techniques of which they had learned from Quest and used at Tinder. Two others cited the Data on Display strategy as having been a useful way to work collaboratively. One described how this technique was used at Tinder: "The one thing that stands out in my mind is the dot system that, I don't know what you all call it, but, like, if there's something that has to be decided, instead of us all just raising our hand and saying what we think and then have to decide what all of us thought, we had the questions and or the list or whatever on the papers. We go in and put a dot on the ones we think is most important, and the ones that has the most dots is obviously . . . a picture in our mind of what we think is the most important in our school. And I think that's the one thing that our faculty has used several times to solve a problem on what's the most important thing in teaching math or which is more important math or science or what do we need for . . . our consolidation plan or for choosing PD for our school."

Efforts to include parents more meaningfully in the life of the school resulted in increased parent involvement, according to two interviewees. One such respondent observed that alterations to the parking lot made her feel more welcome at Tinder. She said, "As I pulled into the parking lot just this afternoon I saw that . . . one of the changes that we've had in the school as a result—and I know it's a result of Quest because it happened right after one of our Quest rallies—is the parking spaces, parent parking spaces, were put closer to the door. Before it was the principal and the secretary and the administrative staff, and then the teachers and the parents could park at the end of the parking lot, which I didn't necessarily view as negative. And it wasn't until today that when I pulled up and parked right here next to the door I realized, wow, this is something that has been done to make us feel that we're important and that we're special . . . today I thought these are little things that are done in order to build our trust, to be able to build that community, that relationship."

The remaining three replies were unique. One respondent reported that Quest had encouraged team members to engage in reflection as a group, elaborating, "I think that is one of the big impacts that Quest has had. It's made us stop and think. And it's made us stop and think as a group, as Quest members and as individuals, you know, 'What is my impact on the school? What can I do? What am I capable of?'"

Another interviewee suggested that Quest had reinforced the significance of professional development, which had enhanced Tinder staff's professional lives. As she put this, "I think in a broad sense it's helped me to understand the importance of professional growth, not just for myself, but for the faculty, and that the ideas and the things that we do here don't have to come from, from the principal. They need to come from other places and other people. And having a team involved in Quest and what we've learned uh, has had an impact. And I have, you know, my teachers and the

parents that have been involved in Quest are different people as a result, and I think Quest has given them the courage and the knowledge to do things differently than their colleagues."

One respondent described the ways in which information provided at Quest events about the applications of findings from brain-based research has been incorporated into the school. "I know certain teachers are more conscious of these students, making sure that they're hydrated and that they have protein, you know. We always make sure they have healthy snacks and things like that . . . what we've learned in brain-based research."

Use of the SMART Learner Theme

Interviewees also offered 26 comments constituting seven categories of themes about the use of the SMART learner theme throughout the school. Eighteen comments simply named or described the various ways SMART had been woven into the school culture. Three respondents each reported that the SMART theme had been displayed in myriad ways on bulletin boards throughout the school, a parent wrote a monthly column in the school newsletter based on the theme, and several workshops had been conducted by parents for parents on ways they could incorporate insights from the theme into their parenting. Mentioned twice each were the inclusion of SMART as a theme throughout the yearbook, the renaming of the theme to become more inclusive ("We are Totally SMART!"), the SMART creed recited daily, and SMART stationary. One respondent also reported that Totally SMART t-shirts had been created and distributed at the school.

However, according to two interviewees, the adoption of the theme took some time. As one phrased it, "I think that, that probably the children at first did not understand, and it's difficult for the parents to understand what SMART is. And it's taken a while for that to really take hold for the kids to understand the individual parts of SMART and, and to understand what that means as a whole." In addition, one other respondent reported that the SMART learner creed recited daily was often read too quickly over the intercom, not providing students enough time to reflect on its meaning.

Three comments, on the other hand, suggested that the concept now permeates the school. According to one interviewee, "From listening to Nadia this morning when she was mentioning how her child, you know, when he was sharing something with her in the grocery store and then he says, 'Well, I'm being thoughtful, aren't I?' You know, I think that it permeates . . . or trickles down, whatever you want to call it, you know, from the teacher to the student, you know, to the parent . . . I think that the parents and the teachers and the students will be more on the same, same wave length and be able to understand more what being SMART is . . . I think that it will just become a part of us—I mean, it has to an extent already in one year's time—but I think four years down the road it will just be, we won't remember what it was like without it, maybe."

Another respondent explained, "I think . . . that's a common theme, that cuts across all levels of instruction, kindergarten to sixth grade, across all adults regardless of their role or mission in the school, and that if you ask someone about the school, 'What's it all about?' the children might say 'SMART learners,' or they might say, 'Totally SMART.' It gives an identity, if you will, and I think

it also, it also gives a framework for doing things in the classroom . . . we're doing this because we're responsible, we're doing this because we're autonomous, we're doing this because we're motivated. It gives us, it gives us a framework for looking at each of those things too . . . what is motivation all about? I mean that's, that's a study in and of itself."

Two respondents discussed ways they helped students consider the meaning of the acronym. One reported that classes set aside time to discuss what each word in SMART meant. Another described a weekly reflection sheet a teacher had developed for students. Items asked students to write about ways in which they had been successful, motivated, autonomous, responsible, and thoughtful during the week.

The remaining two replies were idiosyncratic. One respondent noted that the principal often used the acronym during interactions with students. And one reported conducting graduate research at Tinder to explore whether a decline in assignment alerts would result from the schoolwide focus on SMART. However, at the time of the interview, data were not yet available for her to assess this.

Use of Student-Led Conferences

Sixteen comments fell into six categories about the ways student-led conferences had affected Tinder. Respondents made four general positive observations about student-led conferences. For instance, one such interviewee reported, "Going to these Quest rallies has really been a good avenue for me to learn new things, because without some of those I don't know, you know, I probably would still be having the parent teacher conferences that I never did like any way." Another shared that student-led conferences had been a revelation to her: "And the student-led conferences has been a tremendous thing that has come out of Quest. I had never even heard of such a thing until Quest."

Four comments suggested that the adoption of the SMART learner component of the Quest framework had inspired Tinder's use of student-led conferences. Said an interviewee, "And with the SMART, I think student-led conferences come directly out of that, especially in being autonomous for everything they do, because they're in charge of the conference, and being responsible." Another respondent, apparently not directly involved in conducting student-led conferences, noted that they appeared to reinforce the 'T' in SMART: "I think the T is [part of it] too. I think one of the things you all were doing with the student-led conferences that was so valuable is that whole business of reflection."

Two Tinder staff reported that those teachers piloting student-led conferences would use their experiences to train other teachers in the building. Similarly, three interviewees shared the ways in which the innovation had been adapted to better meet their needs. One, for example, described a colleague's use of both student-led and traditional parent teacher conferences. She said, "I mean, she's talked about next year maybe not doing the student-led conferences the first quarter, [she'll just] go ahead and do the parent teacher conferences because there is such a difference between primary and intermediate that the parents needed some feedback maybe from the teacher. And then she had talked about doing the parent one, the parent teacher first quarter and then doing the student-

led second/third quarter." Another described her revisions of the process: "Well, the first time that we had them I think that some of the parents were a little nervous and the kids were nervous . . . We'd prepared the portfolios, and we did the reflecting, reflect and justify on the pieces that they chose and then graphed their grades so they could see . . . That was an excellent visual. And they were able to set goals and I had, and after each set of conferences I would revise, I would go back and reflect and see how you know these things worked . . . perhaps revise their goal setting sheets and try to make it, try to facilitate it a little bit more, and help them to focus and instead of just saying, 'What goals are you going to work on?' 'Well, what goals are you going to work on, and how are you going to do, what are you going to do in order to achieve those goals?'"

Parent attendance at conferences had improved, according to two Tinder staff members. One shared her sense of this: "I'm not aware of any parents that didn't come. And when we have this, the teacher conferences, we maybe will have four or five that don't show up from the whole classroom but I'm thinking that they had a really high attendance rate."

Preparing students for leading conferences with their parents was a learning opportunity in and of itself, indicated one respondent, reporting a colleague's experience: "I think that one of the teachers in the primary had said that she was, she was more aware of the terminology that she used because she wanted her students to be able to convey that to her parents. And you know, how could they if she didn't use the word proofread and edit and those kind of things that they probably wouldn't with their parent either? So she said, 'It just really forced me to make sure that they were going to have the information they needed to present that to their parents in a meaningful way.'"

Use of Math Action Research

During the 1999-2000 school year, Tinder staff noticed a decline in students' math computation scores on the spring administration of the CAT5, the state-mandated standardized achievement test. Puzzled by the decrease in scores and the simultaneous gains made with regard to math concepts, several staff began to investigate. As reported in the faculty focus group, they administrated questionnaires to students and teachers in an effort to isolate the factors effecting the scores (see Appendix for the full transcript of teachers' account of this venture). However, the data from these identified too many variables for teachers to address, so staff requested assistance from Quest staff.

Quest staff in turn referred the concerned teachers to staff at the Region IV Comprehensive Center located at AEL, who led Tinder in an action research project focusing on math computation. Comprehensive Center staff interviewed a sample of Tinder teachers about their math instruction, examined the student data, and analyzed the questionnaires completed by school faculty. In addition, Tinder staff participated in a half-day professional development session on various instructional techniques that could be used to enhance students' computational skills.

Teachers' analyses of test data also revealed several specific areas of concern, including computation with fractions, decimals, and place value. As a result, teachers now often begin their lessons with a review of these areas, engaging students in solving computation problems.

Teachers also discovered that the issues with declining computation scores were not endemic to particular teachers or classes. Rather, it appeared to be a schoolwide challenge.

At the time of the case study site visit, however, test data were not yet available for teachers to assess the results of their efforts. Nonetheless, they reported seeing some changes in students' performance. Said one teacher, for example, "Now myself, since that [professional development] meeting, everyday I start my math class . . . review problems on the board . . . and I do see it, they're getting better at them. When we first [started], some of them were only getting two right. And now most of the class are getting all five right. And I vary what I ask. I ask geometry questions, and each of the five are different. I don't, like, have five addition . . . subtraction, and multilplication."

Student Outcomes

Outcomes of Student-Led Conferences

Interestingly, interviewees made relatively few comments about student outcomes that they could attribute to participation in Quest. Respondents made nine comments, falling into four categories, about student outcomes of involvement in student-led conferences. Three brief comments indicated that students simply enjoyed the chance to present their work. Students felt more ownership for their school work as a result of leading conferences with their parents, reported two interviewees. For instance, one Quest team member suggested, "It makes sense. If the child is saying, 'You know, I really need to work on this,' as opposed to the teacher saying to the parent that your child really needs to work on this . . . It makes sense that they would be more [involved]."

Two team members indicated that students engaged in more reflection about their work due to their participation in student-led conferences. Asked about student outcomes from the conferences, one individual replied, "I don't know, unless it's more of an ability to reflect on what we've done. Because I know they did quite a bit of reflection work, so that's something that probably we don't slow down and take time to do often, and I don't know that they do [it] often. But maybe just right after that conference they can reflect on their work from the quarter."

Two respondents commented that students now developed improvement plans for themselves, one of whom additionally reported that students were more responsible for their work as a result of the student-led conferences: "They keep up with their work better, you know. I have them keep their things in a 3-ring binder . . . I think that they're more responsible to keep up with their work and it's given them an area to organize their things. I've been very pleased with it. I think that, I've been, it's helped me, which has enabled them to be better goal setters, because usually, you know, you set goals at the beginning of the year and well, you don't look at them, you know, until the end of the year. You don't go back and look at them like you should, and I've been guilty of that.

And this has, you know, we've reviewed them frequently and they have a copy in their folder of their, of their goals and check it . . . I've been very excited about that."

SMART Learner Outcomes

Interviewees discussed student outcomes from the school's adoption of the SMART learner theme, making five comments falling into four categories of themes. Two respondents reported that students appeared more responsible. One, for instance, said, "I think that probably students are not as afraid to take responsibility for things they've done, both good and bad."

Another respondent indicated that students seemed increasingly thoughtful as a result of Tinder's focus on the SMART learner component of the Quest framework. She reported, "I think that they are probably a little more thoughtful in the things that they say and what they do. Uh, I think in some ways they probably maybe look at the entire education process or their entire class a little differently than they did before, you know. How do these things impact other people? Most kids are really self-centered, and it's really difficult to get them to look outside themselves. And I think in some ways this has gotten them to look outside themselves at other people in the class. And at least I can see some of that going on in my son's class."

One respondent each reported that students were more confident in their ability to learn new material and used the words contained in the SMART acronym.

Benefits of Network Participation

Interviewees reported a variety of benefits derived from the Quest network of schools, making 24 comments falling into 11 categories of themes. Mentioned six times was the way in which the network facilitated the exchange of ideas, coupled with the inspiration to implement the most useful of these. For instance, one such respondent said, "Mansfield and some of the other schools that we've talked to give us a direction; they give us ideas; they give us feedback. I mean we look at some of the smaller schools that have fewer resources and have different population[s] than we have, and I mean, they're a world apart from where we are, and yet they achieve so much and they do indeed have a sense of community inside their school. I mean we envy, you know, some of the things they've been able to achieve." Reported another, "And I think that the ideas that those schools have brought into Tinder and just the examples that they have shown us, you know, what is possible, has really given us kind of a foundation, if not something to head toward, a real goal that we can do. If somebody else can do this, so can we."

Similarly, five interviewees noted that the network enabled participants to share ideas and resources. One such respondent reported, "I've talked to . . . Nathan, and I've talked to Helen and Mrs. Vincent, and getting to know them as individuals always helps, and you're not afraid to offer suggestions or offer to help. If I know someone on a personal basis, you know, I'm willing to say, 'Hey, anything I can do please let me know.' I'm willing to put myself out there." For another participant, the various means of communication were helpful. She said, "The e-mail business is

wonderful and the listserv too. I mean, I don't always respond when those things come out, but I know that there are people out there thinking and sharing ideas and using it as a sounding board, and that's a good thing too. And sometimes I, I share some thoughts but sometimes I, I just read what's out there too. But I've taken lists of things off there and, and used some of that information, followed up on it, went to a website that was, that was listed as a good resource, or looked at grant possibilities because they've been listed, those kinds of things. And then of course . . . from the network is resources that people are using in their schools that we hadn't heard of that we know, we have, have books that we purchased as a result, or CD's."

Two respondents reported that a benefit of the network had been the provision of information about a variety of school improvement strategies. Schools could then choose from them the most appropriate strategy to meet their specific needs. As one interviewee put it, "It's certainly given us a lot of things to think about. And some things that are working for other schools are not necessarily going to work for us, and that's good. I mean, we can, we can pick and choose from the things we've learned from the network of schools."

Another two respondents reported that the network allowed them to see their schools from new perspectives. For instance, one Quest team member shared, "I think that . . . the network . . . provided some recognition of the things that we're doing at this school that to us seem common place and other people find to be very extraordinary. I mean, I think, that was very supportive. It's, you know, [as if network participants are saying], 'Don't give up what you're doing. That's a special kind of thing you're doing." You know, I hadn't thought about it that way. So it's given us, it's given us that."

Two interviewees expressed their admiration for other network participants. As one phrased this sentiment, "I have such admiration, not only friendship, but admiration, for the people that I have met in the network. The Saint Margaret people impressed me so. They've got their own set of constraints, you know, and the things that they're doing within their mission is really impressive. So there hasn't been anyone that I haven't learned from in the network."

A visit from another network school was mentioned in two instances. Reported one faculty member, "[A fourth grade teacher from Bowman] came and spent some time with me and we shared some things and I shared with her the things that I was doing you know as far as the reflecting and she took copies of different things and my parent letter that I do each Friday and the scoring rubric and you know just everything that's involved and what I give the children for that to help them with their reflecting and communicating with parents and we just, we shared some things."

The remaining comments were idiosyncratic. One respondent expressed appreciation for the opportunity to interact with students participating in the Quest high school network. Another reported that the network helped support the reflection necessary for continuous improvement. Relationships within her Quest team had been strengthened as a result of participation in the network, noted a team member.

One respondent reported that although Quest staff used a variety of "buzz words . . . I just had to get through the language to get to the meat of the process." Later she added that she was pleased to be included in Quest as a parent; nonetheless, she felt that the project was intended as a "professional type of networking organization."

Three additional comments were made by interviewees about the value of networking with schools from states other than Kentucky. Two reported that meeting participants from other states allowed them to look beyond their own particular education contexts. As one put it, "I think that in Kentucky we have a mind set — and sometimes it's good and sometimes it's not good — we think we're on the top of the heap as far as education reform. And in some ways we probably are, and in other ways we're really behind, and they don't recognize the fact because they're, they're constantly looking at themselves and comparing themselves to other schools in the area or other schools in the state. Well, they're all working with the same materials. When you look at, you know, at a school that's in Georgia, or one that's in Tennessee, or one that's in West Virginia, they have a whole other set of rules they have to live by, and you know, resources that they can use, and you can look at that and draw inspiration from it."

Differently, another respondent felt that networking across states revealed the similarities between schools. "The value [of networking with schools outside of Kentucky] is that we're all in the business of helping children learn, and we can all learn from one another because none of us has the corner on all the right ideas. And although situations may differ, we can still learn from one another."

CONCLUSIONS

The data collected suggest several conclusions about the impact participation in Quest had upon Tinder Elementary.

Although the school was highly involved in the project in many respects, including attendance at every Quest gathering, there were some limitations to their participation. For example, only one of the two school administrators attended Quest events; the school hosted a visit from another Quest school, but did not participate more fully by assisting a sister school implement an effective practice; and project team members did not believe faculty and staff experienced a dramatic change in their view of school improvement.

Tinder undertook a few initiatives which they attributed to participation in Quest. The school adopted the SMART learner theme as a focal point, using the phrase in yearbooks, newsletters, parent workshops, billboards, and t-shirts. Several teachers piloted the use of student-led conferences in place of traditional parent-teacher conferences with success. Staff also undertook an action research project to examine the impact of changed instructional practices on their students' math computation performance.

Quest team members clearly thought that Tinder approximated well many of the Quest framework components. However, shared leadership appeared to be a concern both to Quest team members and the principal herself.

Tinder's total score on the Professional Learning Community instrument decreased slightly between the 1998 and 2000 administrations. However, the decline was not statistically significant, suggesting that it was perhaps due to chance and not to a deterioration of Tinder's sense of constituting a learning community. Nonetheless, Quest did not appear to have an effect on the school's development in this regard.

The project also had little impact on student achievement at Tinder, although improvement trends in grades three through five were apparent, and a few statistically significant improvements were located. These, however, were not substantial, and therefore not of much practical meaning. Such findings are not surprising, given Tinder's use of Quest for purposes other than explicitly targeting achievement scores.

On the other hand, student TCS/2 total, nonverbal, and verbal scores were consistently higher in 1998 and 1999 than in 1996, when Tinder began its involvement in Quest. Moreover, these gains were statistically significant. Similar statistically significant differences were located within grade levels, although none were found in the fifth and sixth grades. Nonetheless, these findings should be interpreted with caution, as the higher scores may be an artifact of the slightly older sample of students in 1999.

Although statistical significance indicates that findings are not likely due to chance or sampling errors, the small effect sizes for TCS/2 gains suggest that the impact Quest may have made upon scores was nonetheless small. This is not surprising given the many factors influencing the life of a school.

Interviewees were quite clear that Quest had made important contributions to their personal and professional growth. From learning more about the educational process to becoming more reflective to focusing on sharing leadership, Tinder school community members indicated that participation in the project had been significant at the personal level.

Quest provided Tinder staff useful information gleaned from a variety of sources in a non-prescriptive manner, allowing the school to choose which resources were most aligned with its goals and concerns. Due to participation in Quest, Tinder became more attentive to nurturing meaningful parent involvement, for instance. These were important contributions to the school's development.

The incorporation of the SMART learner theme into the school culture appears to have breadth and depth. In other words, the theme is displayed and referred to in a variety of settings and media, and it is reported to have influenced specific decisions, such as to pilot student-led conferences and parent workshops. Students seem to be more thoughtful and responsible, according to some Tinder staff, as a result of the school's focus on enabling SMART learners.

Student-led conferences were piloted successfully, and teachers plan to train other teachers on the faculty interested in conducting them as well. Teachers believe that students have benefitted from the innovation, becoming increasingly reflective about and responsible for their work.

Although math computation scores are not yet available to assess Tinder's action research efforts, teachers interviewed thought that the process had been useful. Several believed that improvements in students' computation skills were already apparent.

The Quest network facilitated the exchange of information and resources among participants, and nurtured a variety of relationships as well. These served as a source of inspiration and knowledge as Tinder staff participated in the project and undertook improvement efforts.

In sum, it appears that Quest made uneven impact on Tinder Elementary during the few years of the school's participation. For instance, while TCS/2 scores rose over the course of the school's involvement in the project, Professional Learning Community scores dropped slightly. Although student-led conferences were used successfully by several teachers, most had not implemented the innovation. And interviewees reported relatively few student outcomes which they believed they could attribute to Quest. Student achievement data also indicate few statistically significant improvements over the course of the school's participation in the project. Nevertheless, interviewees perceived that Quest had made significant, meaningful contributions to the school's development and to their own personal and professional growth.

It is the impact of the project on Tinder faculty and parents that holds particular promise for continuous improvement at the school. In other words, their understandings of school change may facilitate new initiatives or expanded use of strategies learned during the school's involvement in Quest, the outcomes from which may not be apparent until after the end of the project. Having experienced significant professional growth and having enacted a variety of Quest techniques, Tinder is well-equipped to continue on its trajectory of ongoing improvement.

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APPENDIXES

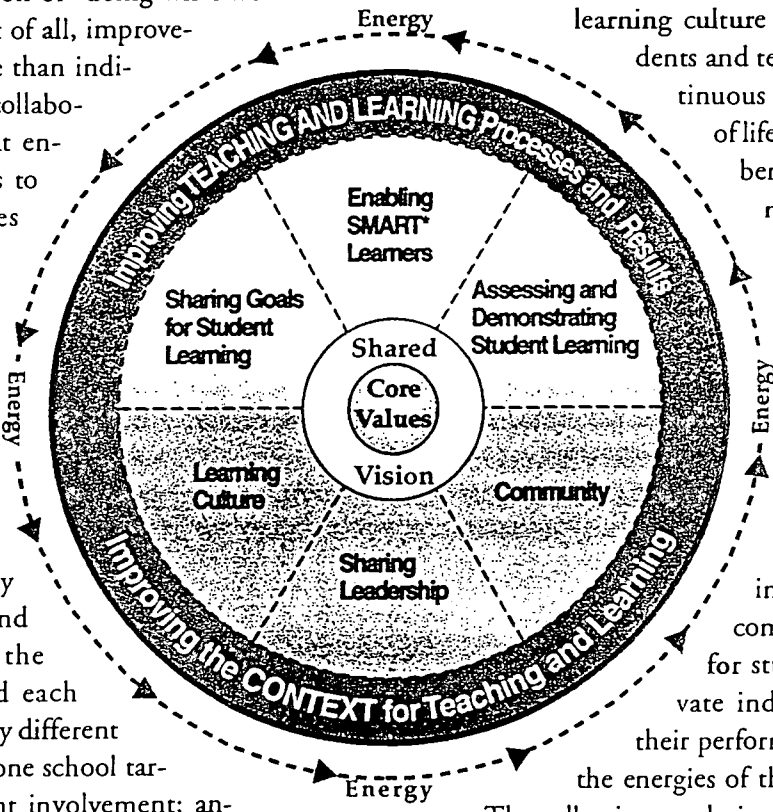
APPENDIX A:

Quest Brochure and Framework for Continuous Improvement

Quest for Quality Learning Communities

A Program for Continuous School Improvement

School improvement is challenging work; to be effective, it must be continuous. Improvement is not a single act or program; it is a process of always wanting to learn more about how better to help all students achieve at higher levels. Improvement is visionary; it involves risk-taking, uncertainty, and a rejection of "doing what we've always done." Most of all, improvement requires more than individual effort: it is a collaborative endeavor that engages and responds to the diverse voices within an entire community.



Teams from 20 schools in a four-state region now collaborate with staff from the Appalachia Educational Laboratory (AEL) to study and learn together in the Quest project, and each school takes a slightly different path. For example, one school targets increased parent involvement; another hopes to raise the level of student thinking through teachers' working together and coaching one another; a high school improves teaching by listening to what students say about how they learn best; other schools focus on specific curriculum areas such as writing or science education.

The Quest framework unifies their thinking about school improvement. These core values offer a blueprint for continuous progress: ongoing questioning of practice, high expectations for all, individual responsibility for better performance, collegial sharing and support, and thoughtful reflection on practice.

Stemming from these values is a clearly defined vision of student excellence that is shared by all members of the school community. A strong learning culture encourages both students and teachers to choose continuous improvement as a way of life in their school. Members of the school community connect to one another through a shared commitment to improved learning conditions for all. Shared leadership encourages and enables everyone to assume responsibility for making a positive impact on the school community. Shared goals for student learning motivate individuals to improve their performance and help focus the energies of the entire community.

The collection, analysis, and use of student assessment data sustains continuous improvement, providing a measure of the effectiveness of the community's efforts. SMART learners are Successful, Motivated, Autonomous, Responsible, and Thoughtful. Fully equipped to become lifelong learners, they are ready for life and work in the 21st century. In short, continuous improvement spawns the energy and excitement necessary to transform a collection of individuals into a true learning community.

Goals of the Quest Project

1. *Connect* with colleagues. By serving on a Quest leadership team, participants connect with others on their school team, forming bonds that enhance working relationships. In addition, Quest teams connect with teams from other schools, districts, and states, allowing everyone to learn from others' experiences. A listserv, inquiry@ael.org, facilitates connections across the network.

2. *Create* a learning community. Teams become part of the Quest network learning community with the expectation of recreating this experience in their own community.

3. *Connect* with concepts and stories related to continuous school improvement. At Quest rallies, the Quest framework is a source of study, dialogue, and sharing among teams.

4. *Create* personal and shared meaning. The Quest network places a high value on processes such as reflection and dialogue, which lead to deeper understandings of continuous improvement.

5. *Commit* to continue learning with this community. Quest schools have made a three-year commitment to study and learn together, with a focus on improving student achievement.

What is a learning community? "Learning communities are essentially communities of inquirers . . . sustained by a continued commitment to share this journey of exploration with one another on matters people care deeply about" (Ryan, 1995).

Peter Senge et al. (1994) write that a learning organization "is a place where people continually expand their capacity to create the results they truly desire, . . . and where people are continually learning how to learn together."

6. *Commit* to continue the Quest back home. The "rubber hits the road" at schools, not at Quest events. AEL helps school teams take their learnings home and apply them for the benefit of students. Site visits, called Co-Ventures in Learning, provide opportunities for AEL staff to visit each school, in order to better understand the context of that school's efforts, and tailor assistance to the school's needs.

The Quest project hopes to achieve results at three different levels:

- For individuals, sharing leadership on a Quest team leads to more reflective practice and renewed under standing of the concepts that support continuous improvement.
- For schools, Quest will provide motivation and support for ongoing and/or new school-based initiatives to improve teaching and learning.
- For the Quest network of schools, our collaborative learning and research will yield stories, insights, processes, and products—all of which will be helpful to the broader educational community.

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APPENDIX B:

Quest Team Member Individual Interview Protocol

Quest Co-Venture 2 Interview Protocol

Instructions: We are interested in your perceptions regarding the difference Quest has made for you personally and for your school. Please respond to the focusing questions honestly and openly. There are no right answers, and we are sincerely interested in your personal assessment and reaction. Also, please be assured that your name will not be associated with any of your comments. We are committed to protecting your confidentiality and anonymity.

1. Personal/Professional: What impact has your involvement with Quest had upon your **personal and professional growth** and development?

If the respondent does not talk about the following areas of impact, the interviewer should probe for more information using the prompts below.

(a) In what areas have you increased your **knowledge and skills** as a result of Quest participation?

(b) What **attitudes or beliefs** have been challenged and/or modified through involvement with Quest?

(c) What **questions** have you been prompted to investigate?

(d) What **personal behaviors** have you changed or attempted to modify as a result of your involvement in Quest?

(e) What meaningful **relationships** have you developed?

2. School reform/improvement: In what ways has participation in Quest contributed to your **school's journey of continuous improvement**?

(a) Please describe specifically the **results** or outcomes for students and adults that you believe attributable to Quest.

(b) Think about the Quest **framework** and its six constructs. In which of these areas has your school become more focused?

Culture for Learning
Sharing Leadership
Community of Learners
SMART Learners
Assessing and Demonstrating Learning
Sharing Goals for Learning

(c) What is different now as a result of your school's focus on this component?

3. Value of Network: To what extent and in what ways has the Quest **network** supported the individual learning and school improvement you described above?

Additional prompts for further information below.

(a) What is the value of networking with others schools as we have done in Quest?

(b) Describe the value of relating to schools outside of your own state.

APPENDIX C:

Faculty Focus Group Interview Protocol

Quest Co-Venture 2
Faculty Focus Group Protocol

Thank you very much for participating today in this focus group interview. We're interested in learning more about what school improvement efforts you've undertaken here since your school's involvement in the Quest network.

Let me describe a few guidelines before we begin. First, we will be recording today's conversation. However, let me assure you that your name will not be associated with any comment you make. We will have the tape transcribed, but you will never be identified personally. This is to protect your confidentiality and anonymity. Second, the purpose of a focus group is to get everyone's candid viewpoint. No one's answers are right or wrong, so please respect everyone's opinion. And, finally, it is important that everyone has an opportunity to express their opinions concerning each question. It is my job to ensure that everyone has that opportunity. With these guidelines in mind, let's begin!

1. For those of you **not** directly involved in Quest, what is your understanding of the project?

2. What school improvement efforts have you undertaken here as a result of your school's participation in Quest?

3. How successful have these been? For what reasons?

4. What student results or outcomes have you seen as a result of the improvement projects you've undertaken? (Do you have data or stories supporting this that you might share with us?)

5. What other results or outcomes have you seen as a result of these projects? (Do you have data or stories supporting this that you might share with us?)

6. What is your favorite story about the projects you've participated in?

APPENDIX D:

Student Focus Group Protocol

Co-Venture 2 Student Focus Group Protocol

My name is _____, and I work at an organization called AEL. We have been working with your school to find out more about good teaching and learning. Today we're going to ask you a few questions about being a student here. We are tape recording our conversation, but no one at your school will listen to the tape, and any comment you make will not be associated with your name.

There are a few guidelines for this kind of discussion. First, we're talking about opinions today, so no one's answers are right or wrong. Please respect each other's answers. And second, it is my job to make sure that everyone has a chance to speak. Please be considerate and take turns when answering. Any questions?

Let's begin.

1. Remember an experience in school when you felt very successful as a learner. Please you describe that experience to us.

   Probes:
   - What was it that made it successful?
   - What did you do?
   - What did the teacher do?

2. Remember an experience in school when you did not feel successful as a learner. Please describe that experience to us.

   Probes:
   - What was it that made it not very successful?
   - What did you do?
   - What did the teacher do?

3. How do you learn best—or how do you like to learn? Try to elicit the types of instructional approaches that "work" for these students.

5. *Elementary*: Is school easy or hard for you? For what reasons? *High School*: Do you feel challenged in school? Are there opportunities to be engaged in challenging courses?

6. *High school*: What kind of schedule does this school operate on (traditional; 4 x 4 block; AB block; other). How well does this work?

7. What are some words you would use to describe this school that capture "what is important around here"?

8. What else would you like to tell me about learning in this school?

APPENDIX E:

Reflective Assessment Questionnaire

Reflective Assessment for Quest Schools of Continuous Improvement

Name: _____ School: _____

Directions: This instrument was designed to help you reflect upon your school's development as a school of continuous improvement. For each of the six dimensions of the Quest framework, circle the number that best represents your school's current position on the continuum. Then explain your rating and describe how change has occurred. **Please be honest. We appreciate frank and open responses.**

Also, please be assured that your name will not be associated with any of your comments. We are committed to protecting your confidentiality and anonymity.

Culture for Learning

➤ The paragraph below describes a school at "100" in the area of "culture for learning." Where does your school fit on the continuum?

Members of the school staff frequently reflect on how to improve the school for all students. They not only ask lots of questions–including "How can we do this better?"–but also they regularly try new ideas, with administrative support, and celebrate their successes as a community. Likewise, students are curious and show excitement for learning.

100 90 80 70 60 50 40 30 20 10 0

➤ On what do you base your rating? Cite specific evidence/examples to support the above rating.

➤ Has involvement in Quest for Quality Learning Communities influenced your school's development in this area?

☐ No ☐ Yes

If yes, in what ways has Quest made an impact? Give specific examples.

▼

If yes or no, what *besides involvement in Quest* have been the major factors influencing your school's development in this area?

Community of Learners

➤ The paragraph below describes a school at "100" in the area of "community of learners." Where does your school fit on the continuum?

Members of the school community, especially students and teachers, feel connected to one another and to the school as an organization with a clear mission. Open and regular communication promote norms of trust and respect. The school is a center of learning for the entire community; parents and other community members are welcomed and valued.

100 90 80 70 60 50 40 30 20 10 0

➤ On what do you base your rating? Cite specific evidence/examples to support the above rating.

➤ Has involvement in Quest for Quality Learning Communities influenced your school's development in this area?

□ No □ Yes

If yes, in what ways has Quest made an impact? Give specific examples.

▼

If yes or no, what *besides involvement in Quest* have been the major factors influencing your school's development in this area?

Sharing Leadership for Learning

➤ The paragraph below describes a school at "100" in the area of "sharing leadership for learning." Where does your school fit on the continuum?

Teachers, parents, and students have a forum for input into decisions and have easy access to important information about the school. They know that they are listened to and that what they think and do makes a difference. School administrator(s) participate democratically with teachers. School leadership teams include students–or at least are guided by students' perspectives–as they plan for school improvement.

100 90 80 70 60 50 40 30 20 10 0

➤ On what do you base your rating? Cite specific evidence/examples to support the above rating.

➤ Has involvement in Quest for Quality Learning Communities influenced your school's development in this area?

□ No □ Yes

If yes, in what ways has Quest made an impact? Give specific examples.

If yes or no, what *besides involvement in Quest* have been the major factors influencing your school's development in this area?

Shared Goals for Learning

➤ The paragraph below describes a school at "100" in the area of "shared goals for learning." Where does your school fit on the continuum?

Goals for school improvement are specific, measurable, and identifiable by all segments of the school community. These goals are a major consideration in decision making about allocation of school resources. They affect decisions at both the classroom and school levels.

100 90 80 70 60 50 40 30 20 10 0

➤ On what do you base your rating? Cite specific evidence/examples to support the above rating.

➤ Has involvement in Quest for Quality Learning Communities influenced your school's development in this area?

□ No □ Yes

If yes, in what ways has Quest hade an impact? Give specific examples.

▼

If yes or no, what *besides involvement in Quest* have been the major factors influencing your school's development in this area?

Assessing and Demonstrating Learning

➤ The paragraph below describes a school at "100" in the area of "assessing and demonstrating learning." Where does your school fit on the continuum?

At the school level, multiple data sources are carefully studied and used in setting goals. Results of student achievement tests are disaggregated and are widely communicated and interpreted to the broader community. At the classroom level, teachers communicate clear expectations for student performance and use a variety of methods to assess progress. Students and teachers actively assess their own performance and time is provided for this reflection.

100 90 80 70 60 50 40 30 20 10 0

➤ On what do you base your rating? Cite specific evidence/examples to support the above rating.

➤ Has involvement in Quest for Quality Learning Communities influenced your school's development in this area?

□ No □ Yes

If yes, in what ways has Quest hade an impact? Give specific examples.

If yes or no, what *besides involvement in Quest* have been the major factors influencing your school's development in this area?

Enabling SMART Learners

➤ The paragraph below describes a school at "100" in the area of "enabling SMART learners." Where does your school fit on the continuum?

Throughout the school, students and teachers are actively engaged in meaningful work which they understand is connected with the real world and with their future. Students are aware of their own personal strengths in learning, they increasingly are intrinsically motivated to learn, and accept responsiblity for their own performance. Students and teachers are aware that learning discrete facts is not nearly as important as is developing skills necessary for lifelong learning in the complex world of the 21st century.

100 90 80 70 60 50 40 30 20 10 0

➤ On what do you base your rating? Cite specific evidence/examples to support the above rating.

➤ Has involvement in Quest for Quality Learning Communities influenced your school's development in this area?

□ No □ Yes

If yes, in what ways has Quest hade an impact? Give specific examples.

If yes or no, what *besides involvement in Quest* have been the major factors influencing your school's development in this area?

APPENDIX F:

Professional Learning Community Instrument

School Professional Staff as Learning Community*

Directions: This questionnaire concerns your perceptions about your school as a learning organization. There are no right or wrong responses. Please consider where you believe your school is in its development of each of the five numbered descriptors shown in bold-faced type on the left. Each sub-item has a five-point scale. On each scale, circle the number that best represents the degree to which you feel your school has developed.

Last Four Social Security Numbers: ___ ___ ___ ___

Date: _____

School: _____

1. **School administrators participate democratically with teachers sharing power, authority, and decision making.**

1a

5	4	3	2	1
Although there are some legal and fiscal decisions required of the principal, school administrators consistently involve the staff in discussing and making decisions about most school issues.		Administrators invite advice and counsel from the staff and then make decisions themselves.		Administrators never share information with the staff nor provide opportunities to be involved in decision making.

1b

5	4	3	2	1
Administrators involve the entire staff.		Administrators involve a small committee, council, or team of staff.		Administrators do not involve any staff.

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2. **Shared visions for school improvement have an undeviating focus on student learning and are consistently referenced for the staff's work.**

2a

5	4	3	2	1
Visions for improvement are discussed by the entire staff such that consensus and a shared vision results.		Visions for improvement are not thoroughly explored; some staff agree and others do not.		Visions for improvement held by the staff are widely divergent.

2b

5	4	3	2	1
Visions for improvement are always focused on students and teaching and learning.		Visions for improvement are sometimes focused on students and teaching and learning.		Visions for improvement do not target students and teaching and learning.

2c

5	4	3	2	1
Visions for improvement target high quality learning experiences for all students.		Visions for improvement address quality learning experiences in terms of students' abilities.		Visions for improvement do not include concerns about the quality of learning experiences.

3. Staff's collective learning and application of the learnings (taking action) create high intellectual learning tasks and solutions to address student needs.

3a

5	4	3	2	1
The entire staff meets to discuss issues, share information, and learn with and from each other.		Subgroups of the staff meet to discuss issues, share information, and learn with and from each other.		Individuals discuss issues, share information, and learn with and from each other.

3b

5	4	3	2	1
The staff meets regularly and frequently on substantive student-centered educational issues.		The staff meets occasionally on substantive student-centered educational issues.		The staff never meets to consider substantive educational issues.

3c

5	4	3	2	1
The staff discusses the quality of their teaching and students' learning.		The staff does not often discuss their instructional practices nor its influence on student learning.		The staff basically discusses non-teaching and non-learning issues.

3d

5	4	3	2	1
The staff, based on their learnings, makes and implements plans that address students' needs, more effective teaching, and more successful student learning.		The staff occasionally acts on their learnings and makes and implements plans to improve teaching and learning.		The staff does not act on their learning.

3e

5	4	3	2	1
The staff debriefs and assesses the impact of their actions and makes revisions.		The staff infrequently assesses their actions and seldom makes revisions based on the results.		The staff does not assess their work.

4. Peers review and give feedback based on observing each other's classroom behaviors in order to increase individual and organizational capacity.

4a

5	4	3	2	1
Staff regularly and frequently visit and observe each other's classroom teaching.		Staff occasionally visit and observe each other's teaching.		Staff never visit their peers' classrooms.

4b

5	4	3	2	1
Staff provide feedback to each other about teaching and learning based on their classroom observations.		Staff discuss non-teaching issues after classroom observations.		Staff do not interact after classroom observations.

5. **Conditions and capacities support the school's arrangement as a professional learning organization.**

5a

5	4	3	2	1
Time is arranged and committed for whole staff interactions.		Time is arranged but frequently the staff fails to meet.		Staff cannot arrange time for interacting.

5b

5	4	3	2	1
The size, structure, and arrangements of the school facilitate staff proximity and interaction.		While the facility and school membership are large, the staff are working to maximize existing arrangements for interaction.		The staff takes no action to manage the facility and personnel for interaction.

5c

5	4	3	2	1
A variety of processes and procedures are used to encourage staff communication.		A single communication exists and is sometimes used to share information.		Communication devices are not given attention.

5d

5	4	3	2	1
Trust and openness characterize all the staff.		Some of the staff are trusting and open.		Trust and openness do not exist among the staff.

5e

5	4	3	2	1
Caring, collaborative, and productive relationships exist among all the staff.		Caring and collaboration are inconsistently demonstrated among the staff.		Staff are isolated and work alone at their task.

*Hord, Shirley M. (1996). Austin, TX: Southwest Educational Development Laboratory.

APPENDIX G:

Quest Innovation Configuration Checklist

School Name: _____ Your Role/Position _____

Date: _____

Quest Schools of Continuous Improvement
Innovation Configuration Checklist

Directions: The eight items in this instrument represent the components associated with the Quest Network of Schools of Continuous Improvement. Beneath each component are alternative ways in which the components might be implemented in a school. For each item, circle the letter which best describes *your* perception of how Quest has been implemented in your school.

1. School Leadership Team

a. All three of the following are true of our school leadership team: (1) It is inclusive with administrator, teacher, parent, and (in the case of high schools) student membership; (2) It has been fairly stable over time; and (3) It has assumed active leadership in taking our quest back home to the broader school community.

b. Two of the following are true of our school leadership team: (1) It is inclusive with administrator, teacher, parent, and (in the case of high schools) student membership; (2) It has been fairly stable over time; and (3) It has assumed active leadership in taking our quest back home to the broader school community.

c. One of the following statements is true of our school leadership team: (1) It is inclusive with administrator, teacher, parent, and (in the case of high schools) student membership; (2) It has been fairly stable over time; and (3) It has assumed active leadership in taking our quest back home to the broader school community.

d. Our school does not have a true leadership team.

2. Administrative Support

a. One or more of our school's administrators are active members of the leadership team and extensively involved in Quest activities.

b One or more of our school's administrators are members of the leadership team and have been occasionally involved in Quest activities.

c One or more of our school's administrators have been involved in a few Quest activities and have been generally supportive of our team.

d Our school administrators have not been involved in Quest activities and are only minimally supportive of our school's involvement in Quest.

3. **Participation in Network Events**

   a. Individuals from our school have participated in three (3) or more Network events during the past year including Rallies, Summer Symposia, and/or Scholar's Colloquia.

   b. Individuals from our school have participated in two (2) Network events during the past twelve months including Rallies, Summer Symposia, and/or Scholar's Colloquia.

   c. Individuals from our school have participated in one (1) Network event during the past twelve months including Rallies, Summer Symposia, and/or Scholar's Colloquia.

   d. Individuals from our school have not participated in any Network events during the past year.

4. **Participation in Co-Ventures in Learning**

   a. A wide cross-section (i.e., administrators, teachers, staff, parents, and students) of our school community participated in the Quest Co-Venture(s) in Learning.

   b. A limited number of our school community—primarily administrators, teachers and staff—participated in our Quest Co-Venture(s).

   c. Our school has not yet engaged in a Quest Co-Venture in Learning, but plans to do so during this school year.

   d. Our school has no plans to participate in a Quest Co-Venture.

5. **Involvement with Other Quest Schools**

   a. Our school has been directly involved in sharing successful practices with other Quest schools by either (1) adopting a practice that we learned about from a sister school, (and)/or (2) helping a sister school adopt a practice that has been effectively used at our school.

   b. Individuals from our school have visited another Quest school or our school has hosted a visit by another Quest school to our campus.

   c. Leadership team members have shared ideas with individuals from other schools at rallies and other network events.

   d. Our school has had very limited involved with other Quest schools.

6. **School Improvement/Action Research**

   a. Our school is implementing a school improvement project in connection with our involvement in Quest and is collecting data to demonstrate its impact on student learning.

   b. Our school is implementing a school improvement project in connection with our involvement in Quest, but has not designed a formal plan for assessing its effectiveness.

   c. Our school is currently considering one or more school improvement initiatives that would be supported by our involvement with Quest.

   d. Our school has no plans to pursue an improvement initiative as a part of our involvement in the Quest network.

7. **Change in School-Wide View of School Improvement**

   a. Our school community has been significantly impacted by the Quest approach. A wide cross-section is aware of the Quest framework and committed to work on one or more of the component parts.

   b. Our faculty and staff have focused on one or more aspect of the Quest approach to continuous improvement.

   c. Members of the Quest leadership team have been affected by the Quest approach to continuous improvement.

   d. Our school community has not been influenced by the Quest approach to continuous improvement.

8. **Engagement in Related School Improvement Efforts**

   a. Our school has been actively engaged in other school improvement efforts and the results have been recognizable.

   b. Our school has been involved in other school improvement efforts but there are no clearly identifiable results from our participation.

   c. Our school has not been involved in any other school improvement efforts.

APPENDIX H:

Completed Evaluation *Standards* Checklist

Checklist for Applying the Standards

To interpret the information provided on this form, the reader needs to refer to the full text of the standards as they appear in Joint Committee on Standards for Educational Evaluation, *The Program Evaluation Standards* (1994), Thousand Oaks, CA, Sage.

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

Descriptor		The Standard was addressed	The Standard was partially addressed	The Standard was not addressed	The Standard was not applicable
U1	Stakeholder Identification	x			
U2	Evaluator Credibility	x			
U3	Information Scope and Selection	x			
U4	Values Identification	x			
U5	Report Clarity	x			
U6	Report Timeliness and Dissemination	x			
U7	Evaluation Impact	x			
F1	Practical Procedures	x			
F2	Political Viability	x			
F3	Cost Effectiveness	x			
P1	Service Orientation	x			
P2	Formal Agreements	x			
P3	Rights of Human Subjects	x			
P4	Human Interactions	x			
P5	Complete and Fair Assessment	x			
P6	Disclosure of Findings	x			
P7	Conflict of Interest	x			
P8	Fiscal Responsibility	x			
A1	Program Documentation	x			
A2	Context Analysis	x			
A3	Described Purposes and Procedures	x			
A4	Defensible Information Sources	x			
A5	Valid Information	x			
A6	Reliable Information	x			
A7	Systematic Information	x			
A8	Analysis of Quantitative Information	x			
A9	Analysis of Qualitative Information	x			
A10	Justified Conclusions	x			
A11	Impartial Reporting	x			
A12	Metaevaluation	x			

The Program Evaluation Standards (1994, Sage) guided the development of this (check one):

_____ request for evaluation plan/design/proposal
_____ evaluation plan/design/proposal
_____ evaluation contract
_x_ evaluation report
_____ other: _____

Name Caitlin Howley-Rowe Date 11/29/00

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