

## DOCUMENT RESUME

ED 473 935

TM 034 782

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TITLE Pilot Test of AEL's School Capacity Assessment.  
INSTITUTION AEL, Inc., Charleston, WV.  
SPONS AGENCY Office of Educational Research and Improvement (ED),  
Washington, DC.  
PUB DATE 2002-08-00  
NOTE 64p.  
CONTRACT ED-01-CO-0016  
PUB TYPE Reports - Research (143)  
EDRS PRICE EDRS Price MF01/PC03 Plus Postage.  
DESCRIPTORS \*Educational Change; Institutional Characteristics; Low  
Achievement; Pilot Projects; Reliability; \*School  
Effectiveness; Teacher Effectiveness; \*Teachers; Validity

## ABSTRACT

A pilot version of a School Capacity Assessment (SCA) was developed in 2002 to assess the degree to which schools possess the potential to become high performing learning communities. The SCA was part of AEL's School Capacity Development project. The pilot version of the SCA was intended to be administered to K-12 professional staff to assist them in determining how well positioned their schools are to begin the development of a higher performing learning community. The 99-item, 4-page instrument contains 8 subscales: Collective Teacher Efficacy, Deprivatized Practice, Program Coherence, Technical Resources, Equitable Practice, Differentiated Instruction, Expectations for Student Performance, and Time for Planning. The pilot SCA was completed by 427 respondents from 10 schools in a Virginia school district and 26 respondents from a West Virginia school district. Results suggest that the SCA holds potential for assessing school capacity for improvement. As was to be expected from the sample of relatively low performing schools chosen, item and subscale means were relatively low. The instrument overall was internally consistent in the pilot test, and correlations between the subscales were, in general, moderate to very strong. Recommendations are made for additional study. Three appendixes contain the SCA, descriptive statistics, and a checklist for applying standards. (Contains 13 tables and 76 references.) (SLD)

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# Pilot Test of AEL's School Capacity Assessment

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August 2002**



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# **Pilot Test of AEL's School Capacity Assessment**

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This publication is based on work sponsored wholly or in part by the Office of Educational Research and Improvement, U.S. Department of Education, under contract number ED-01-CO-0016. Its contents do not necessarily reflect the views of OERI, the Department, or any other agency of the U.S. government.

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## EXECUTIVE SUMMARY

A pilot version of AEL's School Capacity Assessment (SCA) was developed in the spring of 2002 by Caitlin Howley and Joy Riffle to assess the degree to which schools possess the potential to become high performing learning communities. This research and development focus grows from the Department of Education's Office of Educational Research and Improvement's concern with and commitment to investigating how low-performing schools may be transformed into learning communities for students, faculty, and community members. More specifically, the SCA was developed in response to AEL's School Capacity Development project, staff of which required an instrument to assess their efforts to enhance the capacity to improve in partner schools.

Based on a review of the education research on change, school capacity was defined by AEL research and evaluation staff as the presence of certain school structures, and teacher practices and perspectives, needed to support the growth of a thriving learning community. School cultural and attitudinal factors were incorporated in this view of school capacity for improvement (Kruse, Louis, & Bryk, 1995). But structural components were also included in response to research showing the importance of school structures and policies to successful improvement initiatives (e.g., Fullan, 1991, 1994; Hord, Rutherford, Huling-Austin, & Hall, 1987; Howley & Brown, 2001; Kruse, Louis, & Bryk, 1995; Newmann, King, & Youngs, 2001). It is hypothesized that, lacking these structures, practices, and perspectives, school staff will be less likely to nurture and sustain significant school improvement.

AEL's pilot version of the SCA was developed in response to the paucity of definition, operationalization, and assessment of school capacity in the education research and evaluation literature. It is intended for administration to K-12 school professional staff. Data from administration of the survey are to assist school staff in ascertaining how well positioned their schools are to begin the development of a high performing learning community. In addition, subscale data will allow staff to identify dimensions of school capacity in need of further development in their schools. The instrument is intended for diagnostic use, for instance at the beginning of school reform efforts. It is also intended for administration and analysis over the course of school improvement undertakings.

The SCA is a 99-item, four-page instrument (see Appendix A). Response options to the items are forced-choice, using a scale of 1 to 4, in which 1 means "strongly disagree," 2 means "disagree," 3 means "agree," and 4 means "strongly agree." Subscale items are randomly distributed throughout the instrument so that subscales are not readily apparent to respondents. The instrument is available in a machine scannable format.

Eight subscales constitute the survey: Collective Teacher Efficacy, Privatized Practice, Program Coherence, Technical Resources, Equitable Practice, Differentiated Instruction, Expectations for Student Performance, and Time for Planning. All eight subscales are either drawn directly from other research endeavors or are the result of syntheses of research efforts that did not necessarily produce assessment instruments.

The purpose of the pilot test of AEL's SCA was to begin an exploration of the psychometric properties of the instrument and its subscales. AEL staff wanted to discover the correlations between items intended to constitute distinct subscales and assess discrete concepts, and to delete items not highly correlated with others in their respective subscales. In other words, AEL staff sought data reduction, as the 99-item instrument is cumbersome. Staff also were interested in the degree to which subscales were reliable. In short, an exploratory analysis of the SCA's statistical properties was wanted.

The pilot version of AEL's SCA was administered to school staff in two school districts in the summer of 2002. Both districts have histories of social, economic, and political difficulties, and schools in both have had several decades of depressed student achievement. District administrative staff agreed that AEL would administer the SCA as part of its research and development efforts there, and that data from the initial administration would serve as baseline data for a longitudinal study of the effects of AEL's work.

Five hundred copies of the instrument were mailed to the superintendent of a southern Virginia school division (i.e., district) collaborating with AEL in the early summer. Surveys from 10 schools in the division and a total of 427 respondents were returned to AEL by mid-July 2002.

In addition, the SCA was administered to teams from a West Virginia school district attending an AEL summer institute on project-based learning in July 2002. Approximately 40 copies of the instrument were distributed by an AEL evaluator to teams from 10 schools at the close of the institute's first day. Participants were asked to complete the SCA that evening and return it to AEL staff the following morning. Twenty-six respondents completed and returned the SCA.

Based on the results of the pilot test, it was concluded that the SCA appears to hold some promise for assessing school capacity for improvement. As would be expected given the nature of the sample of low-performing schools, item and subscale means were relatively low. In addition, the sample evidenced a negative skew on nearly all of the subscales. These findings suggest that the SCA is able to identify struggling schools, although it is yet to be seen if the instrument is also capable of identifying schools that possess a great degree of capacity for improvement.

In terms of reliability, the instrument overall was internally consistent in the pilot test administrations. In addition, most of the subscales possess sufficient internal consistency reliability. Correlations and exploratory factor analyses indicated the relationship of subscale items to one another. Most subscale correlation matrices confirmed the moderate to strong relationship between subscale items. Exploratory factor analyses differentiated further the Equitable Practice subscale into the Anti-Discriminatory Teaching and Responsive Pedagogy subscales. Items in each are moderately to highly correlated.

Correlations between the subscales were, in general, moderate to very strong. Subscales assessing structural conditions were highly correlated with one another, whereas the subscales evaluating practice and attitudinal stances were very highly to moderately correlated. This

suggests that the overall instrument effectively assesses the two sorts of subscales, and that the subscales are interrelated without sacrificing their distinct measures.

It was recommended that AEL staff further develop the SCA. For instance, items not correlating with other subscale items should be deleted. The Equitable Practice subscale should also be divided into the two subscales discerned by the exploratory factor analysis.

It was also suggested that staff conduct a field test, in which a larger, more differentiated sample would be used. Ideally, the SCA should be administered to an equal number of respondents from low-, moderate-, and high-performing schools so as to test its ability to discriminate between the various levels of school performance. A larger, more diverse sample would also allow factor analysis for the purpose of more rigorously and empirically defining the subscales.

## INTRODUCTION

Since the 1960's, American schools have been under especial scrutiny for their capacity to educate youth effectively. Although school reform and improvement have always been national concerns (the Progressive era at the turn of the last century, for example), the launching of Sputnik in 1957, at a time when the Cold War shaped American fears, spurred alarm about the state of schooling in the country. If the Russians, who appeared to live under less prosperous conditions, were capable of such a scientific feat, citizens wondered, why had Americans not launched the first orbital satellite? One of the most frequently-cited answers was that United States schools were not educating students sufficiently, particularly in subject areas of increasing prominence, such as math and science. The launch of Sputnik proved pivotal in our ongoing and contemporary concern with school improvement.

A number of school improvement trends have arisen since the 1960s in attempts to improve American education, each offering particular antidotes to educational troubles. Decentralization efforts in the 1960s and 1970s were approaches that sought to encourage local control of curriculum and finance, and to increase community participation in matters of education. Ultimately, however, many of these efforts became ineffective in terms of school improvement as involvement of community members was often token, or dominated only by the most influential community leaders (deMarrais & LeCompte, 1999).

In the 1990s, site-based management and shared decision-making were successors to the earlier decentralization efforts. These school improvement approaches sought again to render schools more responsive to community concerns. Nonetheless, participants with relatively little power continued to face obstacles to their full involvement, and research revealed little impact of site-based management or shared decision making on academic indicators (deMarrais & LeCompte, 1999; Riordan, 1997).

Another wave of school improvement efforts, in response to the 1983 National Commission on Excellence in Education's report *A nation at risk: The imperative for educational reform*, focused on raising standards for students and teachers. This approach entailed establishing performance requirements for students and linking teacher accountability to student achievement on standardized tests. The standards movement continues to play a significant role in contemporary debate about how to improve education (Riordan, 1997).

The Effective Schools movement was an attempt to discover what might make some schools better equipped than others to produce high performing students. According to this research (Levine & Lezotte, 1995), effective schools evidence specific characteristics, such as a clear mission, high academic expectations for all students, a safe school environment, and strong instructional leadership from administrators. However, this area of research failed to provide insight into how schools developed such characteristics.

School improvement is increasingly viewed as an ongoing and comprehensive process. Recent legislation has encouraged the adoption of such a view, with the 1998 appropriation of \$150 million by Congress to states for allocation to schools undertaking research-based

schoolwide reform programs through the Comprehensive School Reform Demonstration Program (CSR D). Earlier, in 1994, Congress altered regulations to allow schools receiving Title I funds, with free and reduced lunch 50% and above, to use such funds for whole school improvement (American Institutes for Research, 1999).

The reform models mentioned in the legislation instituting CSR D encompass a variety of approaches to reform, from skill-based, to comprehensive, to processual. In addition, the models vary in their degree of prescriptiveness. All claim to be based upon research and to have evidence of some positive impact. Yet investigations of and prototypes for school improvement extend far beyond the models forwarded in CSR D legislation: Contemporary literature on school improvement has roots in the school effectiveness literature of the 1970s and early 80s mentioned earlier (e.g., Levine & Lezotte, 1995).

Much current prescriptive education literature and some research suggests that the interplay between school cultural and structural conditions significantly affects how change at a particular school will be greeted (e.g., Newmann & Wehlage, 1996). They contend that if cultural characteristics, such as commitment to high expectations, support for inquiry, and caring relationships, intersect with structural factors, such as time for staff development and freedom from excessive organizational constraints, school reform will proceed more smoothly. These structural and cultural conditions can be seen as contributing to school capacity for improvement (Newmann, King, & Youngs, 2001).

Along with these intersections, school leadership must be an integral part of improvement efforts (van der Bogert, 1998), and collaboration among the many stakeholders in school communities must be pursued (Sarason & Lorentz, 1998). Fullan and Miles (1994) additionally suggest that those involved in improvement must recognize that it is a process, filled with ambiguity, uncertainty, and risk, rather than a scripted, easily implemented recipe. Moreover, Fullan's most important insight is that school reform will not proceed without the voluntary support of staff who view the reform as meaningful and in alignment with their own worldviews (Fullan, 1991).

Thus, efforts to improve schools are an ongoing and contemporary national concern. Research and policy in education are often devoted to imagining, mandating, defending, resisting, and assessing a wide variety of improvement strategies. Nonetheless, the majority of reforms have not resulted in significant change in practice (Cuban, 1993) or in student performance (American Institutes for Research, 1999; deMarrais & LeCompte, 1999; Riordan, 1997). As Brown, Halsey Lauder, and Wells (1997) imply, and as Anyon (1997) vividly demonstrates, other contextual factors play a pivotal role in how, and whether, school change is enacted. Newmann, King, and Youngs (2001) likewise suggest that school reform efforts interact with their context, part of which is school capacity for improvement. It is this important notion of school capacity that is the subject of the following section.

### **AEL's School Capacity Assessment—Pilot Version**

A pilot version of AEL's School Capacity Assessment (SCA) was developed in the spring of 2002 by Caitlin Howley and Joy Riffle to assess the degree to which schools possess the potential to become high performing learning communities. This research and development

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Newmann and his colleagues (2001) contend that structural conditions, such as program coherence and alignment, the sufficiency of technical and professional resources, and the provision of adequate time for staff to plan collaboratively and/or implement change, are critical to the likelihood that school reform will be undertaken with commitment. Moreover, school improvement efforts cannot be sustained over time without sufficient support from district and school policies and structures (Howley & Brown, 2001). Structural conditions, though often invisible or taken for granted, significantly shape how people behave, of what they believe they (and their students) are capable, and to what they commit themselves (Bourdieu & Passeron, 1997; deMarrais & LeCompte; Fullan, 1991; Mills, 1959; Riordan, 1997).

In addition, teachers' practice also plays an important role in forecasting the success of school reform efforts. Louis, Marks, and Kruse (1996) illustrate how deprivatized practice, in which school staff regularly observe one another and provide constructive feedback, structures a conduit by which other change efforts may be brought to fruition. Meaningful collaboration becomes possible when staff are in the habit of crossing the thresholds of each other's classroom doors.

Equitable teaching practices and differentiated instruction together constitute a nuanced pedagogy that is at once attentive, equitable, and sensitive. As Darling-Hammond notes, "Successful education can occur only if teachers are prepared to meet rigorous learning demands and the different needs of students" (1997, p. 334). Teachers who are accustomed to applying themselves equitably to diverse students are better equipped to confront the challenges wrought by social, economic, and political devastation in low-performing schools and their communities (Anyon, 1997; Paley, 1979). However, it could also be argued that school staff are more likely to undertake serious change with commitment if they are already in the practice of differentiating instruction in ways intended to support their students fully and adequately.

Teachers' attitudes, perceptions, expectations, and assessments are also closely bound to the likelihood that their school is well-positioned to undertake significant school improvement work. Faculty who believe that they are not capable as a group of teaching their students are not likely to have much faith in their attempts to effect any broader change in their school. Collective teacher efficacy is critical to the capacity schools possess for committing to and implementing improvement efforts (Goddard, Hoy, & Hoy, 2000).

Expectations for student performance, as with teacher efficacy, constitute an important gauge of school capacity. Depressed expectations indicate a professional fatalism not conducive to improvement or, obviously, enhanced student achievement (Tauber, 1998). In addition, schools with capacity are schools with a predisposition toward nurturing learning. If teachers do not expect much from their students, their school cannot possess much capacity for nurturing student achievement.

AEL's pilot version of the SCA was developed in response to the paucity of definition, operationalization, and assessment of school capacity in the education research and evaluation literature. It is intended for administration to K-12 school professional staff. Data from administration of the survey are to assist school staff in ascertaining how well positioned their schools are to begin the development of a high performing learning community. In addition, subscale data will allow staff to identify dimensions of school capacity in need of further development in their schools. The instrument is intended for diagnostic use, for instance at the beginning of school reform efforts. It is also intended for administration and analysis over the course of school improvement undertakings.

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The first two subscales have been previously validated. They are defined as follows:

- **Collective Teacher Efficacy:** a 12-item scale assessing "the extent to which a faculty believes in its conjoint capability to positively influence student learning" (Goddard, 2002, p. 97)
- **Deprivatized Practice:** a 7-item scale assessing "the frequency with which teachers observe each other's classes to critique colleagues' teaching and provide meaningful feedback; it also measures the frequency of constructive reviews from supervisors" (Louis, Marks, & Kruse, 1996, p. 769)

The remaining subscales are currently being pilot tested in an effort to establish their validity and reliability. These scales are defined as follows:

- **Program Coherence:** a 12-item scale measuring “the extent to which the school’s programs for student and staff learning are coordinated, focused on clear learning goals, and sustained over a period of time” (Newmann, King, & Youngs, 2001, p. 6)
- **Technical Resources:** a 7-item scale evaluating the availability to faculty of working equipment, technology, instructional materials, facilities, and professional resource materials, such as journals (Newmann, King, & Youngs, 2001)
- **Equitable Practice:** a 38-item scale measuring the degree to which faculty understand diversity and engage in classroom practices that equitably support the learning of all students (deMarrais & LeCompte, 1999; Pohan & Aguilar, 2001; Sadker & Sadker, 1994; University of Minnesota, Diversity Work Group, 2002)
- **Differentiated Instruction:** an 8-item scale assessing the extent to which faculty adapt their instructional strategies and grouping arrangements to meet the learning needs of diverse students (Baber, C.R., 2001; Tomlinson, 1995, 1999a-b, 2000; University of North Carolina, 2001)
- **Expectations for Student Performance:** a 10-item scale evaluating the degree to which faculty believe their students are capable of mastering material presented to them and the level at which teachers anticipate that their students will perform (Baber, 2001; Bourdieu & Passeron, 1997; deMarrais & LeCompte, 1999; McLeod, 1987; Ogbu, 1983; Paley, 1979; Riordan, 1997; University of North Carolina, 2001; Willis, 1981)
- **Time for Planning:** a 5-item scale assessing the extent to which school staff have sufficient dedicated time for planning and teaching (Abdal-Haqq, 1996; Lashway, 1998).

The importance of each subscale to a conceptualization of school capacity is explained below. It should be noted that three subscales are intended to assess various structural conditions under which teachers work; these are the Program Coherence, Technical Resources, and Time for Planning measures. The Privatized Practice, Equitable Practice, and Differentiated Instruction subscales are meant to ascertain teacher practices, and the Expectations for Student Performance subscale is primarily attitudinal.

### **Collective Teacher Efficacy**

Collective teacher efficacy extends the notion of individual teacher efficacy to a faculty’s shared sense of capacity to effect positive student outcomes. Whereas an individual’s assessment of his or her own efficacy as a teacher may vary according to specific contexts (such as class size, subject area, or student demographics), a measure of collective teacher efficacy provides a more global evaluation of the specific social and organizational context in which a faculty works.

Teachers' shared beliefs about their collective ability to teach students effectively is, according to Goddard, Hoy, and Hoy (2000), a better gauge of school capacity than measures of individual efficacy or internal locus of control. Collective teacher efficacy is "an emergent group-level attribute, the product of the interactive dynamics of the group members. As such, this emergent property is more than the sum of the individual attributes" (p. 482).

Further, collective teacher efficacy is "a way of conceptualizing the normative environment of a school and its influence on both personal and organizational behavior" (Goddard, 1998, p.65). Teachers' perceptions of their faculty's ability to teach with efficacy shapes their strivings and behaviors in the classroom. Thus, if teachers believe themselves to belong to a very efficacious faculty, "the normative environment will press teachers to persist in their educational efforts (Goddard, 1998, p. 65). On the other hand, a faculty with little sense of collective efficacy will be less likely to exert normative pressure on each other to undertake rigorous pedagogy.

Because of its link to faculty behavior and its hypothesized (Goddard, 1998, 2002; Goddard, Hoy, & Hoy, 2000) and tentatively confirmed (Goddard, Hoy, & Hoy, 2002) impact on student achievement, collective teacher efficacy appears to constitute an important component of school capacity for improvement. A faculty which does not believe in its capabilities will not likely impel itself toward improvement. However, a faculty with a strong sense of its ability to effect change in student achievement will be better positioned to seek improvement.

Goddard's (2002) revision of his earlier measure of collective teacher efficacy was adopted for inclusion in AEL's pilot version of the SCA. The 12-item revision possesses adequate internal consistency reliability with a Cronbach's alpha coefficient of .94. Moreover, Goddard's analysis indicates that the new version is valid; the revised measure correlates highly with the earlier instrument, and multilevel tests of predictive validity showed that the new version is a good predictor of between-school variability in student mathematics achievement.

## **Deprivatized Practice**

Louis, Marks, and Kruse (1996) contend that, among other phenomena, deprivatized practice is pivotal in the development of school professional community. In this view, deprivatized practice is the degree to which faculty observe one another's work, provide feedback, and serve as mutual mentors or coaches. Schools in which practice is deprivatized tend to view teaching less as an autonomous individual project and more as a collaborative undertaking (Sarason & Lorentz, 1998). As a result, faculty in such schools experience less professional isolation and greater opportunity for learning from colleagues (Education Commission of the States, 1996). Deprivatized practice, then, provides faculty with a wider network of resources.

In terms of school capacity for improvement, serious change is not likely to take hold if faculty are not aided by norms or mechanisms that support collegial learning, critique, and cross-fertilization. As Cuban's (1993) historical analysis of school change reveals, professional isolation and conservative norms in schools have rendered most improvement efforts irrelevant, and ultimately teachers have made very few serious changes in their practice as a result.

However, schools that provide the structural support for deprivatized practice invite collaboration and collegiality, which in turn invite opportunities for sustainable improvement (Corallo & McDonald, 2002).

The 7-item Deprivatized Practice subscale is a closed-response option adaptation by Meehan and Cowley (1998) to the original open-ended questionnaire developed by Louis, Marks, and Kruse (1996). Although the 1998 administration of the adaptation by Meehan and Cowley indicated that the subscale possessed less than ideal reliability, with Cronbach's alphas ranging between .65 to .69, a later administration by Nilsen revealed the scale to be more reliable, with an alpha of .84.

### **Program Coherence**

An important structural condition supporting school capacity for improvement is instructional program coherence. According to Newmann, King, and Youngs (2001), program coherence is a measure of the extent to which a school is sufficiently programmatically integrated. The continual and shifting presence of unrelated, unfocused, and multiple improvement programs weakens schools' organizational efficacy. Aligned initiatives, implemented and monitored carefully for sustained periods of time, on the other hand, at the very minimum do not detract from a school's efforts to educate students.

Program coherence also encompasses the alignment of curriculum and instruction within grade levels and between grade levels (Corallo & McDonald, 2002; Newmann, Smith, Allensworth, & Bryk, 2001). Adequate alignment and sequencing assists in the maintenance of an appropriate intellectual pace and rigor, and focuses attention on the primary purpose of education. It also reduces redundancy and fosters communication and collaboration among teachers.

Program coherence is viewed as critical to school capacity for improvement because schools struggling to implement many unrelated programs are not immediately equipped to undertake significant improvement work. Already burdened with other competing and shifting priorities, teachers in schools with little programmatic coherence are unlikely to accommodate additional serious change. Focus and carefully allocated resources to a committed, shared purpose prepare a more hospitable environment for improvement.

The Program Coherence subscale on AEL's SCA is an adaptation of items from a survey of professional development to build school capacity. In addition, several other items were added by AEL staff. No reliability or validity analyses were provided by Newmann, King, and Youngs, although their study seems to confirm that program coherence constitutes a critical component of school capacity for improvement.

### **Technical Resources**

Newmann, King, and Youngs (2001) also found the presence of adequate technical and professional resources to be a useful indicator of school capacity for improvement. Instructional materials, functioning technical and computer equipment, and adequate workspace represent

some of the material conditions under which teachers work. Improvement efforts which depend on such tools are likely to fail if teachers do not have access to them.

In addition, teachers who feel that they do not have the material resources with which to teach to their objectives in the classroom will feel additionally hampered if asked to institute significant change across their school. If teachers' fundamental resource needs are unmet, the likelihood that their school can effect and sustain improvement is small.

As with the Program Coherence subscale, the Technical Resources subscale is an adaptation of survey items developed by Newmann, King, and Youngs (2001). Some items were used verbatim, others were modified, and still others were developed by AEL staff to extend and elaborate on the concept assessed by the subscale. Reliability and validity information about the items is not available.

### **Equitable Practice**

Schools are increasingly diverse organizations, with larger percentages of African American and Latino/a students. In addition, national attention is focused on increasing the academic achievement of racially/ethnically-defined youth and of low SES students (Fortune, 2002; Schwartz, 2001a). Education Week, for example, covered the issue in 2000 with a four-part series (Johnston & Viadero, 2000; Viadero, 2000; Viadero & Johnston, 2000a, 2000b). Equitable education for all students is, however, both a national challenge and a legal imperative since the 1954 *Brown v. Board of Education* Supreme Court decision, which overturned the "separate but equal" doctrine justifying school segregation by racial category.

Equity must also be applied to gender, as much research indicates that curriculum and instruction tend to favor boys (deMarrais & LeCompte, 1999; Sadker & Sadker, 1994). For instance, boys may receive more attention, praise, and opportunities to elaborate or correct their answers to instructional questions (Mid-Atlantic Equity Center, 1993). Female figures appear less often in literary or historical accounts in curricula, and girls confront sexist language at school in which being called female is an insult (Thorne, 1995). In addition, girls enroll in fewer advanced math and science courses than do their male counterparts (Perez, 2000).

Equitable practice can be defined in numerous ways, along multiple dimensions. Rose (1999), for instance, identifies 10 indicators of fair teaching, ranging from equal distribution of response opportunities to courtesy and respect. The University of North Carolina Diversity Work Group (2002) cites a long list of practices identified by educators as conducive to the development of an equitable environment. Kahle (2002) explicates a variety of strategies to enhance the equity of science teaching, and Rickford (2001) illustrates how the use of culturally relevant texts and higher order questioning techniques are useful strategies for engaging low SES and ethnic minority students. Ensuring that curriculum and discipline practices honor students' backgrounds is another strategy suggested as important to creating an equitable classroom (Thompson & O'Quinn, 2001). Multicultural education research also points up a wealth of practices that ensure students receive equitable educational opportunities (c.f., Banks & Banks, 1995). Ultimately, equitable practice is a multiple concept: More than one strategy is required

for the creation and sustenance of an academic environment that is fair and sensitive to all students (NWREL, 1997).

Schools equipped to teach their students equitably, fairly, yet also sensitively are likewise equipped to make improvement equitably. Improvement can hardly be considered full and meaningful unless it is salient to the experience and achievement of all students.

The Equitable Practice subscale of AEL's pilot version of the SCA was developed by AEL staff using the research literature cited above as a catalyst. Items were constructed to account for a variety of equitable practices, including racially/ethnically and socioeconomically sensitive pedagogy, relevant curriculum, active discouragement of stereotypical comments and behavior, equitable praise, multicultural content, and use of students' preferred speaking styles to enhance learning.

### **Differentiated Instruction**

Classrooms are not homogeneously populated; students hail from various communities, bring disparate skills and strengths, and have differing academic needs. Varying content, process, products, and learning environment to meet students' assorted needs is differentiating instruction (Tomlinson, 2000). The University of North Carolina's School of Education (2001) makes the teaching of differentiated instructional strategies to pre-service teachers one of its priorities because it is considered so essential to effective pedagogy.

The rationales for differentiating instruction are many. Instruction that honors the linguistic and literacy styles of young children augments their reading skills (Vernon-Feagans, Hammer, Miccio, & Manlove, 2001), and by extension, their learning of any subject that requires literacy skills. Moreover, differentiated instruction has been shown to improve student achievement (Dahl, Scharer, Lawson, & Grogan, 1999; although see Rowan & Miracle, 1983, for an alternative view). Differentiated instruction accommodates students of various cognitive abilities (Tomlinson, 1999a) and accounts for the myriad ways in which we all learn (Tomlinson, 1999b). Undifferentiated instruction and curriculum, conversely, may stifle student enthusiasm for learning and ultimately for achieving to the fullest (Kohn, as interviewed by O-Neil & Tell, 1999). Sizer (1999) similarly points out that a "rigid system" of schooling will ultimately fail those students whom it does not accommodate (1999, p.1). "A one-size-fits-all approach to classroom teaching is ineffective for most students and harmful to some," suggest Tomlinson and Kalbfleisch (1998, p.1) in their analysis of brain research, because "to learn, students must experience appropriate levels of challenge" (p. 3). As Tomlinson put it earlier, "There simply is no single learning template" for all students (1995, p.1)

The Differentiated Instruction subscale developed for the SCA attempts to measure the degree to which school faculty adapt their classroom teaching, grouping, and assessment practices in order to meet the needs of their various students. Items were constructed by AEL staff with close attention to the literature cited above.

## **Expectations for Student Performance**

School staff's expectations for student academic performance play a powerful role in how students actually perform. Teachers' expectations for students inform how they treat students. For instance, teachers holding depressed expectations for certain students may then treat them differently than other students perceived to be more capable. Such differential treatment, very different than the differential instruction described above, results in fewer opportunities to learn challenging material, less time to answer questions or complete assignments, and less frequent encouragement and praise (deMarrais & LeCompte, 1999; Lumsden, 1997; McLeod, 1987; Willis, 1981). Over time, students' performance conforms to the expectations of teachers (Tauber, 1998), thereby confirming teachers' original expectations. In addition, teachers are in positions of power relative to students, making their expectations all the more influential.

Wilson and Martinussen (1999) show dramatically how teacher expectations based on students' socioeconomic status and prior achievement significantly shape the final grades study participants accorded their students. Ogbu (1983) likewise illustrates how important teacher expectations are to students' academic involvement and, ultimately, to their achievement.

Expectations for student performance are often shaped by stereotypical assessments based on race/ethnicity, socioeconomic status, gender, family structure, language, immigrant status, religion, transience, sexual orientation, and other contextually significant social characteristics (Bourdieu & Passeron, 1997; deMarrais & LeCompte, 1999; McLeod, 1987; Ogbu, 1983; Paley, 1979; Riordan, 1997; Willis, 1981). Hence, teachers sometimes may anticipate that, for instance, white middle-class boys will perform better academically than working-class Latinas (Schwartz, 2001b). This is not to blame teachers for holding differential expectations; rather, such expectations are endemic to our stratified society (c.f., Rose, 1990; Takaki, 1987). Nonetheless, American education also seeks to nurture meaningful democratic involvement through equal opportunity to all citizens, and in this regard differential expectations based on social and economic characteristics run counter to such ideals.

The Expectations for Student Performance subscale evaluates the degree to which teachers expect that their students are capable of mastering material presented to them this academic year. It also assesses the level at which teachers believe their students will perform vis-à-vis their peers. Items were developed by AEL staff following a review of the literature on the impact of teacher expectations on student performance described above.

## **Time for Planning**

School improvement efforts may have little chance of success if faculty lack fundamental structural support for their implementation. Among the most important of such conditions is the provision of adequate time to allow staff to plan, implement, experiment with, and evaluate their improvement initiatives (Howley & Brown, 2001; Howley-Rowe, 1999; Raywid, 1993). "Insufficient time to plan for implementing [reform] is a common barrier to implementation and a frequent concern of teachers," reports Desimone (2000, p. 12) in her analysis of schools

instituting comprehensive school reform. Teachers are better equipped to develop professionally if they have time during their work day to reflect, collaborate, and focus on their own learning. Such opportunities, moreover, are fundamental to the development of schools as professional learning communities (Abdal-Haqq, 1996; Lashway, 1998). Conversely, lack of time to plan and implement contributes to teacher turnover (Adelman, Haslem, & Pringle, 1996).

An adequate allotment of time for reform to be learned about and practiced, implemented, institutionalized, assessed, and reflected upon is crucial (Adelman & Walking-Eagle, 1997). Some researchers have even argued that time is so important to the success of any school improvement undertaking because change proceeds according to standard development phases; without time, reform has no chance to develop (Hord, Rutherford, Huling-Austin, & Hall, 1987).

Sufficient time for planning is therefore an important structural resource to which teachers require access if reform is to have the opportunity to become institutionalized. For this reason, Time for Planning subscale items were developed by AEL staff to evaluate the extent to which faculty are provided enough time for within-grade and across-grade planning and for appropriate professional development.

## **In Sum**

School capacity is an often-used phrase in discussions of educational reform and improvement. However, very few researchers have attempted to define and operationalize school capacity for improvement (although, see Newmann, King, & Youngs, 2001). Rather, school capacity is a vague, albeit appealing, reference to some ephemeral quality predisposing schools to successful change.

AEL staff have attempted to define and operationalize the concept of school capacity through the development of the SCA. Nonetheless, we were also interested in testing our definition empirically. Thus, a pilot test of the instrument was conducted during the summer of 2002.

The purpose of the pilot test of AEL's SCA was to begin an exploration of the instrument's subscales. AEL staff wanted to discover the correlations between items intended to constitute distinct subscales and assess discrete concepts, and to delete items not highly correlated with others in their respective subscales. In other words, AEL staff sought data reduction, as the 99-item instrument is cumbersome. Staff also were interested in the degree to which subscales were reliable. In sum, an exploratory analysis of the SCA's statistical properties was wanted.

The audience for this report includes AEL staff working with low-performing schools. As the SCA is developed further, it may prove to be a useful diagnostic tool as professional developers begin their work in ailing school districts or schools. It is anticipated that the refinement of the SCA will render it more amenable to use in AEL's current and future research and development efforts.

Other audiences include the Department of Education's Office of Educational Research and Improvement, the schools and districts with which AEL is working, and other entities undertaking external assistance projects. Evaluators and researchers seeking measures of school capacity may also find this report of some use.

## METHODS

The pilot version of AEL's SCA was administered to school staff in two districts in the summer of 2002. Both districts have histories of social, economic, and political difficulties, and schools in both have had several decades of depressed student achievement. District administrative staff agreed that AEL would administer the SCA as part of its research and development efforts there, and that data from the initial administration would serve as baseline data for a longitudinal study of the effects of AEL's work.

Five hundred copies of the instrument were mailed to the superintendent of a southern Virginia school division (school districts are called divisions in Virginia) collaborating with AEL in the early summer. Each survey was placed in a brown, sealable envelope; upon completing their surveys, each teacher then had the option of returning their survey to the brown envelope and sealing it in order to protect their confidentiality and anonymity. Surveys were bundled by school, so that each was provided enough for all staff. The superintendent was then responsible for disseminating the surveys to each school.

Once teachers had completed their surveys, sealed their envelopes, and returned them to their principals, principals were directed to mail the surveys to AEL. Surveys from 10 schools and a total of 427 respondents were returned to AEL by mid-July 2002.

In addition, the SCA was administered to teams from a West Virginia school district attending an AEL summer institute on project-based learning in July 2002. Approximately 40 copies of the instrument were distributed by an AEL evaluator to teams from 10 schools at the close of the institute's first day. Participants were asked to complete the SCA that evening and return it to AEL staff the following morning. Twenty-six respondents completed and returned the SCA.

Returned and completed surveys were scanned into an SPSS data file by a trained research assistant. Data were then cleaned by AEL staff, and the West Virginia and Virginia data files were merged for pilot test analyses in August, 2002.

Data analyses for the purpose of reducing the number of items on the SCA were conducted in August. Descriptive statistics were calculated. More importantly for data reduction, however, AEL staff calculated Pearson Product Moment correlations and Cronbach's internal consistency reliability coefficients. Items within subscales that proved to have low correlations with other subscale items were eliminated to form the proposed revised field test version of the instrument. In general, items with a preponderance of correlations below .30 were eliminated from the pilot test version of the SCA.

Because so many items contribute to the Equitable Practice subscale, staff chose to conduct exploratory factor analysis (Garson, 2002) of this subscale alone. Factor analysis revealed two distinct factors within the subscale; these were named, and then correlations for items in each of the two new subscales were calculated. As with the other SCA subscales, those items showing little correlation with their subscale counterparts were not recommended for inclusion in the proposed field test version of the instrument.

## FINDINGS

### Descriptive Statistics

A total of 453 school staff completed AEL's pilot version of the SCA. These respondents hailed from 20 schools in two districts with which AEL has been collaborating. However, the majority (94.3%) of respondents were from the Virginia school division; only 5.7 were from the West Virginia district. The number and percentage of respondents from each school are presented in Table 1. The number and percentage of respondents by school level are then presented in Table 2.

**Table 1**  
**Frequency and Percent of Respondents by School**

School	N	Percent
VA 1	38	8.4
VA 2	25	5.5
VA 3	40	8.8
VA 4	59	13.0
VA 5	92	20.3
VA 6	29	6.4
VA 7	53	11.7
VA 8	26	5.7
VA 9	33	7.3
VA 10	32	7.1
WV 1	2	0.4
WV 2	5	1.1
WV 3	2	0.4
WV 4	1	0.2
WV 5	5	1.1
WV 6	3	0.7
WV 7	1	0.2
WV 8	3	0.7
WV 9	1	0.2
WV 10	3	0.7

**Table 2**  
**Frequency and Percent of Respondents by School Level**

School level	N	Percent
Elementary	235	51.9
Middle	112	24.7
High	106	23.4

As shown in the previous tables, the percent of respondents from each school ranged from a low of 0.2% of the total sample in three West Virginia schools to a high of 20.3% of the total sample in one Virginia school. Number of respondents ranged from a low of one respondent to a high of 92. In terms of school level, slightly more than half (51.9%) of respondents to the SCA worked in elementary schools. Approximately a quarter each of remaining respondents hailed from middle or high schools (24.7% and 23.4%, respectively).

Table 3 presents descriptive statistics for subscales. These include the number of respondents, minimum and maximum subscale mean scores (calculated by dividing subscale item values by the number of subscale items), the subscale mean scores, standard deviations, a measure of skewness, and Cronbach's alpha coefficient assessing internal consistency reliability. (Descriptive statistics for each item are presented in Appendix B.)

Overall mean scores for each subscale ranged from a low of 2.32 (SD 0.59) for the Deprivatized Practice scale to a high of 2.94 (SD 0.50) for the Differentiated Instruction subscale. The Equitable Practice subscale was shown to be highly reliable, with a reliability coefficient of .97. The remaining subscale scores also possessed adequate internal consistency reliability, although the Time for Planning subscale was somewhat less reliable in this pilot test.

In terms of skewness, all but the Collective Teacher Efficacy subscale (which appeared in this administration to be very symmetrical) tended to have negative skew. The Program Coherence, Equitable Practice, Differentiated Instruction, and Expectations for Student Performance subscales had significant negative skew, with skewness statistics more than twice the standard error for skewness. These findings are not surprising, however, given that the schools surveyed are low-performing and collaborating with AEL for the purpose of improvement. In fact, negative skew suggests that the pilot version of the SCA is able to identify low-performance.

**Table 3**  
**Descriptive Statistics for SCA Subscales**

<b>Subscale</b>	<b>N</b>	<b>Min.</b>	<b>Max.</b>	<b>Mean</b>	<b>SD</b>	<b>Skew</b>	<b>Std. Err.</b>	<b>Alpha</b>
Collective Teacher Efficacy	453	1.25	3.91	2.67	0.44	.004	.115	.77
Deprivatized Practice	453	1.00	4.00	2.32	0.59	-.093	.115	.78
Program Coherence	453	1.00	3.67	2.61	0.41	-.517	.115	.75
Technical Resources	453	1.00	3.71	2.36	0.51	-.032	.115	.71
Equitable Practice	453	1.08	3.97	2.91	0.46	-.691	.115	.97
Differentiated Instruction	451	1.38	4.00	2.94	0.50	-.339	.115	.86
Expectations for Student Performance	452	1.10	4.00	2.85	0.51	-.263	.115	.86
Time for Planning	453	1.00	4.00	2.46	0.61	-.058	.115	.69

## Reliability

Cronbach's Alpha was calculated for each subscale as a measure of its internal consistency reliability for this administration of AEL's SCA. In addition, the Cronbach's Alpha was calculated for each item in the hypothetical circumstance that it were deleted from the subscale. These statistics are presented in Table 4.

**Table 4**  
**Cronbach's Coefficient Alpha by Subscale**

Item Number	Cronbach's Alpha if Item Deleted
<i>Total SCA, Alpha = .97</i>	
<i>Collective Teacher Efficacy, Alpha = .77</i>	
1	.74
2	.75
5	.74
7	.75
9	.75
11	.76
13	.77
15	.75
16	.77
17	.75
19	.76
20	.76
<i>Deprivatized Practice, Alpha = .78</i>	
3	.78
6	.76
8	.73
10	.73
12	.75
26	.75
43	.75
<i>Program Coherence, Alpha = .75</i>	
22	.72
23	.70
24	.69
27	.73
29	.76
30	.79
33	.70
34	.71
36	.76
37	.73

39	.71
41	.71
<i>Technical Resources, Alpha = .71</i>	
21	.72
25	.62
28	.63
31	.68
32	.69
38	.69
40	.66
<i>Equitable Practice, Alpha = .97</i>	
44	.97
45	.96
48	.96
51	.96
52	.96
54	.96
55	.97
56	.96
57	.96
58	.96
60	.96
61	.97
63	.96
64	.96
66	.96
67	.97
69	.96
70	.96
72	.96
73	.96
74	.96
75	.96
76	.96
77	.96
78	.96
81	.96
83	.96
85	.96
88	.96
90	.96
91	.96
92	.96
95	.96
96	.96

97	.97
99	.96
<i>Differentiated Instruction, Alpha = .86</i>	
50	.85
62	.85
68	.84
82	.84
86	.84
87	.83
89	.84
93	.89
<i>Expectations for Student Performance, Alpha = .86</i>	
47	.87
49	.85
53	.84
59	.84
65	.84
71	.84
80	.86
84	.84
94	.84
98	.84
<i>Time for Planning, Alpha = .69</i>	
4	.66
14	.64
18	.66
35	.63
42	.61

Overall, the SCA subscales possess sufficient internal consistency reliability in this administration of the instrument. The Equitable Practice subscale is particularly reliable, with a Cronbach's coefficient of .97. Also quite reliable are the Differentiated Instruction and Expectations for Student Performance subscales, both with reliability coefficients of .86. Less internally consistent is the Time for Planning subscale, with a Cronbach's Alpha of .69.

In addition, the total instrument itself yielded very sufficient internal consistency reliability for this administration. The Cronbach's coefficient Alpha for the entire SCA was .97.

As illustrated in Table 4, the deletion of items does not appear to significantly improve the reliability of any of the subscales. Item deletion tends to increase or decrease most subscale Alphas by only .09 at the most.

## Correlations

Because the Collective Teacher Efficacy and Deprivatized Practice subscales have been shown to be valid and reliable in previous research efforts, they were not subject to data reduction techniques. However, item correlations were calculated for each remaining subscale.

Data presented in Table 4 indicate that nine of the Program Coherence items are at least moderately correlated with at least two other subscale items. Some correlations were negative, which is surprising given that negatively phrased items were reverse coded for analysis. Correlations ranged from quite weak, at  $-.011$  (Items 36 and 40), to very strong, at  $.739$  (Items 33 and 34). Many correlations were statistically significant, but this was not the basis upon which items were chosen for the edited version of the SCA. Items with correlations  $.300$  and above with at least two other subscale items were selected for inclusion in the new field test version of the SCA. In terms of the Program Coherence subscale, Items 29, 30, and 36 were eliminated. As shown in Table 5, and all following correlation tables, those items retained in the revised field test version of the SCA are highlighted in grey.

**Table 5**  
**Correlations Among Program Coherence Subscale Items**

Item No.	22	23	24	27	29	30	33	34	36	37	39	40
22	1.000											
23	.443**	1.000										
24	.479**	.618**	1.000									
27	.180**	.342**	.312**	1.000								
29	-.033	.094*	.054	-.039	1.000							
30	-.210**	-.178**	-.210**	-.169**	.387**	1.000						
33	.322**	.413**	.446	.216**	.064	-.112*	1.000					
34	.246**	.334**	.438**	.166**	.054	-.122*	.739**	1.000				
36	.012	.044	.018	.062	.066	.070	.039	.087	1.000			
37	.227**	.279**	.321**	.190**	.070	-.138**	.309**	.232**	-.179**	1.000		
39	.319**	.367**	.462**	.342**	.090	-.202**	.357**	.346**	.070	.243**	1.000	
40	.359**	.455**	.521**	.289**	.056	-.202**	.418**	.366**	-.011	.282**	.477**	1.000

\*\*Statistically significant at the .01 level.

\* Statistically significant at the .05 level.

The inter-item correlations for the Technical Resources subscale are shown in Table 6. Correlations were all positive and ranged from  $.049$  (Items 21 and 38) to  $.684$  (Items 25 and 28). Only three items from this subscale met the correlation strength criterion for inclusion in the revised SCA. Items 21, 31, 32, and 38 were eliminated.

**Table 6**  
**Correlations Among Technical Resources Subscale Items**

Item No.	21	25	28	31	32	38	40
21	1.000						
25	.080	1.000					
28	.081	.684**	1.000				
31	.239**	.274**	.280**	1.000			
32	.067	.235**	.262**	.189**	1.000		
38	.049	.348**	.288**	.195**	.176**	1.000	
40	.175**	.387**	.386**	.302**	.234**	.219**	1.000

\*\*Statistically significant at the .01 level.

As shown in Table 7, all Differentiated Instruction subscale items are statistically significantly correlated at the .01 level. Correlations ranged from .139 (Items 50 and 93) to .682 (Items 86 and 87) and were all positive. All items except Item 93 were retained in the revised SCA.

**Table 7**  
**Correlations Among Differentiated Instruction Subscale Items**

Item No.	50	62	68	82	86	87	89	93
50	1.000							
62	.474**	1.000						
68	.572**	.506**	1.000					
82	.470**	.478**	.495**	1.000				
86	.433**	.547**	.511**	.574**	1.000			
87	.513**	.508**	.556**	.606**	.682**	1.000		
89	.485**	.504**	.484**	.541**	.585**	.653**	1.000	
93	.139**	.218**	.197**	.306**	.237**	.274**	.170**	1.000

\*\*Statistically significant at the .01 level.

All items in the Expectations for Student Performance subscale were correlated at statistically significant levels. Correlations ranged from .102 (Items 47 and 94) to .565 (Items 84 and 94). Item 47 was not selected for inclusion in the field test version of the SCA, however, as no correlations achieved the .300 criterion.

**Table 8**  
**Correlations Among Expectations for Student Performance Subscale Items**

Item No.	47	49	53	59	65	71	80	84	94	98
47	1.000									
49	.166**	1.000								
53	.271**	.482**	1.000							
59	.174**	.350**	.496**	1.000						
65	.163**	.422**	.508**	.454**	1.000					
71	.218**	.348**	.496**	.558**	.534**	1.000				
80	.239**	.220**	.305**	.304**	.398**	.399**	1.000			
84	.157**	.514**	.476**	.388**	.428**	.445**	.227**	1.000		
94	.102*	.371**	.423**	.371**	.434**	.421**	.217**	.565**	1.000	
98	.136**	.398**	.504**	.423**	.504**	.547**	.316**	.547**	.489**	1.000

\*\*Statistically significant at the .01 level.

\*Statistically significant at the .05 level.

Because the Equitable Practice subscale contained so many items, AEL staff suspected that it included several factors. For the purposes of data reduction, exploratory factor analysis (Garson, 2002) was conducted on the entire SCA, with especial attention given to the way in which factor analysis revealed factors within the Equitable Practice subscale in the context of the whole instrument. Principal component analysis was used, and the data were rotated via the varimax method to limit the correlation of identified factors. Varimax solutions are orthogonal and tend to have either large or small loadings of particular variables on each factor. In other words, shared variance is reduced. In addition, six factors were forced, as an earlier factor analysis had identified a total of 17 factors (this factor analysis was not used for the purposes of this pilot study, however, because the sample was not sufficiently balanced in terms of school performance). Again, the purpose of this technique at this juncture in the development of the SCA is to reduce the number of items on the instrument.

The factor analysis identified two distinct factors underlying the Equitable Practice items. The first explained 14.31% of the SCA's total variance, and the second, 12.23% of the total variance. Items with factor loadings of .500 and above were selected for correlation analysis and potential inclusion in the field test version of the instrument.

The first factor, tentatively entitled the Anti-Discriminatory Teaching subscale, consists of items that take a more active stance toward teaching equitably. For example, some of the items loading on this factor include *Teachers in this school . . . discourage disparaging treatment of students based on race/ethnicity, use language that does not demean or exclude, teach students to challenge stereotypes, and are aware of their own biases*. This factor is made up of 16 items.

The second factor, provisionally called the Responsive Pedagogy subscale, is made up of items that concern responsiveness to students' communities, the creation of equitable classroom environments, and language and text use. Some items include *Teachers in this school . . . Ensure*

*that all students participate in classroom activities, respond to diverse community interests, show an interest in learning about diversity, and interact with students in ways that acknowledge students' speaking style preferences regardless of how similar they are to staff members' preferences.* In all, 9 items constitute this subscale.

Table 9 presents the correlations between items contributing to the new Anti-Discriminatory Teaching subscale. Not surprisingly (because of their basis in the factor analysis), all items were statistically significantly correlated at the .01 level, and all correlations were positive. Correlations ranged from .278 (Items 55 and 91) to .702 (Items 77 and 90). Because of the high correlations between all items, all were retained for inclusion in the field test version of the SCA.

**Table 9**  
**Correlations Among the New Anti-Discriminatory Teaching Subscale Items**

Item No.	55	56	58	75	76	77	78	79	81	83	85	88	90	91	95	97
55	1.000															
56	.463**	1.000														
58	.391**	.634**	1.000													
75	.431**	.430**	.578**	1.000												
76	.401**	.497**	.480**	.468**	1.000											
77	.511**	.524**	.522**	.578**	.576**	1.000										
78	.453**	.494**	.571**	.598**	.531**	.590**	1.000									
79	.403**	.466**	.531**	.567**	.544**	.582**	.684**	1.000								
81	.469**	.421**	.454**	.433**	.431**	.594**	.511**	.457**	1.000							
83	.328**	.424**	.498**	.442**	.450**	.384**	.510**	.451**	.395**	1.000						
85	.321**	.527**	.641**	.599**	.519**	.465**	.554**	.532**	.405**	.509**	1.000					
88	.363**	.452**	.599**	.608**	.496**	.516**	.581**	.565**	.393**	.476**	.643**	1.000				
90	.514**	.507**	.537**	.586**	.489**	.702**	.583**	.594**	.647**	.471**	.544**	.576**	1.000			
91	.278**	.374**	.424**	.454**	.395**	.438**	.402**	.455**	.405**	.445**	.455**	.366**	.447**	1.000		
95	.287**	.513**	.655**	.509**	.474**	.441**	.522**	.541**	.423**	.509**	.663**	.619**	.514**	.455**	1.000	
97	.356**	.370**	.371**	.369**	.392**	.437**	.412**	.458**	.438**	.451**	.349**	.392**	.480**	.381**	.460**	1.000

\*\*Statistically significant at the .01 level.

Table 10 presents correlation coefficients for the Responsive Teaching subscale items. All items were positively correlated and were statistically significantly correlated at the .01 level. Correlations varied from .367 (Items 45 and 70) to .668 (Items 57 and 73). In addition, all correlations met the .300 criterion for inclusion in the revised version of the SCA.

**Table 10**  
**Correlations Among the New Responsive Teaching Subscale Items**

Item No.	45	57	96	51	52	67	69	70	73
45	1.000								
57	.554**	1.000							
96	.520**	.584**	1.000						
51	.413**	.462**	.518**	1.000					
52	.498**	.484**	.539**	.582**	1.000				
67	.420**	.466**	.515**	.389**	.433**	1.000			
69	.504**	.540**	.535**	.493**	.478**	.561**	1.000		
70	.367**	.452**	.379**	.477**	.383**	.425**	.515**	1.000	
73	.498**	.668**	.530**	.462**	.486**	.428**	.566**	.512**	1.00

\*\*Statistically significant at the .01 level.

All items in the Time for Planning subscale were statistically significantly correlated, as shown in Table 11. Correlations ranged from .189 (Items 4 and 14) to .505 (Items 14 and 42) and were all positive. However, only Items 14, 35, and 42 met the .300 criterion for inclusion in the field test version of the instrument.

**Table 11**  
**Correlations Among Time for Planning Subscale Items**

Item No.	4	14	18	35	42
4	1.000				
14	.189**	1.000			
18	.450**	.203**	1.000		
35	.290**	.358**	.210**	1.000	
42	.214**	.505**	.250**	.474**	1.000

\*\*Statistically significant at the .01 level.

Correlations between each original subscale were also calculated. As shown in Table 12, all subscales were at least minimally correlated. Correlations ranged from relatively weak, with a correlation coefficient of .260 for the Equitable Practice and Time for Planning subscales, to very strong, with a correlation of .861 for the Equitable Practice and Differentiated Instruction subscales. With a correlation of .747, Equitable Practice and Expectations for Student Performance were strongly related. Differentiated Instruction and Expectations for Student Performance were also highly correlated, with a correlation coefficient of .727.

**Table 12**  
**Correlations Among SCA Subscales**

Subscale	Collective Teacher Efficacy	Deprivatized Practice	Program Coherence	Technical Resources	Equitable Practice	Differentiated Instruction	Expectations for Student Performance	Time for Planning
Collective Teacher Efficacy	1.000							
Deprivatized Practice	.356**	1.000						
Program Coherence	.476**	.451**	1.000					
Technical Resources	.384**	.263**	.498**	1.000				
Equitable Practice	.496**	.381**	.493**	.300**	1.000			
Differentiated Instruction	.538**	.386**	.484**	.303**	.861**	1.000		
Expectations for Student Performance	.610**	.403**	.480**	.326**	.747**	.727**	1.000	
Time for Planning	.415**	.296**	.568**	.518**	.260**	.284**	.314**	1.000

\*\* Statistically significant at the .01 level.

The weak correlation between Equitable Practice and Time for Planning is not surprising; intuitively, one would not necessarily expect the two concepts to share much in common. On the other hand, the strong relationship between the Equitable Practice, Differentiated Instruction, and Expectations for Student Performance subscales is a phenomenon one might anticipate. As discussed in the introduction, these practices and attitudes together constitute a stance toward pursuing meaningful and equitable student achievement. It is not difficult to imagine teachers who hold challenging standards for their students, are committed to providing equitable educational opportunities to students, and who additionally differentiate instruction so as to ensure that all students are given adequate support to achieve. (It should be noted that equity, in this scenario and as related to the development of the SCA, does not mean that all students are treated identically. Rather, this conception of equity is one in which students are provided equal access to the support they need, regardless of the variation in needs.)

Also positively and moderately correlated are the Collective Teacher Efficacy and Expectations for Student Performance subscales, with a correlation of .610. Again, such a correlation is to be expected. Teachers' sense of their capacity to teach is closely linked to their expectations for how students will perform. In other words, teachers who do not have faith in their ability to teach students well will likely not expect their students to perform well.

Program Coherence is correlated, with a correlation coefficient of .568, with Time for Planning. Similarly, Technical Resources is related to Time for Planning, with a correlation coefficient of .518. These subscales were intended to assess some of the structural conditions under which teachers work. It is therefore confirming that these concepts are correlated.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

The SCA appears to hold some promise for assessing school capacity for improvement, based on the findings from this pilot test. As would be expected given the nature of the sample of low-performing schools, item and subscale means were relatively low. In addition, the sample evidenced a negative skew on nearly all of the subscales. These findings suggest that the SCA is able to identify struggling schools, although it is yet to be seen if the instrument is also capable of identifying schools with a great deal of capacity for improvement.

In terms of reliability, the instrument overall was internally consistent in the administration. In addition, most of the subscales possessed sufficient internal consistency reliability. These findings lead to the conclusion that the instrument overall and each subscale together constitute concepts that can be assessed reliably over time.

Correlations and exploratory factor analyses indicated the relationship of subscale items to one another. Most subscale correlation matrices confirmed the moderate to strong relationship between subscale items. Those items with weak correlations with other subscale items were not retained for inclusion in the revised version of the SCA, thereby achieving one of the primary purposes of the pilot test—to reduce the number of SCA items.

Exploratory factor analyses differentiated further the Equitable Practice subscale into the Anti-Discriminatory Teaching and Responsive Pedagogy subscales. Items in each are moderately to highly correlated.

Correlations between the subscales were, in general, moderate to very strong. Subscales assessing structural conditions were highly correlated with one another, whereas the subscales evaluating practice and attitudinal stances were very highly to moderately correlated. This suggests that the overall instrument assesses the two sorts of subscales effectively, and that the subscales are interrelated without sacrificing their distinct measures.

### Recommendations

Based on the conclusions above, it is recommended that the SCA undergo further development. First, AEL staff should revise the pilot test version of the instrument so that it reflects the findings from this study. The Collective Teacher Efficacy and Deprivatized Practice subscales should be retained. Items not correlating with other subscale items should be deleted. Also, the Equitable Practice subscale should be divided into the two subscales discerned by the exploratory factor analysis. As a result, the revised version of the SCA would include the subscales and items presented in Table 13, as well as the previously validated Collective Teacher Efficacy and Deprivatized Practice subscales.

Further development would additionally entail the conduct of a field test, in which a larger, more differentiated sample would be used. In other words, ideally, the SCA would be administered to an equal number of respondents from low-, moderate-, and high-performing

schools so as to test its ability to discriminate between the various levels of school performance. A larger, more diverse sample would also allow factor analysis for the purpose of more rigorously and empirically defining the subscales.

**Table 13**  
**Revised SCA Items and Subscales**

<b>Program Coherence = 9 items</b>
Supplemental programs like Title I are carefully designed to complement classroom teaching.
We routinely evaluate the utility of efforts to improve our school.
Professional development activities are aligned to achieve improvement goals at this school.
We practice organized abandonment of programs that are not doing what we expected them to do.
Curriculum, instruction, and materials are well coordinated <i>across</i> the different grade levels at this school.
Curriculum, instruction, and materials are well coordinated <i>within</i> the different grade levels at this school.
Most professional development topics are offered once in the school and not followed up.
Professional development in this school is supported by other initiatives for improving the school.
We choose innovations selectively.
<b>Technical Resources = 6 items</b>
Teachers have adequate equipment in their classroom (e.g., computers, maps, lab materials) to teach to their objectives.
I have all the equipment and materials I need to teach my students well.
The texts and instructional materials students have allow teachers to teach to their objectives.
Regular time is set aside at this school for teachers to coordinate curriculum, instruction, or materials <i>within</i> the different grade levels at this school.
Teachers in this school have sufficient time available for professional development that is appropriate to our school's goals.
Regular time is set aside at this school for teachers to coordinate curriculum, instruction, or materials <i>across</i> the different grade levels.
<b>Anti-Discriminatory Teaching = 16 items</b>
Teachers in this school . . .
Discourage disparaging treatment of students based on their racial/ethnic background.
Teach students to be culturally sensitive.
Encourage students to value each others' differences.
Use language that does not demean or exclude any students.
Ensure that students participate in classroom activities that are sensitive to their racial/ethnic background.
Discourage disparaging comments about students based on their racial/ethnic background.
Assign materials that do not promote stereotypes.
Acknowledge the contributions of various racial or ethnic groups.
Discourage disparaging treatment of students based on their socioeconomic status.
Teach students to challenge stereotypes.
Express the same level of respect for the abilities of all students.
Offer praise to students in an even-handed, equitable manner.
Discourage disparaging comments about students based on their socioeconomic status.
Are aware of their own biases.
Encourage students to acknowledge each others' strengths.
Assign reading material written by or about women.
<b>Responsive Pedagogy = 9 items</b>
Teachers in this school . . .
Provide learning experiences that make subject matter meaningful for students from diverse backgrounds.
Ensure that students participate in classroom activities that are respectful of their socioeconomic status.
Use culturally sensitive assessment strategies.
Respond to diverse community interests.
Provide culturally relevant and respectful learning environment for students.

Learn about their students by participating in their communities.
Connect curriculum to students' home and community experiences.
Interact with students in ways that acknowledge students' speaking style preferences regardless of how similar they are to staff members' preferences.
Show an interest in learning about diversity.
<b>Differentiated Instruction = 7 items</b> Teachers in this school . . .
Use a variety of assessment techniques to accommodate diverse learners.
Use classroom grouping methods that are flexible.
Provide varied learning environments to accommodate diverse learners.
Understand how students differ in their approaches to learning.
Use various classroom grouping methods.
Differentiate instruction to promote all students' achievement.
Modify individual students' assignments to groups based on regular assessments of individual students' performance.
<b>Expectations for Student Performance = 9 items</b> Teachers in this school . . .
Expect most students in this school to perform above the national average in terms of academic achievement.
Have high expectations for all students.
Believe that most students in this school are able to master basic skills.
Expect almost all students to perform at or above grade level by the end of this year.
Believe that children here have what it takes to learn this year's material.
Do not expect many students to master basic skills at each grade level.
Believe that most students at this school will perform at about the national average in terms of academic achievement.
Believe that most students in this school are capable of performing at about the national average.
Think that their students will work hard this year.

It is likewise recommended that the field test include validity and further reliability tests. Test-retest reliability could be conducted, for instance. In terms of validity, a concurrent validity test might be conducted using an instrument similar to the SCA. Construct validity could be tested via factor analysis and comparison of known groups in the sample (that is, low- and high-performing schools would be compared).

Finally, AEL staff might want to consider renaming the instrument so that it better reflects the construct it seeks to measure. The instrument is intended to assess school capacity for improvement; therefore, the title should reflect a focus on improvement as well.

## REFERENCES

- Abdal-Haqq, I. (1996). Making time for teacher professional development. *ERIC digest*. Retrieved from the World Wide Web August 1, 2002: [http://www.ericsp.org/pages/digests/making\\_time\\_teacher\\_pro\\_dev\\_95-4.html](http://www.ericsp.org/pages/digests/making_time_teacher_pro_dev_95-4.html)
- Adleman, N. E., Haslem, M. B., & Pringle, B. A. (1996). The uses of time for teaching and learning. Washington, DC: U.S. Department of Education, Office of Education Research and Improvement. Retrieved from the World Wide Web on August 19, 2002: <http://www.ed.gov/pubs/SER/UsesofTime>
- Adelman, N. E., & Walking-Eagle, K. P. (1997). Teachers, time, and school reform. In A. Hargreaves, Ed., *Rethinking educational change with heart and mind, 1997 ASCD yearbook*. Alexandria, VA: Association for Supervision and Curriculum Development.
- American Institutes for Research. 1999. *An educators' guide to schoolwide reform*. Retrieved from the World Wide Web July 16, 1999: <http://www.aasa.org/Reform>
- Anyon, J. (1997). *Ghetto schooling: A political economy of urban educational reform*. New York: Teachers College Press.
- Baber, C. R. (2001). UNCG conceptual framework for developing caring, collaborative, and competent professionals. Greensboro, NC: University of North Carolina. Retrieved from the World Wide Web: [http://soe.uncg.edu/affiliates/teachers\\_academy/documents/uncg\\_cf\\_ovr.pdf](http://soe.uncg.edu/affiliates/teachers_academy/documents/uncg_cf_ovr.pdf)
- Banks, J., & Banks, C. M., Eds. (1995). *Handbook of research on multicultural education*. New York: Simon & Schuster.
- Bourdieu, P., & Passeron, J. (1990) *Reproduction in education, society and culture*, 2<sup>nd</sup> ed. Sage.
- Brown, P., Halsey, A. H., Lauder, H., & Wells, A. S. (1997). The transformation of education and society: An introduction. In A. H. Halsey, H. Lauder, P. Brown, & A. S. Wells (Eds.), *Education: Culture, economy, and society*. New York: Oxford University Press.
- Cuban, L. (1993). *How teachers taught: Constancy and change in American classrooms, 1880-1990*, 2<sup>nd</sup> ed. New York: Teachers College Press.
- Dahl, K. L., Scharer, P. L., Lawson, L. L., & Grogan, P. R. (1999). Phonics instruction and student achievement in whole language first-grade classrooms. *Reading Research Quarterly*, 34: 3, pp. 312-341.
- Darling-Hammond, L. (1997). Restructuring schools for student success. In A. H. Halsey, H. Lauder, P. Brown, & A. S. Wells (Eds.), *Education: Culture, economy, and society*. New York: Oxford University Press.

- deMarrais, K. B., & LeCompte, M. D. (1999). *The way schools work: A sociological analysis of education*. New York: Longman.
- Desimone, L. (2000). Making comprehensive school reform work. New York, NY: ERIC Clearinghouse on Urban Education. Retrieved from the World Wide Web on August 20, 2002: <http://eric-web.tc.columbia.edu/monographs/uds112/index.html>
- Education Commission of the States. (1996). *Lessons learned: How collaboration contributes to school improvement*. Denver, CO: Education Commission of the States.
- Fortune, A. (2002). Closing the achievement gap: A look ahead. *Gaining ground: Achieving excellence in high poverty schools*, 4: 1. Washington, DC: Council of Chief State School Officers.
- Fullan, M. G. (1991). *The new meaning of educational change*. New York: Teachers College Press.
- Fullan, M. G., & Miles, M. B. (1994). Getting reform right: What works and what doesn't. In *Changing education: Resources for systemic change*, pp. 211-218. Washington, DC: U.S. Department of Education.
- Garson, G. D. (2002). Factor analysis. Retrieved from the World Wide Web on August 8, 2002: <http://www2.chass.ncsu.edu/garson/pa765/factor.htm>
- Goddard, R. (1998). *The effects of collective efficacy on student achievement in urban public elementary schools*. Doctoral dissertation, Ohio State University, Columbus.
- Goddard, R., Hoy, W. K., & Hoy, A. W. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, 37: 2, pp. 479-507.
- Goddard, R. (2002). A theoretical and empirical analysis of the measurement of collective efficacy: The development of a short form. *Educational and Psychological Measurement*, 62: 1, pp. 97-110.
- Goddard, R., Hoy, W. K., & Hoy, A. W. (2002). The effects of collective efficacy on student achievement in urban public elementary schools. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA, April 2002.
- Hord, S. M., Rutherford, W. L., Huling-Austin, L., & Hall, G. E. (1987). *Taking charge of change*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Howley, C., & Brown, P. (2001, April). To continue, press on: Sustaining school improvement. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA, April 10-14, 2001.

- Howley-Rowe, C. (1999). *Engaging with school improvement: Initial and sustained involvement in the Quest network*. Charleston, WV: AEL.
- Johnston, R. C., & Viadero, D. (2000, March 15). Unmet promise: Raising minority achievement. *Education Week*, 19: 27. Retrieved from the World Wide Web on April 10, 2002: <http://www.edweek.org/ew/ewstory.cfm?slug=27gapintro.h19>
- Kahle, J. B. (2002). Gender equity in science classroom. Retrieved from the World Wide Web on July 31, 2002: <http://www.te-mat.org/kahle.shtml>
- Kruse, S., Louis, K. S., & Bryk, A. (1995). Let's build teachers' professional community. *WCER Highlights*, 7: 1. Retrieved from the World Wide Web on August 12, 2002: [http://www.wcer.wisc.edu/publications/WCER\\_Highlights/Vol.7\\_No.1\\_Spring\\_1995/Teachers\\_prof\\_community.html](http://www.wcer.wisc.edu/publications/WCER_Highlights/Vol.7_No.1_Spring_1995/Teachers_prof_community.html)
- Lashway, L. (1998). Creating a learning organization. *ERIC digest*. Eugene, OR: ERIC Clearinghouse on Educational Management. Retrieved from the World Wide Web August 1, 2002: <http://eric.uoregon.edu/publications/digests/digest121.html>
- Levine, D. U., & Lezotte, L. W. (1995). Effective schools research. In J. A. Banks & C. A. M. Banks (Eds.), *Handbook of research on multicultural education* (pp. 525-547). New York: Simon and Schuster.
- Louis, K. S., Marks, H. M., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Educational Research Journal*, 33: 4, pp. 757-798.
- Lumsden, L. (1997). Expectations for students. *ERIC digest*. Eugene, OR: ERIC Clearinghouse on Educational Management. Retrieved from the World Wide Web August 1, 2002: <http://eric.uoregon.edu/publications/digests/digest116.html>
- McLeod, J. (1987). *Ain't no makin' it: Leveled aspirations in a low-income neighborhood*. Boulder, CO: Westview Press.
- Meehan, M. L., & Cowley, K. S. (1998). Comprehensive evaluation of the Interdisciplinary Teamed Instruction Summer Institute. Charleston, WV: AEL.
- Mid-Atlantic Equity Center. (1993). Beyond Title IX: Gender equity issues in schools. Chevy Chase, MD: Author. Retrieved from the World Wide Web, August 12, 2002: <http://www.maec.org/beyond.html>
- Mills, C. W. (1959). *The sociological imagination*. New York: Oxford University Press.

- Newmann, F. M., King, M. B., & Youngs, P. (2001, April). Professional development that addresses school capacity: Lessons from urban elementary schools. Presented at the annual meeting of the American Educational Research Association, New Orleans, April 28, 2000.
- Newmann, F. M., Smith, B., Allensworth, E., & Bryk, A. S. (2001). School instructional coherence: Benefits and challenges. Chicago, IL: Consortium on Chicago School Reform.
- Newmann, F. M., & Wehlage, G. G. (1996). Conclusion: Restructuring for authentic achievement. In F. M. Newmann, Ed., *Authentic achievement: Restructuring schools for intellectual quality* (pp. 286-301). San Francisco: Jossey-Bass.
- Nilsen, K. L. (1999). Assessing pre-intervention capacity for change in a high-need rural school district. Charleston, WV: AEL.
- Northwest Regional Educational Laboratory. (1997). Closing the achievement gap requires multiple solutions. Retrieved from the World Wide Web on March 13, 2001: <http://www.nwrel.org/cnorse/infoline/may97/article5.html>
- Ogbu, J. (1983). Minority status and schooling in plural societies. *Comparative Education Review*, 27: 2, 168-90.
- O'Neil, J., & Tell, C. (1999). Why students lose when "tougher standards" win: A conversation with Alfie Kohn. *Educational Leadership*, 57: 1. Retrieved from the World Wide Web on August 19, 2002: <http://www.ascd.org/pdi/demo/diffinstr/oneiltell.html>
- Paley, V. G. (1979). *White teacher*. Cambridge, MA: Harvard University Press.
- Perez, C. (2000). Equity in standards-based elementary mathematics classrooms. Cambridge, MA: TERC. Retrieved from the World Wide Web, August 12, 2002: <http://www.terc.edu/wge/equity.html>
- Pohan, C. A., & Aguilar, T. E. (2001). Measuring educators' beliefs about diversity in personal and professional contexts. *American educational research journal*, 38: 1, pp. 159-182.
- Raywid, M. A. (1993). Finding time for collaboration. *Educational leadership*, 51: 1, 30-34.
- Rickford, A. (2001). The effect of cultural congruence and higher order questioning on the reading enjoyment and comprehension of ethnic minority students. *Journal of education for students placed at risk*, 6: 4, 357-387.
- Riordan, C. (1997). *Equality and achievement: An introduction to the sociology of education*. New York: Longman.

- Rose, A. (1999). Teaching effectively and equitably. *The National Teaching and Learning Forum*, 8: 4.
- Rose, P. I. (1990). *They and we: Racial and ethnic relations in the United States*, 4<sup>th</sup> edition. New York: McGraw-Hill.
- Rowan, B., & Miracle, A. W., Jr. (1983). Systems of ability grouping and the stratification of achievement in elementary schools. *Sociology of Education*, 56: 3, pp.133-144.
- Sadker, M., & Sadker, D. (1994). *Failing at fairness: How America's schools cheat girls*. New York: Charles Scribner's Sons.
- Sarason, S. B., & Lorentz, E. M. (1998). *Crossing boundaries: Collaboration, coordination, and the redefinition of resources*. San Francisco: Jossey-Bass.
- Schwartz, W. (2001a). Closing the achievement gap: Principles for improving the educational success of all students. *ERIC digest*. New York: ERIC Clearinghouse on Urban Education. Retrieved from the World Wide Web on March 13, 2002: <http://eric-web.tc.columbia.edu/digests/dig169.html>
- Schwartz, W. (2001b). Strategies for improving the educational outcomes of Latinas. *ERIC digest*. New York: ERIC Clearinghouse on Urban Education. Retrieved from the World Wide Web on August 6, 2002: <http://eric-web.tc.columbia.edu/digests/dig167.html>
- Sizer, T. R. (1999). No two are quite alike. *Educational Leadership*, 57: 1. Retrieved from the World Wide Web on August 19, 2002: <http://www.ascd.org/pdi/demo/diffinstr/sizer.html>
- Takaki, R., Ed. (1987). *From different shores*. New York: Oxford University Press.
- Tauber, R. T. (1998). Good or bad, what teachers expect from students they generally get! *ERIC digest*. Washington, DC: ERIC Clearinghouse on Teaching and Teacher Education. Retrieved from the World Wide Web on August 6, 2002: [http://www.eric.org/pages/digests/good\\_or\\_bad.html](http://www.eric.org/pages/digests/good_or_bad.html)
- Thompson, C. L., & O'Quinn, S. D. (2001). First in America special report: Eliminating the black-white achievement gap. Chapel Hill, NC: North Carolina Education Research Council.
- Thorne, B. (1995). *Gender play: Girls and boys in school*. New Brunswick, NJ: Rutgers University Press.
- Tomlinson, C. A. (1995). Differentiating instruction for advanced learners in the mixed-ability middle school classroom. *ERIC digest*. Reston, VA: ERIC Clearinghouse on Disabilities and Gifted Education.

- Tomlinson, C. A. (1999a). *The differentiated classroom: Responding to the needs of all learners*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tomlinson, C. A. (1999b). Mapping a route toward differentiated instruction. *Educational Leadership*, 57: 1. Retrieved from the World Wide Web on August 19, 2002: <http://www.ascd.org/pdi/demo/diffinstr/tomlinson2.html>
- Tomlinson, C. A. (2000). Differentiation of instruction in the elementary grades. *ERIC digest*. Champaign, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. Retrieved from the World Wide Web on January 11, 2002: <http://ericir.syr.edu/plweb-cgi/obtain.pl>
- Tomlinson, C. A., & Kalbfleisch, M. L. (1998). Teach me, teach my brain: A call for differentiated classrooms. *Educational Leadership*, 56: 3. Retrieved from the World Wide Web on August 19, 2002: <http://www.ascd.org/pdi/demo/diffinstr/tomlinson.html>
- University of Minnesota, Diversity Work Group. (2002). Survey of campus climate and diversity: Summary, 1997-98. Retrieved from the World Wide Web on January 11, 2002: <http://webhome.crk.umn.edu/~mprada/Survey.html>
- University of North Carolina. (2001). School of Education and Teachers Academy: Conceptual framework for professional education. Greensboro, NC: Author. Retrieved from the World Wide Web: [http://soe.uncg.edu/affiliates/teachers\\_academy/documents/uncg\\_cf\\_ovr\\_sum.pdf](http://soe.uncg.edu/affiliates/teachers_academy/documents/uncg_cf_ovr_sum.pdf)
- van der Bogert, R. (Ed.) (1998). *Making learning communities work: The critical role of leader as learner*. San Francisco: Jossey-Bass.
- Vernon-Feagans, L., Hammer, C. S., Miccio, A., & Manlove, E. (2001). Early language and literacy skills in low-income African American and Hispanic children. In S. Neuman and D. Dickinson (Eds.), *Handbook of early literacy research*. New York: Guilford Press, pp. 192-210.
- Viadero, D. (2000, March 29). Minority gaps smaller in some Pentagon schools. *Education Week*, 19: 29. Retrieved from the World Wide Web on April 10, 2002: <http://www.edweek.org/ew/ewstory.cfm?slug=29dodd.h19>
- Viadero, D., & Johnston, R.C. (2000, March 22). Lags in minority achievement defy traditional explanations. *Education Week*, 19: 28. Retrieved from the World Wide Web on April 10, 2002: <http://www.edweek.org/ew/ewstory.cfm?slug=28causes.h19>
- Viadero, D., & Johnston, R.C. (2000, April 5). Lifting minority achievement: Complex answers. *Education Week*, 19: 30. Retrieved from the World Wide Web on April 10, 2002: <http://www.edweek.org/ew/ewstory.cfm?slug=30gap.h19>

Willis, P. (1981) *Learning to labor: How working class kids get working class jobs*. New York: Columbia University Press.

Wilson, R. J., & Martinussen, R. L. (1999). Factors affecting the assessment of student achievement. *Alberta Journal of Educational Research*, 45: 3, 267-277.

## APPENDIXES

**APPENDIX A:**  
**AEL's School Capacity Assessment (SCA)**

# AEL School Capacity Assessment Questionnaire (SCA)

Your School: \_\_\_\_\_

Identification Number

Your School District: \_\_\_\_\_

SSN #    Home #    Day Born

Directions: Please fill in the six digits of your "Identification Number" on the grid to the right. This number ensures anonymity and is easy to generate. It consists of the last two digits of your Social Security Number (SSN), the last two digits of your home phone number, and the two digits for the day of the month on which you were born (01-31).

0	0	0	0	0	0
1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9

Read each item and then rate the extent to which it is true for your school. Using a scale of 1- 4 for your ratings, with a "1" indicating "Strongly Disagree" and a "4" indicating "Strongly Agree," completely fill in the bubble that represents how well you believe your school performs.

Like this: ●      Not like this: ⊗      ✓

<b>Strongly Disagree</b> ①	<b>Disagree</b> ②	<b>Agree</b> ③	<b>Strongly Agree</b> ④
-------------------------------	----------------------	-------------------	----------------------------

- |   |   |   |   |   |
|---|---|---|---|---|
| 1. Teachers here are confident they will be able to motivate their students.  | ① | ② | ③ | ④ |
| 2. If a child doesn't want to learn, teachers here give up.   | ① | ② | ③ | ④ |
| 3. I have often visited a peer's school to observe and discuss his/her teaching/learning situation.   | ① | ② | ③ | ④ |
| 4. I have to give up planning time because of non-academic activities at this school.   | ① | ② | ③ | ④ |
| 5. Teachers in this school are able to get through to difficult students.   | ① | ② | ③ | ④ |
| 6. Other than formal evaluation, my supervisor(s) regularly observe(s) my work in school and give(s) me meaningful feedback.  | ① | ② | ③ | ④ |
| 7. These students come to school ready to learn.  | ① | ② | ③ | ④ |
| 8. I have often been visited by a peer from another classroom to observe and discuss my teaching/learning situation.  | ① | ② | ③ | ④ |
| 9. Teachers in this school do not have the skills to deal with student disciplinary problems.   | ① | ② | ③ | ④ |
| 10. Two or more colleagues in the building regularly observe my work in school and give me meaningful feedback.   | ① | ② | ③ | ④ |
| 11. Teachers here don't have the skills needed to produce meaningful student learning.  | ① | ② | ③ | ④ |
| 12. I have often been visited by a peer from another school to observe and discuss my teaching/learning situation.  | ① | ② | ③ | ④ |
| 13. Home life provides so many advantages students here are bound to learn.   | ① | ② | ③ | ④ |
| 14. Regular time is set aside at this school for teachers to coordinate curriculum, instruction, or materials <i>within</i> the different grade levels at this school | ① | ② | ③ | ④ |
| 15. Students here just aren't motivated to learn.   | ① | ② | ③ | ④ |
| 16. Learning is more difficult at this school because students are worried about their safety.  | ① | ② | ③ | ④ |

Strongly Disagree ①	Disagree ②	Agree ③	Strongly Agree ④	
17. Teachers in this school really believe every child can learn.	①	②	③	④
18. I have to give up instructional time because of non-academic events at this school.	①	②	③	④
19. Drugs and alcohol abuse in the community make learning difficult for students here.	①	②	③	④
20. The opportunities in this community ensure that these students will learn.	①	②	③	④
21. The tests students take reflect teachers' objectives.	①	②	③	④
22. Supplemental programs like Title I are carefully designed to complement classroom teaching.	①	②	③	④
23. We routinely evaluate the utility of efforts to improve our school.	①	②	③	④
24. Professional development activities are aligned to achieve improvement goals at this school.	①	②	③	④
25. Teachers have adequate equipment in their classroom (e.g., computers, maps, lab materials) to teach to their objectives.	①	②	③	④
26. I receive informal, meaningful feedback on my performance from my peers.	①	②	③	④
27. We practice organized abandonment of programs that are not doing what we expected them to do.	①	②	③	④
28. I have all the equipment and materials I need to teach my students well.	①	②	③	④
29. We have so many different programs in this school that I can't keep track of them all.	①	②	③	④
30. We have many new programs in our school.	①	②	③	④
31. There is adequate space in classrooms to allow teachers to teach to their objectives.	①	②	③	④
32. Teachers have access at school to journals and professional resource materials.	①	②	③	④
33. Curriculum, instruction, and materials are well coordinated <u>across</u> the different grade levels at this school.	①	②	③	④
34. Curriculum, instruction, and materials are well coordinated <u>within</u> the different grade levels at this school.	①	②	③	④
35. Teachers in this school have sufficient time available for professional development that is appropriate to our school's goals. ①	②	③	④	
36. When we add a new program, we often eliminate another one.	①	②	③	④
37. Most professional development topics are offered once in the school and not followed up.	①	②	③	④
38. Classroom equipment usually does not function adequately.	①	②	③	④
39. Professional development in this school is supported by other initiatives for improving the school.	①	②	③	④
40. The texts and instructional materials students have allow teachers to teach to their objectives.	①	②	③	④
41. We choose innovations selectively.	①	②	③	④
42. Regular time is set aside at this school for teachers to coordinate curriculum, instruction, or materials <u>across</u> the different grade levels.	①	②	③	④
43. I have often visited a peer's classroom to observe and discuss his/her teaching/learning situation.	①	②	③	④

Strongly Disagree ①	Disagree ②	Agree ③	Strongly Agree ④
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**For Questions 44-99, the professional staff at this school:**

- |  |   |   |   |   |
|--|---|---|---|---|
| 44. Understand the community(ies) in which their students live.  | ① | ② | ③ | ④ |
| 45. Provide learning experiences that make subject matter meaningful for students from diverse backgrounds.  | ① | ② | ③ | ④ |
| 46. Expect students to be culturally sensitive.  | ① | ② | ③ | ④ |
| 47. Tend to underestimate students' performance.   | ① | ② | ③ | ④ |
| 48. Show respect for students' differences.  | ① | ② | ③ | ④ |
| 49. Expect most students in this school to perform above the national average in terms of academic achievement.  | ① | ② | ③ | ④ |
| 50. Use a variety of assessment techniques to accommodate diverse learners.  | ① | ② | ③ | ④ |
| 51. Ensure that students participate in classroom activities that are respectful of their socioeconomic status.  | ① | ② | ③ | ④ |
| 52. Use culturally sensitive assessment strategies.  | ① | ② | ③ | ④ |
| 53. Have high expectations for all students.   | ① | ② | ③ | ④ |
| 54. Respond to diverse community interests.  | ① | ② | ③ | ④ |
| 55. Discourage disparaging treatment of students based on their racial/ethnic background.  | ① | ② | ③ | ④ |
| 56. Teach students to be culturally sensitive.   | ① | ② | ③ | ④ |
| 57. Provide culturally relevant and respectful learning environment for students.  | ① | ② | ③ | ④ |
| 58. Encourage students to value each others' differences.  | ① | ② | ③ | ④ |
| 59. Believe that most students in this school are able to master basic skills.   | ① | ② | ③ | ④ |
| 60. Seek to prevent their biases from hindering student learning.  | ① | ② | ③ | ④ |
| 61. Teach students to recognize stereotypes.   | ① | ② | ③ | ④ |
| 62. Use classroom grouping methods that are flexible.  | ① | ② | ③ | ④ |
| 63. Teach students to challenge discrimination.  | ① | ② | ③ | ④ |
| 64. Ensure all students' participation in instructional activities.  | ① | ② | ③ | ④ |
| 65. Expect almost all students to perform at or above grade level by the end of this year.   | ① | ② | ③ | ④ |
| 66. Assign reading material written by or about members of various racial/ethnic groups.   | ① | ② | ③ | ④ |
| 67. Learn about their students by participating in their communities.  | ① | ② | ③ | ④ |
| 68. Provide varied learning environments to accommodate diverse learners.  | ① | ② | ③ | ④ |
| 69. Connect curriculum to students' home and community experiences.  | ① | ② | ③ | ④ |
| 70. Interact with students in ways that acknowledge students' speaking style preferences regardless of how similar they are to staff members' preferences. | ① | ② | ③ | ④ |
| 71. Believe that children here have what it takes to learn this year's material.   | ① | ② | ③ | ④ |
| 72. Help students apply their learning to their home and community.  | ① | ② | ③ | ④ |
| 73. Show an interest in learning about diversity.  | ① | ② | ③ | ④ |

Strongly Disagree ①	Disagree ②	Agree ③	Strongly Agree ④
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- |  |   |   |   |   |
|--|---|---|---|---|
| 74. Use multicultural examples when explaining content.  | ① | ② | ③ | ④ |
| 75. Use language that does not demean or exclude any students.   | ① | ② | ③ | ④ |
| 76. Ensure that students participate in classroom activities that are sensitive to their racial/ethnic background.         | ① | ② | ③ | ④ |
| 77. Discourage disparaging comments about students based on their racial/ethnic background.                                | ① | ② | ③ | ④ |
| 78. Assign materials that do not promote stereotypes.  | ① | ② | ③ | ④ |
| 79. Acknowledge the contributions of various racial or ethnic groups.  | ① | ② | ③ | ④ |
| 80. Do not expect many students to master basic skills at each grade level.  | ① | ② | ③ | ④ |
| 81. Discourage disparaging treatment of students based on their socioeconomic status.                                      | ① | ② | ③ | ④ |
| 82. Understand how students differ in their approaches to learning.  | ① | ② | ③ | ④ |
| 83. Teach students to challenge stereotypes.   | ① | ② | ③ | ④ |
| 84. Believe that most students at this school will perform at about the national average in terms of academic achievement. | ① | ② | ③ | ④ |
| 85. Express the same level of respect for the abilities of all students.   | ① | ② | ③ | ④ |
| 86. Use various classroom grouping methods.  | ① | ② | ③ | ④ |
| 87. Differentiate instruction to promote all students' achievement.  | ① | ② | ③ | ④ |
| 88. Offer praise to students in an even-handed, equitable manner.  | ① | ② | ③ | ④ |
| 89. Modify individual students' assignments to groups based on regular assessments of individual students' performance.    | ① | ② | ③ | ④ |
| 90. Discourage disparaging comments about students based on their socioeconomic status.                                    | ① | ② | ③ | ④ |
| 91. Are aware of their own biases.   | ① | ② | ③ | ④ |
| 92. Provide learning experiences that make subject matter interesting for students from diverse backgrounds.               | ① | ② | ③ | ④ |
| 93. Do not believe that students have different learning styles.   | ① | ② | ③ | ④ |
| 94. Believe that most students in this school are capable of performing at about the natural average.                      | ① | ② | ③ | ④ |
| 95. Encourage students to acknowledge each others' strengths.  | ① | ② | ③ | ④ |
| 96. Respond to diverse community interests.  | ① | ② | ③ | ④ |
| 97. Assign reading material written by or about women.   | ① | ② | ③ | ④ |
| 98. Think that their students will work hard this year.  | ① | ② | ③ | ④ |
| 99. Design instructional activities that reflect local community interests.  | ① | ② | ③ | ④ |

**APPENDIX B:**  
**Pilot Test Item Descriptive Statistics**

## Collective Teacher Efficacy

Item	N	Mean	Median	Mode	SD	Skewness	Std. Error of Skewness	Min.	Max.
Teachers here are confident they will be able to motivate their students.	450	2.86	3.00	3	.827	-.480	.115	1	4
If a child doesn't want to learn, teachers here give up.	452	3.23	3.00	3	.829	-1.061	.115	1	4
Teachers in this school are able to get through to difficult students.	445	2.61	3.00	3	.819	-.344	.116	1	4
These students come to school ready to learn.	443	2.00	2.00	2	.861	.269	.116	1	4
Teachers in this school do not have the skills to deal with student disciplinary problems.	452	2.98	3.00	3	.892	-.582	.115	1	4
Teachers here don't have the skills needed to produce meaningful student learning.	448	3.35	3.00	4	.747	-1.113	.115	1	4
Home life provides so many advantages students here are bound to learn.	449	1.62	1.00	1	.842	1.253	.115	1	4
Students here just aren't motivated to learn.	449	2.60	3.00	3	.898	-.229	.115	1	4
Learning is more difficult at this school because students are worried about their safety.	450	3.34	3.00	4	.702	-.939	.115	1	4
Teachers in this school really believe every child can learn.	451	3.05	3.00	3	.823	-.619	.115	1	4
Drugs and alcohol abuse in the community make learning difficult for students here.	447	2.31	2.00	2	.899	.273	.115	1	4
The opportunities in this community ensure that these students will learn.	442	2.02	2.00	2	.781	.403	.116	1	4

## Deprivatized Practice

Item	N	Mean	Median	Mode	SD	Skewness	Std. Error of Skewness	Min.	Max.
I have often visited a peer's school to observe and discuss his/her teaching/learning situation.	441	2.15	2.00	1	.969	.243	.116	1	4
Other than formal evaluation, my supervisor(s) regularly observe(s) my work in school and give(s) me meaningful feedback.	447	2.66	3.00	3	.981	-.340	.115	1	4
I have often been visited by a peer from another classroom to observe and discuss my teaching/learning situation.	440	2.27	2.00	3	.939	.084	.116	1	4
Two or more colleagues in the building regularly observe my work in school and give me meaningful feedback.	445	2.36	2.00	3	.910	-.041	.116	1	4
I have often been visited by a peer from another school to observe and discuss my teaching/learning situation.	434	1.79	2.00	2	.779	.699	.117	1	4
I receive informal, meaningful feedback on my performance from my peers.	447	2.59	3.00	3	.790	-.479	.115	1	4
I have often visited a peer's classroom to observe and discuss his/her teaching/learning situation.	436	2.35	2.00	3	.868	-.072	.117	1	4

## Program Coherence

Item	N	Mean	Median	Mode	SD	Skewness	Std. Error of Skewness	Min.	Max.
Supplemental programs like Title I are carefully designed to complement classroom teaching.	433	2.69	3.00	3	.868	-.520	.117	1	4
We routinely evaluate the utility of efforts to improve our school.	442	2.66	3.00	3	.831	-.325	.116	1	4
Professional development activities are aligned to achieve improvement goals at this school.	445	2.68	3.00	3	.847	-.463	.116	1	4
We practice organized abandonment of programs that are not doing what we expected them to do.	433	2.30	2.00	2	.797	.054	.117	1	4
We have so many different programs in this school that I can't keep track of them all.	443	3.02	3.00	3	.775	-.624	.116	1	4
We have many new programs in our school.	442	2.82	3.00	3	.735	-.192	.116	1	4
Curriculum, instruction, and materials are well coordinated <i>across</i> the different grade levels at this school.	448	2.47	3.00	3	.827	-.341	.115	1	4
Curriculum, instruction, and materials are well coordinated <i>within</i> the different grade levels at this school.	449	2.65	3.00	3	.776	-.662	.115	1	4
When we add a new program, we often eliminate another one.	426	2.52	3.00	3	.723	-.170	.118	1	4
Most professional development topics are offered once in the school and not followed up.	441	2.42	2.00	2	.765	.036	.116	1	4
Professional development in this school is supported by other initiatives for improving the school.	442	2.54	3.00	3	.725	-.491	.116	1	4
We choose innovations selectively.	426	2.55	3.00	3	.709	-.565	.118	1	4

## Technical Resources

Item	N	Mean	Median	Mode	SD	Skewness	Std. Error of Skewness	Min.	Max.
The tests students take reflect teachers' objectives.	446	2.96	3.00	3	.757	-.681	.116	1	4
Teachers have adequate equipment in their classroom (e.g., computers, maps, lab materials) to teach to their objectives.	452	1.86	2.00	1	.881	.588	.115	1	4
I have all the equipment and materials I need to teach my students well.	447	1.80	2.00	1	.874	.732	.115	1	4
There is adequate space in classrooms to allow teachers to teach to their objectives.	445	2.54	3.00	3	.878	-.388	.116	1	4
Teachers have access at school to journals and professional resource materials.	449	2.63	3.00	3	.838	-.504	.115	1	4
Classroom equipment usually does not function adequately.	445	2.30	2.00	3	.868	-.012	.116	1	4
The texts and instructional materials students have allow teachers to teach to their objectives.	446	2.43	3.00	3	.834	-.332	.116	1	4

## Equitable Practice

Item	N	Mean	Median	Mode	SD	Skewness	Std. Error of Skewness	Min.	Max.
Understand the community(ies) in which their students live.	452	3.02	3.00	3	.769	-.688	.115	1	4
Provide learning experiences that make subject matter meaningful for students from diverse backgrounds.	451	2.82	3.00	3	.726	-.595	.115	1	4
Show respect for students' differences.	448	3.04	3.00	3	.686	-.640	.115	1	4
Ensure that students participate in classroom activities that are respectful of their socioeconomic status.	440	2.89	3.00	3	.665	-.801	.116	1	4
Use culturally sensitive assessment strategies.	438	2.70	3.00	3	.690	-.530	.117	1	4
Respond to diverse community interests.	444	2.80	3.00	3	.693	-.533	.116	1	4
Discourage disparaging treatment of students based on their racial/ethnic background.	441	3.05	3.00	3	.792	-.866	.116	1	4
Teach students to be culturally sensitive.	439	2.89	3.00	3	.705	-.630	.117	1	4
Provide culturally relevant and respectful learning environment for students.	445	2.97	3.00	3	.660	-.678	.116	1	4
Encourage students to value each others' differences.	446	3.11	3.00	3	.683	-.694	.116	1	4
Seek to prevent their biases from hindering student learning.	441	3.00	3.00	3	.645	-.458	.116	1	4
Teach students to recognize stereotypes.	442	2.75	3.00	3	.694	-.479	.116	1	4
Teach students to challenge discrimination.	435	2.78	3.00	3	.749	-.416	.117	1	4
Ensure all students' participation in instructional activities.	443	3.09	3.00	3	.670	-.650	.116	1	4
Assign reading material written by or about members of various racial/ethnic groups.	438	2.88	3.00	3	.730	-.489	.117	1	4
Learn about their students by participating in their communities.	439	2.53	3.00	3	.790	-.150	.117	1	4

## Equitable Practice, cont

Item	N	Mean	Median	Mode	SD	Skewness	Std. Error of Skewness	Min.	Max.
Connect curriculum to students' home and community experiences.	438	2.69	3.00	3	.723	-.326	.117	1	4
Interact with students in ways that acknowledge students' speaking style preferences regardless of how similar they are to staff members' preferences.	426	2.79	3.00	3	.697	-.655	.118	1	4
Help students apply their learning to their home and community.	446	2.93	3.00	3	.670	-.641	.116	1	4
Show an interest in learning about diversity.	446	2.96	3.00	3	.652	-.501	.116	1	4
Use multicultural examples when explaining content.	442	2.80	3.00	3	.725	-.470	.116	1	4
Use language that does not demean or exclude any students.	445	3.04	3.00	3	.701	-.689	.116	1	4
Ensure that students participate in classroom activities that are sensitive to their racial/ethnic background.	438	2.87	3.00	3	.678	-.591	.117	1	4
Discourage disparaging comments about students based on their racial/ethnic background.	444	3.11	3.00	3	.708	-.844	.116	1	4
Assign materials that do not promote stereotypes.	440	3.08	3.00	3	.593	-.482	.116	1	4
Acknowledge the contributions of various racial or ethnic groups.	440	3.14	3.00	3	.644	-.700	.116	1	4
Discourage disparaging treatment of students based on their socioeconomic status.	434	2.97	3.00	3	.770	-.765	.117	1	4
Teach students to challenge stereotypes.	437	2.83	3.00	3	.705	-.490	.117	1	4
Express the same level of respect for the abilities of all students.	440	2.99	3.00	3	.713	-.515	.116	1	4
Offer praise to students in an even-handed, equitable manner.	443	3.13	3.00	3	.642	-.486	.116	1	4

## Equitable Practice, cont

Item	N	Mean	Median	Mode	SD	Skewness	Std. Error of Skewness	Min.	Max.
Discourage disparaging comments about students based on their socioeconomic status.	438	3.06	3.00	3	.697	-.732	.117	1	4
Are aware of their own biases.	433	2.75	3.00	3	.705	-.567	.117	1	4
Provide learning experiences that make subject matter interesting for students from diverse backgrounds.	439	2.92	3.00	3	.720	-.503	.117	1	4
Encourage students to acknowledge each others' strengths.	441	3.05	3.00	3	.655	-.641	.116	1	4
Respond to diverse community interests.	436	2.84	3.00	3	.674	-.574	.117	1	4
Assign reading material written by or about women.	432	2.89	3.00	3	.678	-.718	.117	1	4
Design instructional activities that reflect local community interests.	438	2.72	3.00	3	.726	-.496	.117	1	4

## Differentiated Instruction

Item	N	Mean	Median	Mode	SD	Skewness	Std. Error of Skewness	Min.	Max.
Use a variety of assessment techniques to accommodate diverse learners.	445	2.74	3.00	3	.752	-.436	.116	1	4
Use classroom grouping methods that are flexible.	442	2.98	3.00	3	.629	-.584	.116	1	4
Provide varied learning environments to accommodate diverse learners.	440	2.80	3.00	3	.713	-.367	.116	1	4
Understand how students differ in their approaches to learning.	443	3.04	3.00	3	.663	-.656	.116	1	4
Use various classroom grouping methods.	444	2.99	3.00	3	.644	-.500	.116	1	4
Differentiate instruction to promote all students' achievement.	439	2.95	3.00	3	.671	-.448	.117	1	4
Modify individual students' assignments to groups based on regular assessments of individual students' performance.	442	2.88	3.00	3	.706	-.723	.116	1	4
Do not believe that students have different learning styles.	442	3.14	3.00	3	.783	-.674	.116	1	4

## Expectations for Student Performance

Item	N	Mean	Median	Mode	SD	Skewness	Std. Error of Skewness	Min.	Max.
Tend to underestimate students' performance.	443	2.70	3.00	3	.789	-.191	.116	1	4
Expect most students in this school to perform above the national average in terms of academic achievement.	447	2.50	3.00	3	.831	-.105	.115	1	4
Have high expectations for all students.	447	3.01	3.00	3	.825	-.553	.115	1	4
Believe that most students in this school are able to master basic skills.	448	3.02	3.00	3	.703	-.695	.115	1	4
Expect almost all students to perform at or above grade level by the end of this year.	439	2.99	3.00	3	.731	-.473	.117	1	4
Believe that children here have what it takes to learn this year's material.	447	2.91	3.00	3	.731	-.546	.115	1	4
Do not expect many students to master basic skills at each grade level.	445	3.07	3.00	3	.773	-.466	.116	1	4
Believe that most students at this school will perform at about the national average in terms of academic achievement.	442	2.60	3.00	3	.794	-.208	.116	1	4
Believe that most students in this school are capable of performing at about the national average.	440	2.78	3.00	3	.771	-.580	.116	1	4
Think that their students will work hard this year.	446	2.92	3.00	3	.771	-.545	.116	1	4

## Time for Planning

Item	N	Mean	Median	Mode	SD	Skewness	Std. Error of Skewness	Min.	Max.
I have to give up planning time because of non-academic activities at this school.	444	2.61	3.00	3	.985	-.153	.116	1	4
Regular time is set aside at this school for teachers to coordinate curriculum, instruction, or materials <i>within</i> the different grade levels at this school.	450	2.38	2.00	3	1.009	.017	.115	1	4
I have to give up instructional time because of non-academic events at this school.	442	2.77	3.00	3	.856	-.340	.116	1	4
Teachers in this school have sufficient time available for professional development that is appropriate to our school's goals.	451	2.32	2.00	2	.838	-.004	.115	1	4
Regular time is set aside at this school for teachers to coordinate curriculum, instruction, or materials <i>across</i> the different grade levels.	448	2.24	2.00	2	.832	.044	.115	1	4

**APPENDIX C:**  
**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
- evaluation report
- other: pilot test report

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