

PLANNING FOR PRINCIPAL EVALUATION: EFFECTS ON SCHOOL CLIMATE AND ACHIEVEMENT

Edward Williams
Ganga Persaud
Trevor Turner

ABSTRACT

This study examines the proposition as to whether principals' performances on selected leadership tasks would improve school climate and whether climate would predict student achievement. Teachers evaluated principals on such task areas as: instructional planning, interpersonal skills, decision-making skills, school facilities planning, and evaluation in relation to school climate. Supervisors utilized the data in conferences with principals to engage them in planning for improving school climate with the expectation that climate would improve student performance. In a sample of 81 out of 84 schools, the five tasks were significantly related to school climate, while in a regression analysis of the data only 9% of the variance on achievement scores was predicted by climate.

PROBLEM CONTEXT

A Metro Atlanta school district, whose school board was majority White but whose student population was majority Black, was placed under court order to desegregate the system. At the same time the Black community became vocal about hiring a diverse faculty as well as more Black principals. In response, the school board instituted a policy of hiring 70% White and 30% Black teachers in each school and promoting Black teachers as principals. To ensure all teachers' fair treatment from Black or White principals, the school district introduced the policy of all faculty and staff members evaluating the principals and assistant principals, and designed an instrument for teachers to evaluate principals. The instrument was developed under the five competencies or task areas of instructional planning and leadership, interpersonal skills, decision-making skills, skills in planning and management of school facilities, and personnel evaluation skills. The instrument also measured the climate of the school as perceived by teachers. The results were provided to the supervisor of each principal. In a post evaluation conference with the supervisor, each principal prepared a plan to improve on human relations skills when performing tasks so as to improve school climate. Most principals were able to improve their human relations skills when performing tasks and monitoring their school climate. The few principals who obtained persistently low ratings from teachers were replaced. As a result, the school system met the goal of teachers and communities' acceptance of the appointments of more Black principals and maintaining reasonable school climate throughout the system as evidenced by lack of protests. In a ten-year period, however, test scores declined and students' referrals and suspensions increased. The school board requested the superintendent develop a plan to improve test scores and reduce student referrals and suspensions. The issue is whether climate or student achievement should be utilized to determine the effectiveness of the leadership tasks.

REVIEW OF LITERATURE

In order to cope with the tax payers' demand for improving student achievement and discipline, school boards have attempted to reform schools in terms of principal leadership styles, school-based management, instructional methods (whole language, constructivism, learning styles, brain-based learning, etc), scheduling, and canned reading and math programs and discipline policies. Such reforms, however, have not made the desired improvement (Fullan & Miles, 1992). Ubben and Hughes (2001) indicated that most effective schools have strong creative principals who work with their administrative teams in the following ways: setting the agenda and forming needed advisory groups and coalitions; creating a positive image for the schools; pursuing autonomy for themselves and the schools; delegating authority at all levels; bringing innovative projects, providing training opportunities and new resources; anticipating impending issues; and, changing, planning, and staffing creatively to meet needs of their students. Some researchers, mainly with small sample size, stated that strong leadership skills in instruction and evaluation tended to facilitate positive climate that supported student achievement in low

socio-economic schools (Brookover et al, 1978; Edmonds, 1979). Grobe and Bishop (2001) identified certain essential attributes as principal leadership, teacher morale, and student behavior as fundamental for promoting student achievement. According to Marsden (2005), safe and orderly classroom environment and school facilities significantly were related to student achievement in elementary schools. Glassman (1994) found that professional treatment by the principal towards the teachers, such as trust and confidence, a comfortable and caring environment, professional and personal respect, delegation of decision-making, and other attributes helped to contribute to student academic achievement. In the area of leadership style, Freeland (2006) found that transformational leadership (measured in terms of demonstrating charisma /inspiration/vision, intellectual stimulation, individual consideration, contingent reward, high performance expectations, goal consensus, modeling, culture building, and structuring) did not significantly correlate with achievement gains, and contextual variables such as socioeconomic status (SES) and size in of schools.

In contrast, Hallinger, Bickman, and Davis (1996) found no direct effect of principal instructional leadership on student achievement. Their results did, however, support the belief that a principal can have an indirect effect on school effectiveness through actions that shape the school's learning climate. They also found that principal leadership itself is influenced by both personal and contextual variables (SES, parental involvement, and gender). The most enduring findings (Coleman Report, 1965) supported the view that socio-economic variables tend to predict student achievement. Ma and Williams' (2004) seven dimensions of school disciplinary climate were identified based on a representative sample of grade 8 students in the United States. Within schools, students varied considerably in their perceptions and experiences about discipline. The variation was related mainly to students' SES, sex, and ethnicity. Easton-Brooks (2006) found that socioeconomic indicators (parents' education, parents' occupation, parents' income, and wealth) predicted both African American and European American academic outcomes, though wealth/assets accounted for more variance in the academic outcomes of African American students than of European American students. Kunjufu (1989) recognized that socioeconomic status is an indicator of student achievement; however, he contended it is not the cause; instead, how teachers view and teach African American students are the underlying variables. Ford (1997) found that parents who were of low SES and in a minority, when they instilled a positive achievement orientation in their children, encouraged them to perform highly. According to Sanders (1999), the single important factor affecting the academic growth of any population of youngsters was the effectiveness of the individual classroom teacher. Sanders based teacher effectiveness ratings on relative year-to-year achievement gains of students. This study used only one teacher-related demographic variable that was the teacher average years of experience, and it did not have any significant relationship to student achievement.

It is a common belief that the principal sets the tone for effective school planning and management, and that "what gets evaluated gets done" (Brookover, et al, 1978; Edmonds, 1988). Apparently, the architect of a school system's five tasks, as articulated to impact school climate, is motivated by the school board's mission to ethnically diversify the principals while maintaining positive school climate. Cook (1995) in strategic planning argued that planning begins with a mission statement and participation about strategies for achieving it. MBO techniques in planning suggest that the outputs be considered as the basis for estimating the effectiveness of planning, and obviously, the school board appears to select climate as the output. Stufflebeam (1973) indicated that the context, process, and product should be the basis for both planning and evaluation for effectiveness. NCATE suggested that the results of assessment and evaluation on school outcomes should be the basis for conducting planning inputs for teacher education effectiveness. It would appear, therefore, that to better inform planning for effectiveness, planners should utilize the ultimate outcomes of schools, such as student achievement and the causes for student achievement (Persaud & Turner, 2002). The No Child Left Behind Act (2001) requires that every child meets or exceeds performance expectation on standardized tests. The challenge is for such a school district to demonstrate that students performing below expectation level have improved to meet or exceed expectation levels.

Overall, planning models have not indicated how the results of evaluation were utilized in planning. Similarly, the literature that identified possible variables that might explain student achievement have not systematically indicated how the results of teacher evaluation of principal leadership have been

utilized in school climate management so as to impact student achievement. This study attempts to fill the gap.

THEORETICAL FORMULATION OF PLANNING AND EVALUATION

The effective leadership instrument consisted of five tasks identified earlier in relation to school climate, as shown in the diagram (Figure 1) for definition purposes. Essentially, the school system appears to propose that school climate could be influenced by such principal leadership skills as: instructional planning, interpersonal management, decision-making, school facilities planning, and evaluation. The school system does not utilize the school performance on the Georgia Criterion Reference Competency Test (GCRCT), when considering the effectiveness of the principal leadership in a school. Principals, however, who were viewed negatively by teachers have been replaced. Therefore, in this study the various leadership skills will be analyzed in relation to student performance on the GCRCT in fourth grade reading, and the new principal is considered as an independent variable to estimate if it changed teachers' perceptions and if it made a contribution to improvement in climate and student performance. Essentially, the following research questions are to be examined: Is there a significant relationship between each of the five leadership tasks and school climate? What are the leadership variables that might be related to achievement performance levels at or above expectations? Is school climate related to student achievement? Does a new principal contribute to improvement on the five leadership tasks and school climate?

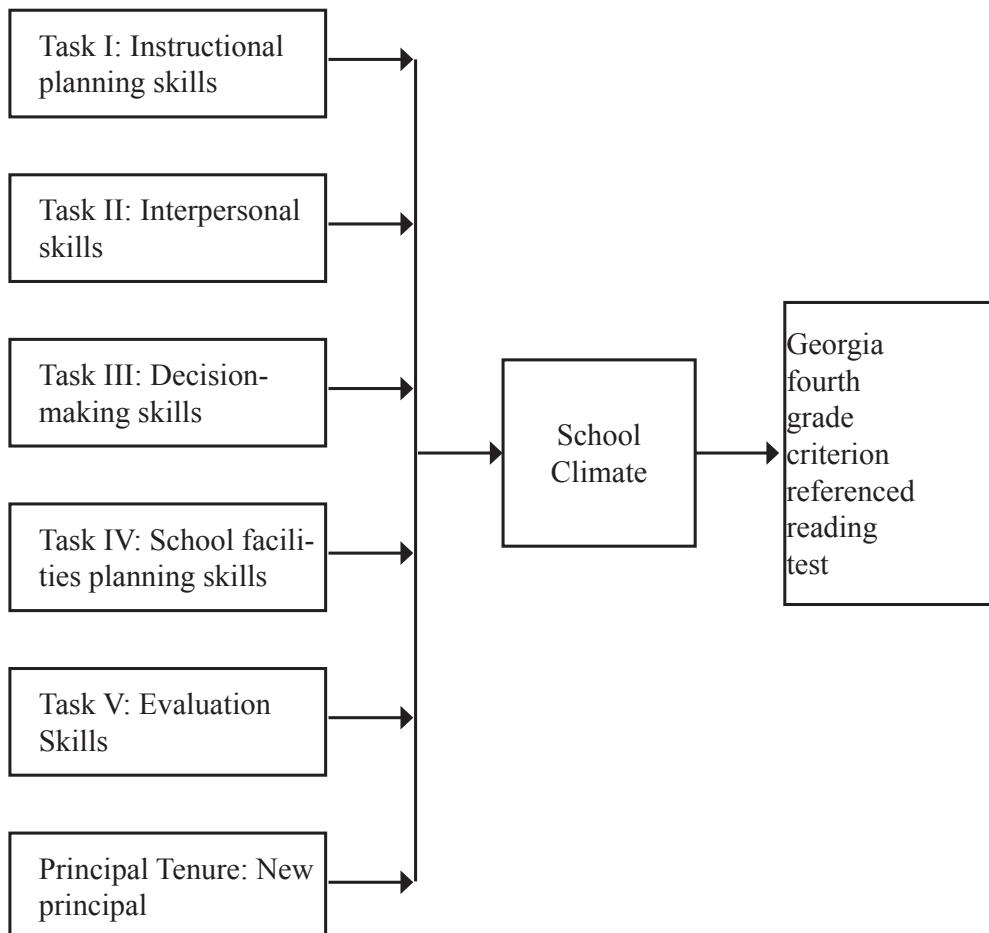


Figure 1. Five Tasks

DEFINITION OF VARIABLES

Task I - Instructional planning assessed the extent to which the principal demonstrated collaborative and appropriate communication skills in setting high expectation for students' performance, protecting

time on task, assigning work appropriately, providing resources appropriately, and encouraging effective use of curriculum materials and staff development (47 items).

Task II - Interpersonal skills assessed the extent to which the principal demonstrated human relation skills in terms of sensitivity, courtesy, impartiality and could prevent and/or resolve conflicts effectively (14 items).

Task III - Decision making skills assessed the extent to which the principal demonstrated skills in reviewing decisions based on data, making timely decisions, and providing reasons (8 items).

Task IV - School facilities and organizational planning assessed the extent to which the principal demonstrated skills in allocating resources appropriately, maintaining facilities in a clean, orderly, safe manner, and implanting procedures for maintaining proper student behavior (8 items).

Task V-Teacher evaluation assessed the extent to which the principal demonstrated skills in pre-evaluation conferences, observations of teaching, post evaluation conferences, and quality of feedback and follow-up when using the State instrument and guidelines (12 items).

School climate assessed the extent to which teachers in a school enjoy the work environment, believe their views are valued by their peers and administrators and are proud of their principal, fellow teachers, students, and parents (11 items).

Expected relationship among the variables

The leadership task areas appear to be selected on the basis of theoretical models in the literature. Getzel and Guba's (1957) social system model stated that a social system consists of: (a) An institutional structure that assigns roles for tasks' performance expectation, and (b) Individuals with variances in personalities and needs. The principal as the leader is responsible for defining tasks, assigning, and evaluating teachers in roles for performance towards school outcomes. Theoretically, if the principal engaged teachers in groups for designing tasks and assigning roles for implementation, teachers' diverse personalities and needs would be accommodated. This would set up a positive school climate that would influence teachers' intentions to increase their efforts in task completion for effective school outcomes.

Conversely, if the principal arbitrarily defined the tasks and assigned role functions, teachers' diverse personalities and needs would be neglected. This would set up a negative school climate that would decrease teachers' intentions to work, leading to ineffective school outcomes. Maslow's (1943) hierarchy of needs supported the view that every teacher had a need for acceptance and recognition and to feel belonging to a given group as the fundamental basis for self-actualization. Blake and Mouton's model (1991) of the collaborative leader supported this theory and suggested that a leader that is high both on task and participation is likely to lead to productive organizational outcomes. Research supported the view that the democratic leader is more effective in building both a cohesive and productive group (Lewin, Lippitt, & White, 1939). Vroom's (1964) expectancy theory of motivation also supported the view that if the leader sets the goals at the capability level of the followers they would make the effort to complete the tasks, and they are likely to continue the effort if the tasks were valued and reward was forthcoming. The critical issue in planning is how does the leader and followers know that they have made effective choices. According to NCATE, assessment and evaluation are the means for determining the baseline performance outcomes and utilizing such assessment results for selecting diverse strategies for improving the outcomes on an on-going basis. The issue is whether school climate is the critical outcome or student achievement.

According to Glickman and Gordon (2004), "A paradigm shift toward the collegial supervision model, if it is to succeed, must include a shift away from conventional or congenial supervision toward collegial supervision" (p. 7). He defined collegial supervision to include: reduction of the hierarchical relationships between the principal and teachers, the involvement of both the principal and teachers in the supervision process, a focus on teacher growth rather than teachers' compliance, facilitation of teachers collaboration with each other in instructional improvement efforts, and teacher involvement in ongoing reflective inquiry.

The theoretical alignment of the variables through participation would suggest that the more the principal's interpersonal behavior is the focal axis for engaging teachers in a participatory mode in decision making about curriculum planning, school facilities planning, and teacher evaluation, the more the school climate is likely to be high, thereby leading to effective school outcomes.

METHODOLOGY

The school system administered the leadership skills instrument consisting of 99 items to all teachers in each school. A teacher administered the leadership instrument at a faculty meeting in the absence of all administrators and in an atmosphere of anonymity. The completed questionnaire was sealed and immediately dispatched for scanning and data analysis. The sample included 81 of the 84 elementary schools in the 2005-06 academic year. Kunjufu (1989) argued that schools tend to fail African males, especially in the fourth grade. In order to test the proposition that school climate would impact student achievement positively, the 4th grade Georgia Criterion Referenced Tests (CRCT) reading scores from the (2005-06) academic school year were attached to each school file. Before utilizing the data in statistical analyses, the items to scale validity and reliability of each task were calculated and each task was found to have a Cronbach alpha of above .8.

RESULTS OF CORRELATION ANALYSES

A Pearson correlation analysis was conducted to provide data with respect to the research question: Is there a significant relationship between each leadership task and school climate?

The results in Table 1 indicated that each task area is significantly correlated with school climate at the probability level of .01 as follows: instructional leadership ($r = .899$), interpersonal skills ($r = .890$), making decisions ($r = .888$), facilities planning ($r = .887$), and evaluation guidelines implementation ($r = .794$). The data supported the view (Brookover, 1978) that appropriate leadership skills are related to climate and appear to justify the school's district's tactic in planning leadership behaviors on this account.

A Pearson correlation analysis was conducted to provide data with respect to the research question: Is school climate significantly related to student reading performance? The results in Table 2 indicated that school climate is inversely ($r = -.321^*$) but significantly related to the number of students who did not meet expectation. The inverse relationship would imply that when teachers perceived the school climate high there were fewer number of students who did not meet expectation in those schools, indicating the need for low achieving schools to increase school climate in order to reduce low student performance in reading. School climate is positively and significantly related to students' excelling performance ($r = .372^*$), indicating that higher climate results in higher student performance. There were no significant relationships between school climate and students meeting expectations in reading ($r = -.183$). The majority of the students were in this category. Therefore, school climate improvement appears to be good for lowest and highest performing students, but not the "meet expectations" group.

Table 1:
Leadership Competencies with School Climate (N = 81 Elementary Schools)

Independent variables	School Climate
Instructional Leadership (Competency 1)	.899**
Interpersonal Skills (Competency 2)	.890**
Making Decisions (Competency 3)	.888**
Facilities Planning & (Competency 4)	.887**
Evaluation Guidelines Implementation (Competency 5)	.794**

** P < .01

Table 2 also provides data in response to the research question: What are the leadership tasks that might be significantly related to reading performance levels at or above expectations? This strategy was designed in relation to the No Child Left Behind Act that requires that all students should meet or exceed expectation, necessitating the breakdown of the data by levels of performance. In Table 2, instructional leadership is significantly related only to students' exceeding reading performance ($r = .253^*$), and, hence not effective for students performing below or meeting expectation. This might be because instructional planning tasks were not selected in alignment with the strategies required for students with such characteristics.

Table 2:
Leadership Competencies with Student Achievement (N = 81 Elementary Schools)

	Does Not Meet	Meets	Exceeds
School Climate	-.321*	-.183	.372*
Instructional Leadership (Competency 1)	-.215	-.131	.253*
Interpersonal Skills (Competency 2)	-.266*	-.123	.291*
Making Decisions (Competency 3)	-.196	-.080	.209
Facilities Planning & (Competency 4)	-.251	-.118	.272
Evaluation Guidelines Implementation (Competency 5)	-.204	-.256*	.315*

* $P < .05$.

Principal interpersonal skill task is positively and significantly related to students exceeding expectations, meaning that the higher the leadership interpersonal skills the greater the number of students who exceed performance. Conversely, principal interpersonal skill task is inversely ($r = -.266^*$) but significantly related to students not meeting expectations, indicating that higher interpersonal skills resulted in lower numbers of students not meeting expectation. There is no significant relationship between principal interpersonal skills and students meeting expectation. Therefore principal interpersonal skills did not appear to be supportive of the middling performing students.

Evaluation guidelines implementation task is inversely ($r = -.256^*$) but significantly related to students meeting expectations and positively ($r = .315^*$) and significantly related to students exceeding expectations. Therefore, evaluation appears to be effective for reducing the number of students below expectation category and increasing students in the exceeding expectation category. In the area of meeting expectation, evaluation did not appear to be correlated meaningfully. Since the majority of students are in this category, the school district might want to rethink its method of conducting evaluation.

RESULTS OF FACTOR ANALYSIS

Since, in the correlation analyses, several leadership skills were significantly correlated with school climate and student performance that exceeded grade level, a factor analysis was conducted to determine whether or not these variables would be placed in the same factor as the student performance variables. The results in Table 3 indicate that:

Factor I is loaded with leadership skills: instructional, interpersonal, decision-making, facilities planning, evaluation, and school climate, indicating that these variables are independent from all other variables including student reading scores.

Factor II is loaded with exceeded expectations in reading and inversely with not meeting expectations in reading. Hence, schools with high percentages of students not meeting expectations tend to have fewer percentages that exceeded expectation.

Factor III is loaded with meet expectations in reading and whether a principal is new at the school. Hence, new principals tend to be associated with meeting expectations in student performance

Table 3:
Leaderships Competencies and Achievement Performance Level Variables (N = 81 Elementary Schools)

	Factor 1	Factor 2	Factor 3
Instructional Leadership	.982	.080	-.028
Making Decisions	.980	.055	.031
Interpersonal Skills	.956	.139	.005
School Climate	.922	.218	-.029
Facilities Planning	.900	.136	.029
Evaluation Implementation	.896	.092	-.191
Reading Percent in Does Not Meet	-.135	-.972	-.132
Reading Percent in Exceeds	.178	.881	-.418
Reading Percent in Meets	-.115	-.139	.898
New Principal	.032	.095	.520

Rotation Method: Varimax with Kaiser Normalization.

Total Variance Explained

Component	Total	% of Variance	Cumulative %
1	5.826	52.963	52.963
2	2.395	21.769	74.733
3	1.291	11.735	86.468

Extraction Method: Principal Component Analysis.

Overall, the results indicated a stronger bonding among leadership skills and school climate than with student achievement variables. The school system appears, however, to be justified in placing new principals in low performing schools, as new principal is loaded positively with students' meeting expectations in Factor 3.

RESULTS OF REGRESSION ANALYSIS

A regression analysis was conducted to estimate the separate effects of the independent variables on the dependent when controlling for other selected independent variables. The results are presented in response to the following research questions: What variables would explain student reading scores that meet or exceed grade level?

The results in Table 4 indicated that only school climate predicted significantly student reading scores that met and exceed expectation. The variance explained, however, was small. The five leadership task areas were excluded from the equation. It appears that high student reading gains were associated with positive school climate and the relation was small but significant. The percent variance explained is 9 percent.

Table 4:
Student Reading Scores that Meet or Exceed Grade Level as Dependent with All Leadership Skills and Demographic Variables as Independent (N = 81 Elementary Schools)

Model		Std. Error	Beta	t	.Sig
1	(Constant)	20.112		.580	.564
	School Climate	5.763	.323	3.032	.003

Dependent Variable: Student Achievement (meet and exceeded expectations)
Adjusted R square = .09; F=9.19; .Sig = .003

RESULTS OF ANALYSIS OF VARIANCE

Because “new principal” is associated with student meeting reading expectation performance in Factor 3, an analysis of variance was conducted to estimate the separate effects of the independent variable principal tenure with teachers’ perceptions of leadership behavior. The results are presented in response to the following research questions: Does changing the principal have an impact on the perceptions of teachers in terms of the principal leadership behavior?

The results in Table 5 indicated that there is no significant difference between whether a principal has served only a year or been in place for several years in regards to teachers’ perceptions of leadership behavior.

SUMMARY AND DISCUSSION

In the correlation analyses, the principals’ instructional, interpersonal skills, decision-making, facilities planning, evaluation and guidelines implementation were significantly related to school climate, thereby supporting the literature (Brookeover, et al, 1978). Higher school climate also was associated with a fewer number of students below expectation (inverse relationship) and a higher number of students performing above expectation, note there was no significant relationship with students performing at expectation level. Therefore, climate was not effective for the average or middle group of students. Based on the climate relationships, principals were advised not to rely on climate as the basis for improving the average students to the level of exceeding expectation.

Regarding the task areas, instructional leadership was significantly related only to the number of students exceeding expectation, indicating that the strategies were biased in favor of highly achieving students supporting the view that instruction is high ability students-oriented. It is recommended that instructional leadership be directed at diversifying instruction to meet the needs of the diverse student population. The findings and recommendation are supportive of NCATE, Standard IV, requiring diversity throughout program planning in order to impact p-12 students’ outcomes in terms of knowledge, skills, and dispositions. The principal’s interpersonal skill was inversely and significantly correlated with students not meeting expectation and positively and significantly correlated with students exceeding expectation, indicating that, while there was no significant relationship with students meeting expectation, interpersonal management served low and high ability students but not the average students. It is recommended that interpersonal management be associated with diversity of instructional strategies. The principal’s decision-making and school facilities planning tasks were not significantly related to students’ performance at any level, indicating that these tasks were not sufficiently aligned to students’ performance outcomes. It is recommended that these tasks be re-planned in alignment to students’ outcomes. The principal’s evaluation task was inversely and significantly correlated with students meeting expectations and positively and significantly correlated with students performing above expectation.

That is to say, the more principals evaluated their teachers according to state guidelines fewer students met performance expectations in such schools, though the strategy increased the number of students exceeding performance. Principals were recommended to examine the technical quality of evaluation and to diversify the evaluation strategy to meet the conditions of diverse students (a requirement for NCATE). Persaud and Turner (2002) demonstrated that teachers should be concerned with the amount of higher order thinking skills that are being transacted by both the teachers and student in relation to student experiences and textbook knowledge.

Even so, correlation is not causation, and the above relationships and recommendations might appear to be premature when the results of factor and regression analyses are examined. The results of factor analysis clearly demonstrated that none of the leadership variables is loaded with any of the student performance levels. Further, the results of regression analysis indicated that the leadership variables did not predict student achievement. Climate had a small (nine percent) though significant effect. Based on these findings, it is recommended that the leadership tasks on the instrument might not be appropriately defined to counteract factors such as socio-economic status of students in each classroom (Coleman, et al, 1965). SES as a variable was not measured in this study; therefore, the critical recommendation is for researchers to examine the role of the SES background of students.

Since, the demographic variables of each school were not included, it is recommended that a study be conducted to include the demographic variables of students to determine if climate still would persist as a contributor to student achievement. The school system might want to redefine the leadership tasks in relation to what teachers need to do to meet the needs of diversity (including abilities and socio-economic and family structure) in the student population.

The results have consequences for the various planning models. Despite the role of SES in students' performance, Cook in strategic planning argued that planning begins with mission statement and participation about strategies for achieving it. The model appears to require the planner to examine the mission as the focal influence of the selection of planning strategies rather than the characteristics of students as the basis for planning. MBO techniques in planning and evaluation suggests that the achievement of objectives should be considered as the basis for estimating the effectiveness of planning (McGregor, 1960). This would indicate that the non-achievement of objectives should result in abandonment of the planned strategies. Stufflebeam (1973) demonstrated that the context, process, and product should be the basis for both planning and evaluation for effectiveness. It would appear, therefore, that to better inform planning for effectiveness, planners should utilize the ultimate outcomes of schools, such as student achievement, and should examine the causes for student achievement as the basis for informing planning as suggested by Persaud and Turner (2002).

Teacher education institutions are required by NCATE to utilize diversity, assessment, and evaluation as the hub for aligning all variables in planning. Levine (2006) stated that teacher education training was not in alignment with the functional roles of educators in schools for effectiveness. Based on the results of this study, it is clear that colleges of education should examine the quality of their assessment and evaluation methods in defining outcomes and the causes for non-attainment of outcomes. Further, educational leaders should be trained accordingly.

Table 5:

Leadership Competencies in Terms of Principal Longevity Independent (N = 81 Elementary Schools)

		Sum of Squares	df	Mean Square		
					F	Sig.
Instructional Leadership	Between Groups	.001	1	.001	.012	.913
	Within Groups	6.638	80	.083		
	Total	6.639	81			
Interpersonal Skills	Between Groups	.022	1	.022	.202	.655
	Within Groups	8.901	80	.111		
	Total	8.923	81			
Making Decisions	Between Groups	.006	1	.006	.053	.819
	Within Groups	9.059	80	.113		
	Total	9.065	81			
Facilities Planning & Student Behavior Expectations	Between Groups	.033	1	.033	.347	.558
	Within Groups	7.715	80	.096		
	Total	7.749	81			
Evaluation Guidelines Implementation	Between Groups	.026	1	.026	.389	.534
	Within Groups	5.334	80	.067		
	Total	5.360	81			
School Climate	Between Groups	.017	1	.017	.293	.590
	Within Groups	4.670	80	.058		
	Total	4.687	81			

REFERENCES

- Blake, R. R., & Mouton, J. S. (1991). *Managerial Grid*. Houston: Gulf Publishing Company.
- Brookover, W. (1978). Elementary School Social Climate and School Achievement. *American Educational Research Journal*, 15(2), 301-18.
- Cook, W. J. (1995). *Strategic planning for American schools: Revised II*. Montgomery: The Cambridge Group and the American Association of School Administrators.
- Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D., & York, R. L. (1966). *Equality of educational opportunity*. Washington, DC: U. S. Government Printing Of ce.
- Cronbach, L. J. (1951). Coef cient alpha and the internal structure of tests. *Psychometrika*. 16, 297-334.
- Easton-Brooks, D. (2006). *Using socioeconomic indicators to predict the academic outcomes of African American students*. Published Dissertation from the University of Colorado at Denver. Proquest. (AAT 3228617)
- Edmonds, R. (1988). *A perspective - educational goals and changes 1988-2010*. Atlanta, GA: Southern Educational Region Board.
- Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership*, 37(1), 15-24.
- Ford, D. Y. (1997). *Underachievement among gifted minority students: Problems and promises*. The ERIC Clearinghouse. (ED409660)
- Freeland, J. (2006). *The relationship of transformational leadership and reading achievement in Broward County, Florida charter schools*. Dissertation from Florida Atlantic University. Proquest. (AAT 3240596)
- Fullan, M., & Miles, M. (1992). Getting Reform Right: What Works and What Doesn't. *Phi Delta Kappan*, 73(10), 744-52.
- Georgia Department of Education. (1997). *CRCT content descriptors reading, QCC*. Atlanta, GA. Copyrighted.
- Georgia Department of Education. (1997). *CRCT Manual*. Atlanta, GA.
- Georgia Department of Education. (2006). *2006 CRCT Score Interpretative Guide*. Atlanta, GA.
- Getzel, J., & Guba, E. (1957). Social behavior and the administrative process. *The School Review*, 65, 423-41.
- Glassman, N. S. (1994). *Making better decisions about school problems: How administrators use evaluation to find solutions*. California: Corwin Press.
- Glickman, C., Gordon, S., & Ross-Gordon, J. (2004). *Supervision and instructional leadership: A developmental approach*. (6th ed.). Nedham Heights, MA: Allyn & Bacon.
- Grobe, C., & Bishop, G. (2001, Spring). *School attributes and student achievement*. New Brunswick Department of Education. Retrieved September 23, 2002, from http://www.saee.bc.ca/2001_4_3_2.html
- Hallinger, P., Backman, L., & Davis, K. (1996). School context, principal leadership, and student reading achievement. *The Elementary School Journal*, 96(5), 527-549.
- Kunjufu, J. (1989). *Critical issues in educating African American youth (a talk with Jawanza)* (2nd ed.). Chicago, IL: African American Images.
- Lewin, K., Lippitt, & White, R. K. (1939). Patterns of aggressive behavior in experimentally created social climates, *Journal of Social Psychology*, 10, 271-299.
- Levine, A. (2006). *Educating School Teachers*. The Education Schools Project.
- Ma, X., Williams, J., & Douglas (2004). School Disciplinary Climate: Characteristics and Effects on Eighth Grade Achievement (EJ689610). *Alberta Journal of Educational Research*, (50)2, 169-188 Sum.
- Marsden, D. B. (2005). *Relations between teacher perceptions of safe and orderly environment and student achievement among ten better-performing, high-poverty schools in one Southern California elementary school district*. Unpublished doctoral dissertation, Pepperdine University, Malibu, California.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, 370-396.

- McGregor, D. (1960). *The Human Side of Enterprise*. New York. McGraw-Hill.
- Persaud G., & Turner, T (2002). High definition planning for effective schools: Reflections from the Field. *Educational Planning*, 14(1), 65-76.
- Sanders, W. L. (1999). Teachers, teachers, teachers! *Blueprint Magazine*, 4.
- Stufflebeam, D. L. (1973). Education Evaluation and Design. In Worthen, B. R. and Sanders, J.R. (ed., *Education Evaluation: Theory and Practice*. Worthington, Ohio: Charles A. Jones Publishing Co., p.139.
- Ubbelohde, G. C., & Hughes, L. W. (2001). *The principal: Creative leadership for effective schools* (4th ed.). Upper Saddle River, NJ: Allyn & Bacon.
- Vroom, V. H. (1964). *Work and motivation*. New York: Wiley, 1964.