



What Works in Oklahoma Schools

A Comprehensive Needs Assessment of Oklahoma Schools

Conducted by Marzano Research Laboratory

Englewood, Colorado

Phase I State Report

Overview of *What Works in Oklahoma Schools* Study: Phase I State Report

The Oklahoma State Department of Education (OSDE) has identified nine essential elements that form the blueprint for school improvement in Oklahoma schools. These nine essential elements are:

1. Curriculum
2. Classroom Evaluation/Assessment
3. Instruction
4. School Culture
5. Student, Family, and Community Support
6. Professional Growth, Development, and Evaluation
7. Leadership
8. Organizational Structure and Resources
9. Comprehensive and Effective Planning

These elements are further divided into ninety indicators representing all aspects of school operations. The framework is intended to be used by Oklahoma schools to identify areas of strength and areas of need. Areas of strength are to be celebrated. Areas of need are the focus of future school improvement initiatives.

In an effort to provide more effective feedback to Oklahoma schools, the OSDE commissioned Marzano Research Laboratory (MRL) in Englewood, Colorado to: (1) conduct a study that would help identify these elements and their indicators that are integral to the success of Oklahoma schools, (2) provide feedback to a sample of Oklahoma schools participating in the study regarding their strengths and areas of need, and (3) use the results to create a replicable system for all Oklahoma schools to better identify areas of strength and areas of need.

This report focuses on the initial phase of that effort.

Design of Initial Phase

Four primary stakeholder groups were identified to participate in this study: (1) teachers, (2) site administrators, (3) parents, and (4) students. Surveys representing indicators for the nine essential elements were designed and field tested and then sent to 61 total schools in the spring of 2010. Of these, 33 schools were classified as *improvement schools* and 28 schools were *not* classified as improvement schools. The OSDE matched the non-improvement schools with the improvement schools as closely as possible on demographic factors such as ethnicity and socio-economic status.

As stated by the OSDE, improvement schools are those that do not make AYP for two consecutive years in the same subject or performance target. Scores from all assessments in the Oklahoma School Testing Program (OSTP) for Mathematics and Reading/Language Arts are included in the performance measure for math and reading.

The goal of every improvement school is to move out of this category. Non-improvement schools do not exhibit the characteristics listed above. In effect, the purpose of this study is to determine what the non-improvement schools do differently from the improvement schools. This information can be used by improvement schools to identify specific future actions that might help them move out of improvement status.

32 of the improvement schools and 27 of the non-improvement schools elected to return the surveys for a total of 59 schools. Of those 32 improvement schools and 27 non-improvement schools, 12 were high schools (7 improvement schools and 5 non-improvement), 28 were middle schools (16 improvement schools and 12 non-improvement schools), and 19 were elementary schools (9 improvement schools and 10 non-improvement schools).

Student Demographics

Figure 1 reports student demographic data as supplied by students who took the surveys in all schools participating in this portion of the study.

Figure 1: Student Demographics

	Demographic Data	# of Responses
Gender	Male	6,689
	Female	6,643
	No Response	41
Hispanic/Latino	Yes	4,006
	No	9,105
	No Response	262
Ethnicity	American Indian/Alaska Native	2,359
	Asian	450
	Black/African American	3,990
	Native Hawaiian/Pacific Islander	233
	White	5,217
	No Response	2,973
Special Programs	English Language Learner	680
	Special Education	777
	Gifted & Talented	1,658
	None	10,093
	No Response	287

Survey Responses

Figure 2 reports the number of teachers employed and number of students enrolled in all schools participating in this portion of the study according to the OSDE as of October 1, 2009. Figure 2 also compares these numbers to the number of surveys returned to MRL. Finally, it reports the number of parent surveys returned.

Figure 2: Survey Responses

Stakeholder Group	Oklahoma Dept. of Education	# of Surveys Returned to MRL
Teachers	2,360	1,117
Students	31,406	13,373
Parents	N/A	516

General Findings for the Nine Essential Elements

This section reports the findings from each stakeholder group for all schools and compares those findings to those of the entire group of non-improvement schools and the entire group of improvement schools. The symbol ‘n’ represents the number of responses for each category. Findings from the teacher surveys are reported first.

Teacher Survey Results

Figure 3 reports the average scores from teachers on the nine essential elements for: (1) the non-improvement schools considered as a group and (2) the improvement schools considered as a group.

Figure 3: Teacher Survey Results

(n=number of participants)

Essential Element	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Curriculum	4.44 (n=478)	4.10 (n=480)	S
Classroom Evaluation/Assessment	4.17 (n=478)	3.96 (n=481)	S

Essential Element	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Instruction	4.47 (n=481)	4.33 (n=486)	S
School Culture	4.40 (n=482)	4.20 (n=485)	S
Student, Family, & Community Support	3.75 (n=482)	3.57 (n=486)	S
Professional Growth, Development, & Evaluation	3.97 (n=481)	3.60 (n=484)	S
Leadership	4.09 (n=940)	3.69 (n=860)	S
Organizational Structure & Response	3.99 (n=496)	3.44 (n=396)	S
Comprehensive & Effective Planning	4.15 (n=500)	3.86 (n=396)	S

The first column of Figure 3 identifies the essential element.

The second column of Figure 3 reports the average score for the 27 non-improvement schools and the third column reports the average score for the 32 improvement schools. The Likert scale that was used ranged from 1 through 5. A score of 1 indicated ‘I do not agree’ and a score of 5 indicated ‘I strongly agree.’

The last column in Figure 3 reports the statistical significance of the difference between the average score for the non-improvement schools and the improvement schools. Technical note 1 explains the concept of statistical significance. In general though, you should treat the results in Figures 3 through 9 in the following way: If the difference between the average score of the non-improvement schools is greater than the average score for the improvement schools, and is noted as statistically significant (i.e., an S is recorded in the last column of Figure 3 as opposed to an NS) this is an indication that the identified element might be an important determiner of whether a school is classified as non-improvement versus improvement. *A result is called **statistically significant** if it is unlikely to have occurred by chance.*

Site Administrator Survey Results

Figure 4 reports the survey results for site administrators and should be interpreted in the same fashion as Figure 3.

Figure 4: Site Administrator Survey Results

Essential Element	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Curriculum	4.65 (n=19)	4.30 (n=22)	NS
Classroom Evaluation/Assessment	4.30 (n=19)	3.58 (n=22)	S
Instruction	4.18 (n=19)	3.38 (n=22)	S
School Culture	4.41 (n=19)	3.66 (n=22)	S
Student, Family, & Community Support	4.46 (n=19)	3.79 (n=23)	S
Professional Growth, Development, & Evaluation	4.11 (n=19)	3.90 (n=23)	NS
Leadership	4.43 (n=19)	3.89 (n=23)	S
Organizational Structure & Response	4.43 (n=19)	4.08 (n=23)	S
Comprehensive & Effective Planning	4.23 (n=19)	3.86 (n=23)	NS

Parent Survey Results

Figure 5 reports the survey results for parents and should be interpreted in the same fashion as Figure 3.

Figure 5: Parent Survey Results

Essential Element	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Curriculum	4.25 (n=277)	4.03 (n=234)	NS
Classroom Evaluation/Assessment	4.26 (n=277)	4.14 (n=233)	NS
Instruction	4.17 (n=276)	4.00 (n=232)	NS
School Culture	3.97 (n=277)	3.99 (n=232)	NS
Student, Family, & Community Support	3.80 (n=276)	3.82 (n=231)	NS
Professional Growth, Development, & Evaluation	4.05 (n=266)	3.86 (n=222)	NS
Comprehensive & Effective Planning	3.76 (n=275)	3.68 (n=231)	NS

Administrator/Teacher Discrepancy Analysis

Figure 6 reports the differences in perceptions between teachers and administrators in all non-improvement schools and in all improvement schools. Again, the Likert scale that was used ranged from 1 through 5. A score of 1 indicated ‘I do not agree’ and a score of 5 indicated ‘I strongly agree.’

Figure 6: Discrepancy Scores for Administrators Versus Teachers in Non-Improvement and Improvement Schools

Essential Element	Non-Improvement Schools: Administrator Average Minus Teacher Average	Improvement Schools: Administrator Average Minus Teacher Average
Curriculum	0.21	0.20
Classroom Evaluation/Assessment	0.13	-0.38
Instruction	-0.29	-0.95

Essential Element	Non-Improvement Schools: Administrator Average Minus Teacher Average	Improvement Schools: Administrator Average Minus Teacher Average
School Culture	0.01	-0.54
Student, Family, & Community Support	0.71	0.22
Professional Growth, Development, & Evaluation	0.14	0.30
Leadership	0.34	0.20
Organizational Structure & Response	0.44	0.64
Comprehensive & Effective Planning	0.08	0.00
Total Discrepancy	1.77	-0.31
Average Discrepancy	0.20	-0.03

The second column in Figure 6 reports the difference computed when the average scores for teachers in non-improvement schools (see Figure 3 for these scores) are subtracted from the average scores for administrators in non-improvement schools (see Figure 4 for these scores). The third column in Figure 6 reports the difference computed when the average score for teachers in improvement schools (see Figure 3 for these scores) are subtracted from the average score for administrators in improvement schools (see Figure 4 for these scores.) In effect, positive scores in Figure 6 indicate that administrators had more positive perceptions than teachers. Conversely, negative scores indicate that teachers had more positive perceptions. This analysis discloses some interesting differences between administrator and teacher perceptions in non-improvement versus improvement schools.

For non-improvement schools, the average discrepancy was .20 favoring administrators. For improvement schools, the average discrepancy was -.03 favoring teachers. There, differences are primarily a result of rather large perceptual differences in four of the essential elements.

For Classroom Evaluation/Assessment, non-improvement school administrator scores were .13 points higher than teacher scores, but in improvement schools, administrator scores were .38 points (-.38) *lower* than teacher scores, a differential in perceptions of .51 points.

For Instruction, non-improvement school administrator scores were .29 points lower (-.29) than teacher scores. Improvement school administrators also had lower scores than teachers but much more so (-.95)—a differential of .66 points.

For School Culture, non-improvement school administrators had slightly higher scores than teachers (+.01) but improvement school administrators had substantially lower scores than teachers (-.54)—a differential of .55 points.

For Student, Family, and Community Support, non-improvement school administrators had substantially higher scores than teachers (+.71). Improvement school administrators also had higher scores than teachers but less so (+.22)—a differential of .49 points.

For the remaining five essential elements, administrators had higher scores than teachers and the differentials between non-improvement and improvement schools were not that great.

In summary, perceptions between administrators and teachers in non-improvement versus improvement schools are substantially different in four of the nine essential elements.

Student Responses

Grades 3-5 Student Responses

Figure 7: Individual Question Responses Grades 3-5

Survey Question	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q6: My teacher treats everyone fairly.	2.35 (n=1114)	2.20 (n=1174)	S
Q7: My teacher cares about me.	2.49 (n=1111)	2.37 (n=1170)	S
Q8: My teacher lets me know when I am doing well in class.	2.36 (n=1118)	2.23 (n=1179)	S
Q9: I am motivated to learn in class.	2.45 (n=1117)	2.41 (n=1177)	NS
Q10: I feel safe in class.	2.40 (n=1114)	2.25 (n=1175)	S

Survey Question	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q11: I have many friends in class.	2.44 (n=1104)	2.34 (n=1166)	S
Q12: I know what my teacher wants me to do in class.	2.45 (n=1105)	2.37 (n=1156)	S
Q13: Students in class respect each other most of the time.	1.86 (n=1100)	1.64 (n=1159)	S
Q14: My teacher regularly lets me know how I am doing in class.	2.28 (n=1101)	2.13 (n=1171)	S
Q15: My teacher grades me fairly.	2.50 (n=1107)	2.38 (n=1168)	S
Q16: My teacher encourages me to learn as much as I can in class.	2.59 (n=1110)	2.51 (n=1174)	S
Q17: My teacher makes learning interesting.	2.40 (n=1104)	2.22 (n=1170)	S
Q18: I understand the words my teacher uses.	2.29 (n=1107)	2.22 (n=1163)	NS
Q19: I work hard to learn what is taught in class.	2.56 (n=1106)	2.48 (n=1170)	S
Q20: I have done my very best work in this class.	2.47 (n=1109)	2.43 (n=1171)	NS
Q21: My teacher encourages me to do my best.	2.60 (n=1112)	2.51 (n=1172)	S
Q22: In this class, even if the lessons are hard, I do my best to learn something new.	2.60 (n=1111)	2.53 (n=1175)	S
Q23: When the work gets hard, my teacher does not let students give up.	2.54 (n=1100)	2.41 (n=1166)	S
Q24: I participate in class discussions with my teacher.	2.32 (n=1091)	2.19 (n=1159)	S

The Likert scale that was used for the Grade 3-5 Student Surveys ranged from 1 through 3. A score of 1 indicated 'I do not agree' and a score of 3 indicated 'I strongly agree.'

For grades 3-5 student responses, it is important to note that all but three questions were statistically significant. Also, for every question, the average score for non-improvement schools was higher than the average score for improvement schools.

On this survey, the average responses to all questions were between a score of 2 and 3 except for Question #13 ‘Students in class respect each other most of the time.’ This question has a lower average score for both non-improvement and improvement schools than any other question on the survey. This question also has the largest discrepancy between non-improvement and improvement schools (0.22).

The next largest discrepancy is in Question #17 ‘My teacher makes learning interesting.’ The average score for non-improvement schools is 2.40 while the average score for improvement schools is 2.22 (a difference of 0.18).

Questions #6 ‘My teacher treats everyone fairly,’ #10 ‘I feel safe in class,’ and #14 ‘My teacher regularly lets me know how I am doing in class,’ also showed relatively large discrepancies between non-improvement and improvement schools (0.15 for each of the three questions).

Grades 6-8 Student Responses

Figure 8: Individual Question Responses Grades 6-8

Survey Question	Non-Improvement Schools’ Average Score	Improvement Schools’ Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q6: The teacher is fair in this class.	3.87 (n=4125)	3.68 (n=3497)	S
Q7: The teacher of this class cares about me.	3.87 (n=4109)	3.80 (n=3505)	NS
Q8: I am recognized for my successes in this class.	3.29 (n=4111)	3.42 (n=3489)	S
Q9: I am motivated to learn in this class.	3.75 (n=4114)	3.78 (n=3494)	NS
Q10: My school does not tolerate inappropriate behavior.	4.18 (n=4112)	3.83 (n=3490)	S
Q11: My school clearly communicates rules and expectations for students.	4.09 (n=4106)	3.82 (n=3480)	S
Q12: Discipline procedures are fair and consistent throughout the school (for	3.44 (n=4106)	3.31(n=3478)	S

Survey Question	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
example: hallway, cafeteria, playground, etc.).			
Q13: I feel safe in this class.	4.01 (n=4113)	3.79 (n=3499)	S
Q14: I have many friends in this class.	4.13 (n=4121)	4.17 (n=3495)	NS
Q15: I know what the teacher expects of me in this class.	4.23 (n=4111)	4.18 (n=3491)	NS
Q16: Students in this class are generally respectful of each other.	2.86 (n=4099)	2.72 (n=3482)	S
Q17: The teacher of this class regularly lets me know how I am doing.	3.40 (n=4098)	3.45 (n=3485)	NS
Q18: The teacher of this class grades me fairly.	4.24 (n=4104)	4.05 (n=3481)	S
Q19: The teacher encourages me to learn as much as I can in this class.	3.97 (n=4109)	3.96 (n=3472)	NS
Q20: The teacher makes lessons interesting in this class.	3.42 (n=4110)	3.28 (n=3474)	S
Q21: I understand the vocabulary used in our classroom lessons.	3.94 (n=4103)	3.90 (n=3476)	NS
Q22: I try very hard to understand what is being taught in this class.	4.13 (n=4095)	4.10 (n=3476)	NS
Q23: I have done my best work in this class.	3.98 (n=4105)	4.03 (n=3476)	NS
Q24: The teacher of this class encourages me to do my best.	3.94 (n=4106)	3.98 (n=3478)	NS
Q25: Even if the lessons are difficult in this class, I know I can do the work and learn something new.	3.93 (n=4101)	3.98 (n=3458)	NS
Q26: The teacher doesn't let students give up when the work gets hard in this class.	3.83 (n=4089)	3.69 (n=3451)	S
Q27: I actively participate in this classroom's discussions.	3.56 (n=4090)	3.58 (n=3438)	NS

Survey Question	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q28: I feel comfortable reporting suspicious behavior.	2.85 (n=4071)	2.83 (n=3432)	NS
Q29: I sometimes hold back from doing my best in class because of what others might think.	2.23 (n=4090)	2.31 (n=3447)	NS

The Likert scale that was used in the Grades 6-8 Student Surveys ranged from 1 through 5. A score of 1 indicated 'I do not agree' and a score of 5 indicated 'I strongly agree.'

The biggest discrepancy between non-improvement and improvement schools' average score (0.35) occurred in Question #10 'My school does not tolerate inappropriate behavior.'

A large discrepancy also occurred in Question #11 'My school clearly communicates rules and expectations for students' between non-improvement and improvement schools (0.27).

Another question that exhibited a large discrepancy between non-improvement and improvement schools (0.22) was Question #13 'I feel safe in this class.'

On Question #6 'The teacher is fair in this class' and Question #18 'The teacher of this class grades me fairly,' the discrepancy between non-improvement schools and improvement schools was 0.19, which is also fairly high.

Interestingly, the average score for *improvement* schools was higher than the average score for *non-improvement* schools on Question #8 'I am recognized for my successes in this class.' The average score for non-improvement schools was 3.29 while the average score for improvement schools was 3.42.

Grades 9-12 Student Responses

Figure 9: Individual Question Responses Grades 9-12

Survey Question	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q6: The teacher of this class is fair.	4.01 (n=904)	3.98 (n=2509)	NS
Q7: The teacher of this class cares about me.	3.93 (n=904)	3.82 (n=2505)	NS
Q8: I am recognized for my successes in this class.	3.60 (n=900)	3.51 (n=2498)	NS
Q9: I am motivated to learn in this class.	3.68 (n=900)	3.73 (n=2502)	NS
Q10: Inappropriate behavior is not tolerated in my school.	3.64 (n=901)	3.27 (n=2498)	S
Q11: My school clearly communicates rules and expectations for students.	3.74 (n=899)	3.33 (n=2502)	S
Q12: Discipline procedures are fair and consistent throughout the school (for example: hallway, cafeteria, playground, etc.).	3.30 (n=901)	2.92 (n=2498)	S
Q13: I feel safe in this class.	3.92 (n=901)	3.79 (n=2505)	S
Q14: I have many friends in this class.	3.95 (n=902)	3.80 (n=2505)	S
Q15: I know what the teacher expects of me in this class.	4.11 (n=899)	4.08 (n=2503)	NS
Q16: Students in this class are generally respectful of each other.	3.36 (n=898)	3.18 (n=2503)	S
Q17: The teacher of this class regularly lets me know how I am doing.	3.71 (n=897)	3.53 (n=2489)	S
Q18: The teacher of this class grades me fairly.	4.13 (n=898)	4.03 (n=2496)	NS
Q19: The teacher encourages me to learn as much as I can in this class.	3.91 (n=897)	3.91 (n=2496)	NS
Q20: The teacher makes lessons interesting in this class.	3.34 (n=897)	3.47 (n=2499)	NS
Q21: I understand the vocabulary used in our classroom lessons.	3.81 (n=897)	3.90 (n=2501)	NS

Survey Question	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q22: I try very hard to understand what is being taught in this class.	3.94 (n=897)	4.00 (n=2495)	NS
Q23: I have done my best work in this class.	3.85 (n=898)	3.82 (n=2499)	NS
Q24: The teacher of this class encourages me to do my best.	3.95 (n=897)	3.94 (n=2498)	NS
Q25: Even if the lessons are difficult in this class, I know I can do the work and learn something new.	3.94 (n=894)	3.94 (n=2483)	NS
Q26: The teacher doesn't let students give up when the work gets hard in this class.	3.66 (n=895)	3.62 (n=2481)	NS
Q27: I actively participate in this classroom's discussions.	3.55 (n=892)	3.52 (n=2476)	NS
Q28: I feel comfortable reporting suspicious behavior.	2.96 (n=891)	2.75 (n=2471)	S
Q29: I sometimes hold back from doing my best in class because of what others might think.	2.13 (n=894)	2.06 (n=2484)	NS
Q30: My school provides opportunities to learn about different careers and education beyond high school.	3.71 (n=893)	3.41 (n=2480)	S

The Likert scale that was used in the Grades 9-12 Student Surveys ranged from 1 through 5. A score of 1 indicated 'I do not agree' and a score of 5 indicated 'I strongly agree.'

On all of the questions that were statistically significant, non-improvement schools scored higher than improvement schools.

Question #11 'My school clearly communicates rules and expectations for students' indicated the biggest discrepancy between non-improvement and improvement schools (0.41). Relatively large discrepancies were also found in Question #12 'Discipline procedures are fair and consistent throughout the school' (0.38) and Question #10 'Inappropriate behavior is not tolerated in my school' (0.37).

Correlational Analysis

In addition to comparisons between average scores on survey items, correlations were computed between average scores on the nine essential elements and proportion of students scoring proficient or above on the state test. Figure 10 reports the correlations for the proportion of students scoring proficient or above on mathematics and reading and the average score for the nine essential elements as reported by teachers and as reported by administrators.

Figure 10: Correlations Between Teacher and Administrator Scores on the Nine Essential Elements and Proportion of Students Proficient or Above in Mathematics and Reading

Essential Element	Teachers		Administrators	
	Math	Reading	Math	Reading
Curriculum	.39** n=50	.53** n=50	.40* n=40	.35* n=40
Classroom Evaluation/Assessment	.32* n=50	.41** n=50	.53** n=40	.42** n=40
Instruction	.30* n=50	.29* n=50	.58** n=40	.54** n=40
School Culture	.31* n=50	.33* n=50	.47** n=40	.36* n=40
Student, Family, & Community Support	.21 n=50	.22 n=50	.45** n=41	.44** n=41
Professional Growth, Development, & Evaluation	.38** n=50	.45** n=50	.37* n=41	.28 n=41
Leadership	.13 n=57	.18 n=57	.45** n=41	.37* n=41
Organization Structure & Response	.08 n=48	.15 n=48	.28 n=41	.16 n=41
Comprehensive & Effective Planning	.10 n=48	.12 n=48	.39* n=41	.29 n=41
* Significant at 0.05 level				
**Significant at 0.01 level				

As depicted in Figure 10, for the teacher responses, five of the nine essential elements had significant correlations with the proportion of students proficient or above in mathematics and

reading: Curriculum, Classroom Evaluation/Assessment, Instruction, School Culture, and Professional Growth, Development, and Evaluation.

For administrator responses, the only essential element that did not have at least one significant correlation was Organization Structure and Response. All other elements had two significant correlations (both mathematics and reading) except for Professional Growth, Development, and Evaluation and Comprehensive and Effective Planning.

Based on teacher perceptions then, five of the essential elements are associated with student achievement; based on administrator perceptions, eight of the essential elements are associated with student achievement.

Conclusions

Ultimately, OSDE staff must scrutinize the data in this report to determine the areas on which to focus to best serve Oklahoma schools, particularly those with an improvement status. However, a few generalizations seem to be warranted.

- The nine essential elements differentiate between non-improvement schools and improvement schools. This is indicated by the preponderance of significant differences between non-improvement and improvement averages for both teachers and administrators.
- The following essential elements would seem to be the most fruitful areas of focus for staff improvement: Curriculum, Classroom Evaluation/Assessment, Instruction, School Culture, and Professional Growth, Development and Evaluation. This is indicated by the differences between average responses in non-improvement and improvement scores by both teachers and administrators and by the correlations between these elements and student achievement.
- Lack of agreement between administrators and teachers in improvement schools regarding the school's performance in the essential elements might be a fruitful beginning place for a school seeking to move out of improvement status.
- Some student perceptions distinguish between non-improvement and improvement schools. These differences might disclose possible improvement areas in which to focus. In grades 3-5, the areas to note include students' respect for each other, the teacher making learning interesting, the teacher treating all students fairly, students' feelings of safety in the class, and the teacher regularly letting students know how they are doing in class.

- In grades 6-8, an area to note is behavioral issues, specifically the school's tolerance of inappropriate behavior, the school clearly communicating rules and expectations for students, and students feeling safe in class. Another area to focus on may be teacher fairness in general and grading practices more specifically.
- In grades 9-12, behavioral issues are a concern. Specifically, the school's ability to clearly communicate rules and expectations for students, having discipline procedures that are fair and consistent, and intolerance around inappropriate behavior in the school stood out as important differences in student perceptions in non-improvement and improvement schools.

APPENDIX

Figure 11: Teacher Survey Results (Item-by-Item)

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q1: Teachers in my school have identified the curriculum necessary to ensure the depth of knowledge and skills needed for students to be proficient on standards.	Curriculum	4.58 (n=471)	4.26 (n=472)	S
Q2: Teachers in my school have developed grade-level learning goals to ensure articulation of the learning standards.	Curriculum	4.56 (n=473)	4.14 (n=469)	S
Q3: I have opportunities to work with others to eliminate curricular overlaps and gaps.	Curriculum	4.07 (n=476)	3.70 (n=475)	S
Q4: Teachers in my school revise classroom curriculum to ensure alignment to standards.	Curriculum	4.45 (n=471)	4.16 (n=464)	S
Q5: All students in my school have access to the academic curriculum.	Curriculum	4.58 (n=466)	4.33 (n=466)	S
Q6: I regularly use a variety of standards-based assessments in my classroom.	Classroom Evaluation/Assessment	4.53 (n=476)	4.45 (n=479)	NS
Q7: Teachers in my school work together to develop standards-based common assessments.	Classroom Evaluation/Assessment	4.07 (n=468)	3.59 (n=465)	S

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q8: Teachers in my school work in partnership to develop authentic assessment tasks (such as portfolios or projects).	Classroom Evaluation/ Assessment	3.60 (n=458)	3.21 (n=458)	S
Q9: My units of instruction include pre- and post-tests that assess student mastery of standards-based objectives.	Classroom Evaluation/ Assessment	3.78 (n=474)	3.81 (n=478)	NS
Q10: I use a variety of test results to identify gaps and modify curriculum and instruction to meet diverse student needs.	Classroom Evaluation/ Assessment	4.25 (n=475)	4.08 (n=479)	S
Q11: Teachers in my school work together by using student-learning data to identify students in need of instructional support or enhancement.	Classroom Evaluation/ Assessment	4.30 (n=471)	3.92 (n=468)	S
Q12: I regularly analyze student work to monitor progress.	Classroom Evaluation/ Assessment	4.66 (n=477)	4.58 (n=481)	NS
Q13: I use a variety of research-based instructional strategies in my classroom.	Instruction	4.47 (n=476)	4.35 (n=477)	NS

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q14: I adjust my instructional strategies and activities based on the student learning objectives I'm trying to carry out.	Instruction	4.63 (n=476)	4.49 (n=479)	S
Q15: I regularly modify curriculum and instruction based on analysis of student work.	Instruction	4.55 (n=475)	4.42 (n=481)	S
Q16: I have the necessary content knowledge in all subjects I teach to challenge my students to high levels of learning.	Instruction	4.70 (n=481)	4.59 (n=481)	S
Q17: I regularly integrate technology into my classroom when it enhances instruction.	Instruction	4.31 (n=480)	4.23 (n=482)	NS
Q18: I assign purposeful homework that supports student-learning objectives.	Instruction	4.18 (n=471)	3.93 (n=479)	S
Q19: School leaders provide support for a safe and respectful learning environment.	School Culture	4.26 (n=481)	3.80 (n=484)	S
Q20: School leaders implement practices that focus on high achievement for all students.	School Culture	4.29 (n=481)	3.93 (n=481)	S

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q21: I believe all students can learn.	School Culture	4.86 (n=481)	4.80 (n=483)	NS
Q22: I regularly challenge my students to improve.	School Culture	4.86 (n=482)	4.73 (n=483)	S
Q23: I am responsible for my students' successes and failures.	School Culture	3.74 (n=479)	3.72 (n=482)	NS
Q24: I provide timely feedback about academic progress to my students' families.	School Culture	4.37 (n=480)	4.18 (n=485)	S
Q25: My students' families are active partners in the educational process.	Student, Family, & Community Support	2.71 (n=478)	2.47 (n=483)	S
Q26: Students in this school have access to academic support (e.g., tutoring, extended learning, extra-curricular activities).	Student, Family, & Community Support	4.46 (n=479)	4.35 (n=486)	NS
Q27: I regularly communicate information about students' behavior and attendance to parents.	Student, Family, & Community Support	4.02 (n=479)	3.96 (n=483)	NS
Q28: School leaders ensure school and community representation when planning or making decisions.	Student, Family, & Community Support	3.83 (n=442)	3.50 (n=446)	S

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q29: I work in partnership with school leaders to develop a written individual professional development plan based on school goals.	Professional Growth, Development, & Evaluation	3.54 (n=468)	3.17 (n=474)	S
Q30: I have access to professional development that supports my school's student learning goals.	Professional Growth, Development, & Evaluation	4.31 (n=481)	4.14 (n=483)	NS
Q31: I can see a direct connection between student achievement results and the professional development that is provided.	Professional Growth, Development, & Evaluation	3.70 (n=476)	3.47 (n=472)	S
Q32: My school maintains a clearly-defined formal teacher evaluation process to ensure that all teachers are highly effective.	Professional Growth, Development, & Evaluation	4.32 (n=479)	3.81 (n=476)	S
Q33: School leaders have implemented a process for all staff to participate in reflective practice.	Professional Growth, Development, & Evaluation	3.73 (n=450)	3.39 (n=448)	S
Q34: Members of the staff create their professional development plans by including school-wide data.	Professional Growth, Development, & Evaluation	3.86 (n=420)	3.44 (n=437)	S

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q35: I have opportunities to engage in collaboration and/or peer observations to improve my classroom practices.	Professional Growth, Development, & Evaluation	3.91 (n=480)	3.60 (n=482)	S
Q36: The evaluation process at my school provides actionable feedback that allows me to improve my instructional practices.	Professional Growth, Development, & Evaluation	4.09 (n=476)	3.59 (n=476)	S
Q37: School leaders periodically reemphasize our shared vision.	Leadership	4.07 (n=474)	3.86 (n=478)	S
Q38: School leaders make decisions that are focused on student academic performance.	Leadership	4.29 (n=471)	3.96 (n=481)	S
Q39: School leaders share data that identifies the needs of diverse populations.	Leadership	4.22 (n=467)	3.87 (n=471)	S
Q40: School leaders regularly monitor learning environment indicators to assess school needs.	Leadership	4.05 (n=456)	3.71 (n=453)	S
Q41: School leaders clearly communicate what is expected of faculty and staff.	Leadership	4.06 (n=500)	3.48 (n=396)	S
Q42: Staffing decisions in my school are based on the learning needs of students.	Organizational Structure & Resources	3.96 (n=480)	3.31 (n=380)	S

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q43: School leaders monitor efficient use of instructional time to maximize student learning.	Organizational Structure & Resources	4.07 (n=491)	3.45 (n=392)	S
Q44: Allocation of department or grade-level funds is aligned to the school improvement plan.	Organizational Structure & Resources	3.91 (n=368)	3.65 (n=300)	S
Q45: Teachers have the opportunity to work together to develop our school's goals.	Comprehensive & Effective Planning	4.21 (n=497)	3.73 (n=394)	S
Q46: I know what my school is trying to do to meet school improvement goals.	Comprehensive & Effective Planning	4.24 (n=490)	4.11 (n=395)	NS
Q47: I regularly evaluate my students' progress toward achieving the school improvement goals and objectives for student learning.	Comprehensive & Effective Planning	4.41 (n=489)	4.22 (n=382)	S
Q48: I am comfortable describing how the school improvement plan will impact my classroom practices.	Comprehensive & Effective Planning	3.86 (n=477)	3.58 (n=383)	S
Q49: School leaders encourage me to regularly evaluate my progress toward student performance in the school improvement plan.	Comprehensive & Effective Planning	4.10 (n=486)	3.70 (n=390)	S

Figure 12: Parent Survey Results (Item-by-Item)

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q1: Teachers and administrators at the school provide a safe learning environment for my child.	Curriculum	4.39 (n=276)	4.13 (n=240)	S
Q2: My child's teachers communicate with me and my child about what my child needs to do in order to be successful.	Curriculum	4.11 (n=276)	3.92 (n=232)	NS
Q3: My child is provided adequate opportunities to develop his or her skills in reading, writing, math, science and social studies.	Curriculum	4.28 (n=272)	4.09 (n=228)	NS
Q4: My child completes a test before and after each unit of study that demonstrates how much he or she knows.	Classroom Evaluation/ Assessment	4.20 (n=224)	4.13 (n=193)	NS

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q5: My child knows what is expected of him or her in each class.	Classroom Evaluation/ Assessment	4.49 (n=275)	4.40 (n=231)	NS
Q6: My child can describe to me what is required to pass his or her class.	Classroom Evaluation/ Assessment	4.14 (n=270)	4.10 (n=225)	NS
Q7: My child's teachers assign purposeful homework that supports learning.	Classroom Evaluation/ Assessment	4.20 (n=272)	4.04 (n=221)	NS
Q8: My child's teachers explore different teaching strategies and activities to meet my child's specific learning needs.	Instruction	4.14 (n=243)	3.90 (n=209)	NS
Q9: My child's teachers provide timely feedback about academic progress.	Instruction	4.10 (n=267)	3.99 (n=229)	NS
Q10: My child is provided with the time and resources to support his or her best efforts.	Instruction	4.24 (n=266)	4.03 (n=220)	NS

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q11: There is adequate recognition of my child's successes.	Instruction	4.19 (n=265)	4.02 (n=224)	NS
Q12: The school promotes respect for diversity in the school and community.	Instruction	4.25 (n=261)	4.05 (n=220)	NS
Q13: My child has the opportunity to assume leadership roles at school and in the community.	Instruction	4.09 (n=253)	4.00 (n=211)	NS
Q14: I have opportunities to work with my child's school to be an active partner in the educational process.	School Culture	4.02 (n=268)	4.03 (n=224)	NS
Q15: My child has access to academic support programs (e.g., tutoring, academic clubs, Saturday school).	School Culture	3.87 (n=233)	4.08 (n=217)	NS

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q16: I am encouraged to become involved with the school through volunteering or programs such as family literacy.	School Culture	3.73 (n=252)	3.90 (n=219)	NS
Q17: My child has access to a variety of guidance programs, including school counseling and mentoring.	School Culture	4.06 (n=245)	4.00 (n=209)	NS
Q18: I receive information about my child's behavior, including attendance, in a time frame acceptable to me.	School Culture	4.26 (n=277)	4.13 (n=232)	NS
Q19: The school provides information that helps me and my child understand important changes from grade level to grade level or school to school.	School Culture	3.83 (n=265)	3.82 (n=215)	NS

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q20: The school uses clear and easy to understand tools to encourage two-way communication.	Student, Family, & Community Support	4.08 (n=270)	3.93 (n=217)	NS
Q21: I have opportunities to participate in meaningful decisions at the school.	Student, Family, & Community Support	3.50 (n=259)	3.70 (n=216)	NS
Q22: The school has enough staff to meet the learning needs of my child.	Professional Growth, Development, & Evaluation	4.00 (n=252)	3.73 (n=207)	NS
Q23: My child's teachers efficiently use instructional time to maximize student learning.	Professional Growth, Development, & Evaluation	4.12 (n=251)	3.97 (n=203)	NS
Q24: Parents and guardians have the opportunity to work together on the development of goals for the school.	Comprehensive & Effective Planning	3.76 (n=240)	3.71 (n=222)	NS
Q25: I know what the school is doing to accomplish school improvement goals.	Comprehensive & Effective Planning	3.54 (n=236)	3.60 (n=209)	NS

Survey Question	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q26: I know how my child is doing in relation to the school improvement goals for student learning.	Comprehensive & Effective Planning	3.85 (n=246)	3.81 (n=217)	NS
Q27: My child feels comfortable reporting suspicious behavior.	Comprehensive & Effective Planning	3.88 (n=259)	3.67 (n=216)	NS
Q28: My child participated in college and/or work readiness programs that helped plan high school courses of study.	HS ONLY: Classroom Evaluation/Assessment	3.25 (n=88)	3.58 (n=108)	NS
Q29: My child's school provides opportunities to learn about different careers and education beyond high school.	HS ONLY: Classroom Evaluation/Assessment	3.68 (n=101)	3.86 (n=116)	NS

Figure 13: Site Administrator Survey Results (Item-by-Item)

Note: One administrator per building completed this survey

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q1: Instructional teams in my school ensure alignment of classroom curriculum with state academic content and process standards.	Curriculum	4.47 (n=19)	4.14 (n=22)	NS
Q2: School leaders provide time for instructional teams for discuss curricular overlaps and gaps.	Curriculum	4.58 (n=19)	4.18 (n=22)	NS
Q3: School leaders ensure that all students have access to the academic core curriculum.	Curriculum	4.89 (n=19)	4.59 (n=22)	NS
Q4: Teachers in my school design units that include pre- and post-tests to assess student mastery of academic performance indicators.	Classroom Evaluation/Assessment	4.00 (n=19)	3.59 (n=22)	NS

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q5: Teachers in my school use test results to identify necessary changes to curriculum and instruction in order to close performance gaps.	Classroom Evaluation/Assessment	4.47 (n=19)	3.82 (n=22)	NS
Q6: School leaders periodically examine student work for evidence that instruction is aligned to state standards.	Classroom Evaluation/Assessment	4.42 (n=19)	3.32 (n=22)	S
Q7: Teachers in my school use a variety of research-based instructional strategies.	Instruction	4.42 (n=19)	3.91 (n=22)	NS
Q8: Teachers in my school use instructional strategies and activities aligned to student learning objectives.	Instruction	4.47 (n=19)	3.82 (n=22)	S

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q9: Teachers in my school differentiate their instructional strategies and activities to target specific student learning needs.	Instruction	4.05 (n=19)	3.10 (n=21)	S
Q10: Teachers in my school assign purposeful homework that supports student learning objectives.	Instruction	3.79 (n=19)	2.68 (n=22)	S
Q11: School leaders foster a positive, respectful school climate.	School Culture	4.63 (n=19)	4.23 (n=22)	NS
Q12: Teachers in my school hold high <u>academic</u> expectations for all students.	School Culture	4.58 (n=19)	3.50 (n=22)	S
Q13: Teachers in my school hold high <u>behavioral</u> expectations for all students.	School Culture	4.53 (n=19)	3.73 (n=22)	NS

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q14: Teachers in my school recognize their professional roles in student successes and failures.	School Culture	4.21 (n=19)	3.32 (n=22)	S
Q15: Teaching assignments in my school are based on teacher instructional strengths to maximize opportunities for all students.	School Culture	4.53 (n=19)	3.91 (n=22)	NS
Q16: All teachers in my school communicate regularly with families about individual student progress.	School Culture	4.00 (n=19)	3.29 (n=21)	NS
Q17: Our community works with the school staff to promote programs and services for all students.	Student, Family, & Community Support	3.84 (n=19)	3.04 (n=23)	NS

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q18: All students in this school have access to academic support (e.g., tutoring, extended learning, extra-curricular activities, Saturday school).	Student, Family, & Community Support	4.68 (n=19)	4.17 (n=23)	NS
Q19: This school maintains systems that allow all staff to provide accurate <u>academic</u> information to parents on request.	Student, Family, & Community Support	4.68 (n=19)	4.17 (n=23)	NS
Q20: This school maintains systems that allow all staff to provide accurate <u>behavioral</u> information to parents on request.	Student, Family, & Community Support	4.63 (n=19)	3.78 (n=23)	S
Q21: The school planning team uses goals for student learning to determine professional development priorities for staff.	Professional Growth, Development, & Evaluation	4.05 (n=19)	4.00 (n=23)	NS

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q22: The school planning team designs professional development that has a direct connection to the analysis of student achievement data.	Professional Growth, Development, & Evaluation	4.00 (n=19)	3.87 (n=23)	NS
Q23: School leaders provide opportunities for teachers to collaborate across disciplines and programs.	Professional Growth, Development, & Evaluation	4.05 (n=19)	4.14 (n=22)	NS
Q24: School leaders use an evaluation process to provide teachers with support in improving instruction and/or changing behavior.	Professional Growth, Development, & Evaluation	4.32 (n=19)	3.65 (n=23)	NS
Q25: School leaders maintain focus on a shared vision.	Leadership	4.32 (n=19)	3.91 (n=23)	NS
Q26: School leaders make decisions based on data.	Leadership	4.53 (n=19)	4.00 (n=23)	NS

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q27: School leaders disaggregate data to exhibit the needs of diverse populations.	Leadership	4.47 (n=19)	3.83 (n=23)	NS
Q28: Instructional staff has access to curriculum-related materials.	Leadership	4.63 (n=19)	4.22 (n=23)	NS
Q29: Teachers have received training in the effective use of curricular and data resources.	Leadership	4.05 (n=19)	3.83 (n=23)	NS
Q30: School leaders implement policies that ensure maintenance of a safe and effective learning environment.	Leadership	4.84 (n=19)	4.13 (n=23)	S
Q31: School leaders conduct comprehensive needs assessments to review and revise school policies and procedures.	Leadership	4.11 (n=19)	3.35 (n=23)	S

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q32: School leaders regularly monitor academic performance indicators to assess school needs.	Leadership	4.53 (n=19)	3.74 (n=23)	S
Q33: School leaders maintain positive relationships with teachers that allow them to engage in conversations about curricular and instructional goals.	Leadership	4.53 (n=19)	4.43 (n=23)	NS
Q34: School and district leaders work together to develop strategies to implement and sustain organizational change.	Leadership	4.21 (n=19)	3.41 (n=22)	NS
Q35: School leaders regularly recognize the accomplishments of faculty and staff.	Leadership	4.53 (n=19)	3.87 (n=23)	S
Q36: School leaders advocate for high-quality performance from students.	Organizational Structure & Resources	4.79 (n=19)	4.30 (n=23)	S

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q37: School leaders advocate for high-quality performance from staff.	Organizational Structure & Resources	4.74 (n=19)	4.26 (n=23)	NS
Q38: The master schedule is designed to provide all students access to the entire curriculum.	Organizational Structure & Resources	4.72 (n=18)	4.43 (n=23)	NS
Q39: School leaders organize all staff, including non-instructional staff, based on the learning needs of students.	Organizational Structure & Resources	4.47 (n=19)	4.17 (n=23)	NS
Q40: School leaders ensure the efficient use of instructional time to maximize student learning.	Organizational Structure & Resources	4.58 (n=19)	4.17 (n=23)	NS
Q41: School leaders implement strategies to attract highly-qualified and effective teachers.	Organizational Structure & Resources	4.32 (n=19)	3.91 (n=23)	NS
Q42: School and district leaders collaborate to provide alternative professional learning	Organizational Structure & Resources	3.95 (n=19)	3.13 (n=23)	NS

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
opportunities (e.g., virtual courses, dual enrollment opportunities, work-based internships).				
Q43: School leaders maintain clearly defined processes for equitable use of fiscal resources.	Organizational Structure & Resources	4.21 (n=19)	3.78 (n=23)	NS
Q44: School leaders direct funding based on needs identified in the school improvement plan.	Organizational Structure & Resources	4.21 (n=19)	4.45 (n=22)	NS
Q45: School leaders equitably allocate state and federal resources to address specific student needs.	Organizational Structure & Resources	4.32 (n=19)	4.22 (n=23)	NS
Q46: School leaders use a collaborative process to develop vision, mission, beliefs, and goals.	Comprehensive & Effective Planning	4.53 (n=19)	4.26 (n=23)	NS
Q47: School leaders provide systems to collect and manage data from multiple data sources.	Comprehensive & Effective Planning	4.21 (n=19)	3.87 (n=23)	NS

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
Q48: School planning teams analyze data from multiple data sources.	Comprehensive & Effective Planning	4.21 (n=19)	3.83 (n=23)	NS
Q49: Research about student learning is incorporated into school improvement plans.	Comprehensive & Effective Planning	4.68 (n=19)	4.04 (n=23)	NS
Q50: School leaders establish goals for strengthening instructional effectiveness.	Comprehensive & Effective Planning	4.26 (n=19)	4.00 (n=23)	NS
Q51: School leaders have a detailed action plan, including timelines and responsibilities, to accomplish school improvement goals.	Comprehensive & Effective Planning	4.11 (n=19)	3.95 (n=22)	NS
Q52: Most of our staff is involved in implementing the school improvement plan.	Comprehensive & Effective Planning	4.11 (n=19)	4.17 (n=23)	NS
Q53: School leaders regularly evaluate progress toward achieving	Comprehensive & Effective Planning	4.37 (n=19)	3.91 (n=23)	NS

Essential Element	Essential Element Reference	Non-Improvement Schools' Average Score	Improvement Schools' Average Score	Statistical Significance S=statistically significant NS=not statistically significant
the school improvement plan goals for student learning.				
Q54. Most of our staff regularly evaluate the impact of classroom practices specified in the school improvement plan.	Comprehensive & Effective Planning	3.63 (n=19)	3.09 (n=23)	NS
Q55: School leaders maintain a process to regularly review data that demonstrates continuous improvement.	Comprehensive & Effective Planning	4.21 (n=19)	3.48 (n=23)	NS

TECHNICAL NOTES

Technical Note 1: In social science research and evaluation it is common practice to consider any contrast with a p -value less than .05 as statistically significant. This is generally interpreted to mean that less than 5 times in 100 would sampling error alone be responsible for the observed difference between group averages. For this report, a more conservative significance level was used ($\alpha = .01$) except when otherwise noted. This study reports many significance tests. Great caution should be taken when interpreting any single significance test since the more tests that are conducted on any given data set, the greater the chances of erroneous results. For a thorough discussion of this phenomenon, see Winer, B.J., Brown, D.R., & Michels, K.M. (1991). *Statistical principles in experimental design* (3rd ed.). Boston: McGraw Hill.