

What Expert Teachers Think: A Look at Principal Leadership Behaviors that Facilitate Exemplary Classroom Instructional Practice

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The purpose of this study was to rank order 21 leadership behaviors originally identified by the work of Waters, Marzano & McNulty (2003) and the impact they have on teacher instructional practice using questionnaire responses provided by past recipients of the National Teacher of the Year award at the state level (n=178) in order to expand the research base on principal leadership behaviors that improve instructional practice. Statistically significant rank order differences were found based on gender, school grade level and SES.

Introduction

In the last 15 years, research consistently supports the premise that school leadership is essential to a successful academic program. Findings by Leithwood, Seashore-Louis, Anderson and Wahlstrom (2005) support the premise that school leadership is an essential factor for improving student achievement. Cotton (2003) asserts that the school principal is critical to a school's success. Strong instructional leadership on the part of the school principal is among the essential characteristics of a successful school (Tschannen-Moran, 2013; Waters, Marzano & McNulty, 2003). The research base continuously confirms that school improvement is rare without instructional leadership delivered by principals and teachers who are effective and dynamic (Cray & Weiler, 2011; Hallinger, 2011; Hallinger & Heck, 2010; Leithwood, Harris, & Hopkins, 2008).

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Others, including Hallinger & Heck (1996), suggest that the academic life of everyone in the educational community is primarily the responsibility of the school principal. Consequently, the increased need for finding expert and quality principals experienced in creating a culture of increased student achievement is difficult to do and very much in demand (Cray & Weiler, 2011).

Accordingly, in the past ten years, principals have been held to higher standards and are much more accountable for the overall success of the school building, specifically when it comes to student academic performance. Their role has evolved more from simply being a manager of operations for the school plant to assuming the role of an overall instructional leader who is responsible for meeting all aspects of the mandates outlined by federal and state legislation that focuses on student performance (Bottom & O'Neill, 2001).

Added into the mix are both teacher evaluation and principal evaluation national initiatives that have changed the educational landscape for both the everyday practice of teachers in the classroom and the daily leadership capacity of school principals. This increasing level of state and federal scrutiny has resulted in a new generation of school administrators that grapple with the question of how to meet state and federal mandates yet find formative and effective evaluation models that improve classroom instructional practice, which will result in overall school growth. We posit that if current principals are held more accountable for overall student academic achievement then it is imperative for them to identify the most effective leadership behaviors that will facilitate exemplary teaching practices in order to improve student academic achievement and overall student efficacy.

Problem

As previously mentioned, teachers are also hailed as equally, if not more, responsible for student academic success than that of the school principal. According to Wong (1999) the primary contributor for increasing student achievement is the teacher. Supovitz, Sirinides & May (2010) posit that it is not the main impact that principals have on students but the day-to-day interactions that teachers have with students that contributes to their overall learning. The leadership of the school principal is considered a key factor in improving schools and research supports the importance of the school principal on school reform and student academic achievement (Sebastian & Allensworth, 2012).

Consequently, teachers will primarily look to the leadership of the school for assistance and support with their craft, which places more of a demand on the instructional leadership capabilities of a principal. Yet, principal leadership behaviors which could potentially facilitate quality instructional practice and provide much needed support for teachers are not clearly identified in the literature.

While it has been established that instructional leadership is important to improve student achievement as well as improving the instructional practice of teachers, leadership behaviors which model both areas have not been specifically identified. Blasé and Blasé (1999) suggest that published studies on the everyday behaviors of the instructional leader from the perspective of teacher are few and far between and those that do exist provide only a scant description of effective behaviors that might impact a teacher's classroom instructional practice

Research on principal leadership behaviors conducted by Waters, Marzano, and McNulty (2003) identify and define 21 leadership behaviors that are related to student and school performance, which could potentially influence the quality of classroom instructional practice.

However, what do teachers say about these behaviors as it relates to their own practice? Are these behaviors also important to teachers and what they do in the classroom? Do some behaviors more than others better facilitate quality classroom instructional practices? Blasé and Kirby (2009) indicate that teachers want and need effective principals who can model and provide exemplary instructional leadership behaviors.

By examining the teacher perspective on the 21 leadership behaviors and how they might influence classroom instructional practice, school leaders might be better informed on how to improve their own behavior and practice, which in turn might possibly influence classroom instructional practice and student performance. Insight from teachers may, in fact, provide opportunities for school leaders to reflect upon their current behaviors and consider changes to improve their day-to-day leadership activities and practices to assist them in becoming the instructional leaders that they need to be in this new era of educational accountability.

Purpose

The primary purpose of this research project was to attempt to identify the most important leadership behaviors a principal needs to practice in order to facilitate quality classroom instructional practices as perceived by a national sample of exemplary teachers. The 21 leadership behaviors, as identified and defined by the work of Marzano, Waters and McNulty (2005), were used as the construct model for preferred leadership behaviors that are related to improving overall student and school efficacy. The primary research question addressed in this study was: From the expert teachers' perspective, which of the 21 leadership responsibilities and behaviors identified by Marzano, et al. (2005) are most important for school leaders to demonstrate in practice in order to facilitate exemplary classroom instructional practice?

Methodology

Survey Construction and Data Collection

The 21 leadership behaviors identified in the 2003 study by Waters et al and later codified in a publication entitled, *School Leadership that works: From Research to Results* by Marzano et al (2005), served as the construct model for all survey items. This work was based on a meta-analysis that drew from over 5,000 previous studies and identified specific behaviors and characteristics of principal leadership, which are significantly associated with student achievement. The instrument was constructed using a forced response design in an attempt to identify leadership behaviors practiced by principals, as perceived by an expert sample of teachers, that best facilitate exemplary classroom instructional practice.

Survey item response design incorporated a Likert scale methodology. Respondents were asked to express their level of agreement for each survey item by answering Very Important (4), Important (3), Somewhat Important (2), or Not Important (1). In addition to facilitating and determining the overall mean rank of teacher participants' responses on each leadership behavior, the instrument also included a detailed demographic questionnaire that enabled categorical comparisons of these leadership behaviors. The data for this study were collected from elementary, middle and secondary school teachers using an online survey tool provided through Survey Monkey (surveymonkey.com).

Survey content validity was established through expert panel review and input from the pilot study participants. The survey pilot study used a purposeful sample of K-12 teachers from a local school district who were recognized as past Teachers' of the Year at their respective schools. Survey reliability was tested using Cronbach's Alpha and found to be .83.

Sample

Participants in the study were selected from a national database representing all 50 states and United States territories that had been selected as National Teachers of the Year winners over the past six years. The potential respondent sample was comprised of 365 teachers who received the award from their respective state or territory between the years 2006 - 2012. Recipients of the National Teacher of the Year Award are selected every year based on the criteria of the National Selection Committee, which represents major educational organizations nationwide ([ccsso.org/ntoy](http://www.ccsso.org/ntoy)). Selection Committee criteria includes, but is not limited to, having exceptional knowledge, being a skilled, articulate and dedicated teacher and one who inspires students to learn. The National Teacher of the Year Award is the oldest and one of the most prestigious programs which honors teacher excellence in the United States.

(see http://www.ccsso.org/ntoy/About_the_Program/html)

Teachers in the study completed an online, web-based survey and rated the importance of the 21 leadership behavior characteristics of school leadership and their potential influence on exemplary classroom instructional practice. Correspondence explaining the nature of the research was sent electronically and outlined the purpose of the study along with a link to the online survey. A total of 365 invitations to participate were delivered with 178 teachers choosing to participate resulting in a response rate of 48%.

Limitations

Limitations to the present study included a sample that was restricted to public school teachers and therefore could not be generalized to other teachers from other types of schools. Survey findings were based on the perceptions of the Teacher of the Year recipients and therefore, could not be generalized to all types of teachers nor controlled for teacher bias.

Assumptions

It was assumed that every teacher in the survey selected as a National Teacher of the Year recipient was selected based on the rigor of the selection process. (see http://www.ccsso.org/ntoy/About_the_Program/html) Additionally, it was assumed that all respondents answered all survey questions as candidly and honestly as possible.

Delimitations

Although the survey was subjected to expert review and piloted, a possible delimitation to the study was the use of a survey instrument as an accurate measurement of the perception of teachers regarding leadership responsibilities and behaviors of school leaders based on an existing, albeit accepted by the field, leadership schema as posited by Marzano et al. (2005).

Categories created for the survey were based only on the 21 leadership behaviors discussed in Marzano et al. (2005).

Results

Demographic Results

The demographic information compiled by the survey indicated a sample of predominately female respondents who are highly educated with 60% having earned a master's degree and at least 10 years of teaching experience. These teachers work in diverse school settings with mostly male principals (55%) and where 70% of those responding work in school populations of 1,000 students or less. Slightly more than 40% of the respondents work in school districts where almost half of the students or more come from low socioeconomic backgrounds. Of the sample of teachers who took part in the study, 75% were female and 25% were male. The principals of the respondents were predominately male, 55%. The age categories of the respondents varied between the ages of 21 - 60+ with the largest response rate from those between the ages of 41-50 years old, 33.1%; ages 31 - 40, 26.4%; ages 51 - 60, 25.3%, over 60, 8.4%, and ages 21 - 30 was 4.5%. Less than 3% did not indicate an age category. Twenty-five percent reported having between 16 - 20 years of experience and over 75 percent had 15 or more years of experience. Forty-four percent identified themselves as coming from a suburban school, 32 percent indicated a rural school and 22.5% an urban school. Approximately 60.1% indicated their school met Annual Yearly Progress (AYP) while 32% responded that their school did not meet AYP. Less than 8% did not indicate whether or not their school met AYP.

School populations varied with over 70 percent of the teachers from schools with student populations up to 1000 students. The other 30 percent ranged between 1001 and 2500 students. Respondents from the high school level comprised 41% of the sample with approximately 22 % from elementary and 38% from middle school. The response rate from teachers who worked in predominantly low SES classified schools was 15.7%.

Findings

Findings from this study attempt to provide some insight on the 21 leadership behaviors identified by Marzano et al. (2005) as to what are the most effective toward improving classroom instructional practice as perceived by a national sample of exemplary educators. Table 1 provides a brief definition for each of the 21 leadership behaviors.

Table 1
Marzano, Waters & McNulty 21 Leadership Behaviors

Leadership Behavior	Description
Affirmation	Recognizes and celebrates school accomplishments and acknowledges failures.
Change Agent	Is willing to and actively challenges the status quo.
Contingent Rewards	Recognizes and rewards individual accomplishments.
Communication	Establishes strong lines of communication with and among teachers and students.
Culture	Fosters shared beliefs and a sense of community and cooperation.
Discipline	Protects teachers from issues and influences that would detract from their teaching time and focus.
Curriculum, Instruction, & Assessment	Directly involved in the design and implementation of curriculum, instruction and assessment. Practices.
Flexibility	Adapts leadership behaviors to the needs of the current situation and is comfortable with dissent.
Focus	Establishes clear goals and keeps those goals in the forefront of the school's attention.
Ideals/Beliefs	Communicates and operates from strong ideals and beliefs about schooling.
Input	Involves teachers in the design and implementation of important decisions and policies.
Intellectual Stimulation	Ensures that faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of school culture.
Involvement in Curriculum, Instruction & Assessment	Is directly involved in the design and implementation of curriculum, instruction, and assessment practices.
Monitoring/Evaluation	Monitors the effectiveness of school practices and their impact on student learning.
Optimizer	Inspires and leads new and challenging innovations.
Order	Establishes a set of standard operating procedures and routines.
Outreach	Is an advocate and spokesperson for the school to all stakeholders.
Relationships	Demonstrates an awareness of the personal aspects of teachers and staff.
Resources	Provides teachers with materials and professional development necessary for the successful execution of their jobs.

Situational Awareness	Is aware of the details and undercurrents in the running of the school and uses this information to address current and potential problems.
Visibility	Has quality contact and interactions with teachers and students.

(Marzano et al., 2005)

The statistical analyses used was the non-parametric Friedman test for related samples (Huizingh, 2007) to determine if the mean rank ordering of these 21 leadership behaviors by a sample of expert teachers as to what best promotes effective classroom instructional practice was statistically significant. The Friedman test was the appropriate non-parametric test for statistical significance to determine what expert teachers deem to be the most important behaviors a principal needs to practice and demonstrate to facilitate their instructional practice.

Additionally, Kendall's tau-b was used as a follow-up statistical analysis to explore the nature and strength of the relationship between the mean rank ordering of the behaviors by specific categories and/or groups (e.g., Gender – males/females; AYP Status – met/not met, etc.). Kendall's tau-b is a statistic that measures the strength and nature of a relationship between two or more variables/categories when the sample size is small and/or the level of measurement is ordinal (Field, 2009).

Table 2 shows the leadership behaviors identified by Marzano et al. (2005) and how 178 respondents rated the behaviors. All of the behaviors had a mean value between 4.0, Very Important, and 3.0, Important. The higher the mean scores were, the higher the percentage of teachers who responded that this behavior was Very Important to instructional practice. The standard deviation (SD) ranged between .26 - .82. As mean scores decreased, SD increased, indicating that inverse relationship between mean and standard deviation.

Table 2

Exemplary Teacher Respondent's Mean Rank Results of the 21 Leadership Behaviors (n=178)

Behavior	Very Important (%)	Important (%)	Somewhat Important (%)	Not Important (%)
Contingent Rewards	93.8	4.5	.6	
Relationships	85.4	12.4	.6	.6
Visibility	84.3	12.9	1.7	
Knowledge of Curriculum, Instruction & Assessment	80.9	15.2	2.8	
Intellectual Stimulation	78.1	19.1	1.1	
Optimizer	75.8	20.2	2.2	
Discipline	74.7	21.3	2.8	

Involvement in Curriculum, Instruction & Assessment	71.9	23.6	2.8	
Communication	69.7	24.7	3.4	.6
Affirmation	69.1	25.8	3.9	
Monitoring/Evaluation	64.0	29.2	4.5	
Outreach	62.9	29.2	5.6	
Order	61.8	33.7	2.2	
Culture	61.8	28.7	6.7	1.1
Change Agent	57.3	34.8	6.7	
Resources	53.9	38.8	3.4	.6
Situational Awareness	53.9	33.7	9.6	1.1
Flexibility	48.3	41.0	7.3	
Input	47.2	42.7	7.3	
Ideals/Beliefs	42.1	46.6	9.0	
Focus	36.0	37.1	21.9	3.4

The behavior which earned a ranking of Very Important by 93.8% of the respondents was *Contingent Rewards*, indicating a high priority by teachers of a preferred principal characteristic that facilitates exemplary classroom instruction. Other behaviors which were rated as being important to improving instructional practices of teachers included *Relationships*, an awareness of the personal aspects of teachers and staff, which was rated at 85.4% (160), and a mean score of 3.86 (SD=.41). *Visibility* was identified at 84.3 % (160) and a mean score of 3.84 (SD=.41). Out of 178 responses, *Contingent Rewards* and *Visibility* had no responses indicating Not Important, while *Relationships* had one Not Important response. Three other behaviors were rated as Very Important by more than 75% of those teachers responding. These included *Knowledge of Curriculum, Instruction and Assessment*, 80.9%, M=3.78, SD=.48; *Intellectual Stimulation*, 75.1%, M=3.78, SD= .44; and *Optimizer*, 75.8%, M=3.74, SD=.47. Teachers identified the behaviors which were Important to impacting instructional practice. The 178 teachers responding identified as Important, *Ideals/Beliefs* (46.6%), followed by *Input* (76%), *Flexibility* (73%), *Resources* (69%), and *Focus* (66%).

Behaviors marked as Somewhat Important by teachers rated *Focus* the highest, 21.9%; (39), *Situational Awareness*, 9.6% (17), *Ideals/Beliefs*, 9% (16); *Flexibility*, 7.3% (13); and *Outreach*, 5.6% (10).

Lastly, out of the 21 leadership behaviors, very few behaviors received a Not Important rating by teachers. There were 6 behaviors that received a Not Important rating, including *Focus*, 3.4% (6) which also had the lowest mean score (3.07) and the highest standard deviation (.82). This possibly indicates that the respondents consider *Focus*, establishing clear goals and keeping those goals in the forefront of the school, as the least important of the 21 leadership behaviors needed to improve instructional practice. Other, Not Important, ratings included: *Situation*

Awareness, 1.1% (2); *Culture*, 1.1 (2); *Resources*, .6% (1); *Relationships*, .6% (1); and *Communication*, .6% (1).

Table 3 presents the Friedman test for mean ranking of the 21 surveyed items, which was found to be statistically significant ($\chi^2(20, N=160) = 434.965, p < .001$).

Table 3
Mean Rank for all Teacher Respondents (n = 160)

Behavior	Mean	Mean Rank
Contingent Rewards	3.93	13.99
Relationships	3.86	13.28
Visibility	3.84	13.13
Knowledge of Curriculum, Instruction & Assessment	3.78	12.55
Intellectual Stimulation	3.78	12.47
Optimizer	3.76	12.43
Discipline	3.71	11.90
Involvement in Curriculum, Instruction & Assessment	3.70	11.79
Communication	3.65	11.37
Affirmation	3.65	11.29
Outreach	3.61	11.12
Monitoring/Evaluation	3.60	10.88
Order	3.60	10.80
Culture	3.53	10.45
Change Agent	3.51	10.06
Resources	3.50	10.03
Situational Awareness	3.42	9.65
Flexibility	3.41	9.27

Input	3.38	9.01
Ideals/Beliefs	3.32	8.27
Focus	3.12	7.29

A comparison of the rankings of 21 leadership behaviors by gender produced statistically significant results for both female teacher respondents and male teacher respondents. According to female respondents, the mean rank of the behavior *Focus* (7.73) was the least important behavior while *Contingent Rewards* (13.90) had the highest mean rank. The chi-square associated with the Friedman test for female responses was $\chi^2(20, N=119) = 293.960, p < .001$. Table 4 shows the ranking of the behaviors based on gender. The same test showed the responses of male teachers and was found to be statistically significant and the behavior *Focus* (5.79) and *Contingent Rewards* (14.21) also received the lowest and highest ranking of importance. The chi-square associated with the Friedman test on male responses was $\chi^2(20, N=40) = 155.718, p < .001$.

Table 4
Mean Rank of Female and Male Teachers

Behavior	Female Mean Rank (n=119)	Male Mean Rank (n=40)
Affirmation	9 (tie)	11
Communication	11	10
Change Agent	15	16
Contingent Rewards	1 (highest)	1 (highest)
Visibility	3	4
Situational Awareness	17	17
Resources	16	14
Knowledge of Curriculum, Instruction & Assessment	5	3
Culture	14	13
Discipline	7 (tie)	7
Flexibility	18	18

Focus	21 (lowest)	21 (lowest)
Outreach	9 (tie)	15
Optimizer	6	2
Monitoring/Evaluation	13	8
Input	19	19
Involvement in Curriculum, Instruction & Assessment	7 (tie)	9
Ideals/Beliefs	20	20
Intellectual Stimulation	4	6
Order	12	12
Relationships	2	5

As previously mentioned, Kendall's tau-b was used to explore the nature and strength of the relationship between the mean rank ordering by gender and found a significant, positive relationship between male and female teachers mean rank ordering of the 21 Leadership behaviors ($\tau(21) = .813, p < .001$). This indicates that the rank ordering of these behaviors by both genders was quite similar.

A Friedman test by teacher respondent grade level was also performed. Teacher respondents self-identified as either grade k-5; grade 6-8; grade 9-12. Any response that would potentially cross between two categories was excluded from the data. The chi-squares associated with the Friedman test for each grade level were all found to be statistically significant: grades k – 5, ($\chi^2(21, N=38) = 246.840, p < .001$); grades 6 – 8, ($\chi^2(20, N=35) = 239.408, p < .001$); and grades 9 – 12, ($\chi^2(20, N=66) = 307.794, p < .001$). The results for the mean rank of the 21 leadership behaviors by teacher respondents according to grade level are outlined in Table 5.

The Friedman Test conducted by grade level showed *Focus* was the least important behavior to impact instructional practice in all three categories: grades k-5 (8.11), grades 6-8 (8.41) and grades 9-12 (7.23). The highest mean rank for grades k-5 was *Contingent Rewards* (14.47) along with Grades 9-12 (15.80). The highest mean rank for grade 6-8 was *Relationships* (14.36).

To determine if the rankings were similar across grade levels a series of Kendall tau-b analyses were performed. A statistically significant, moderately strong positive relationship was discovered between k-5 and 6-8 teachers ($\tau(21) = .625, p < .001$) k-5 and 9-12 teachers ($\tau(21) = .771, p < .001$) and 6-8 and 9-12 teachers ($\tau(21) = .758, p < .001$). Curiously, the strongest relationship in mean ranking by grade level was between k-5 and 9-12 teachers and the weakest between k-5 and 6-8 teachers.

Table 5
Mean Rank Comparisons of Teachers in Elementary, Middle and High School

Behaviors	k-5 Teachers (n=38) Mean Rank	MS Teachers (n=35) Mean Rank	HS Teachers (n=66) Mean Rank
Affirmation	11	11	10
Communication	9	14	9
Change Agent	12	15	16
Contingent Rewards	1 (highest)	2	1 (highest)
Visibility	5	4	3
Situational Awareness	13	16	17
Resources	19	17	14
Knowledge of Curriculum, Instruction & Assessment	6	5	4
Culture	17	10	15
Discipline	10	3	7
Flexibility	18	18	19
Focus	21 (lowest)	21 (lowest)	21 (lowest)
Outreach	8	8	11
Optimizer	2	12 (tie)	5
Monitoring/Evaluation	14	12 (tie)	13
Input	16	19	18
Involvement in Curriculum, Instruction & Assessment	7	6	8
Ideals/Beliefs	20	20	20

Intellectual Stimulation	3	7	6
Order	15	9	12
Relationships	4	1 (highest)	2

Table 6 displays the ranked results of the behaviors based on the teacher respondents varying school populations of students who receive Free and Reduced Lunch (FRL). In all four FRL categories the findings indicated a statistical significance. The chi-square statistics associated with each level were: FRL \leq 24%, (χ^2 (20, N=44) =139.661, $p < .001$); FRL 25-49%, (χ^2 (20, N=45) =154.468, $p < .001$); FRL 50-74%, (χ^2 (20, N=41) =131.691, $p < .001$); and FRL \geq 75%, (χ^2 (20, N=28) =78.398, $p < .001$). In all four categories the mean ranking for the least important behavior was *Focus* and the top behavior was *Contingent Rewards*.

Table 6
Free and Reduced Lunch Categories

Behavior	FRL \leq 24% (n=44)	FRL 25-49% (n=45)	FRL 50-74% (n=41)	FRL \geq 75% (n=28)
Affirmation	12	12	5	10
Communication	14	11	10 (tie)	3
Change Agent	18	16	13	13
Contingent Rewards	1(tie)	1	1	1(tie)
Visibility	4	2(tie)	3	4
Situational Awareness	16	18	15	18
Resources	13	14	17	17
Knowledge of Curriculum, Instruction & Assessment	5	2(tie)	6	8(tie)
Culture	9	15	18	11
Discipline	6	6	7	14
Flexibility	17	17	19	19
Focus	21	21	21	21
Outreach	8	10	14	12

Optimizer	7	6	4	1(tie)
Monitoring/Evaluation	15	9	16	8(tie)
Input	20	20	12	16
Involvement in Curriculum, Instruction & Assessment	10	5	9	7
Ideals/Beliefs	19	19	20	20
Intellectual Stimulation	3	8	8	5
Order	11	13	10(tie)	15
Relationships	1(tie)	4	2	6

As with the previous two analyses, the strength and nature of the relationships between school FRL status of respondents and their respective mean rank ordering of the behaviors was explored. Because of so many different combinations the results of the Kendall tau-b analyses on this category is displayed in Table 7.

Table 7
Kendall's tau-b Results Based on Respondents School FRL Status

School FRL Status	25% – 49%	50% - 74%	≥ 75%
≤ 24%	tau (21) = .724 p<.001	tau (21) = .612 p<.001	tau (21) = .561 p<.001
25% – 49%		tau (21) = .667 p<.001	tau (21) = .663 p<.001
50% - 74%			tau (21) = .609 p<.001

The table clearly shows that the mean rank relationships between respondents within schools of close FRL status were stronger than those farther apart, suggesting the possibility of a similar emphases on specific behaviors based upon the school's socioeconomic status, for which FRL serves as a proxy indicator.

Table 8 indicates the results for the Friedman Test of Mean Ranking based on whether a teacher came from a school that met AYP or did not meet AYP. Responses indicated that schools meeting AYP were found to be statistically significant (χ^2 (20, N=99) =316.182, p<.001). For schools not meeting AYP the Friedman test results were also statistically significant (χ^2 (20, N=49) =122.040, p<.001). The results show *Focus* as the lowest ranked leadership behavior and *Contingent Rewards* as the top ranked leadership behavior.

Table 8
Schools Meeting and not Meeting Annual Yearly Progress (AYP)

Behavior	Mean Rank of Schools Meeting AYP (n=99)	Mean Rank of Schools Not Meeting AYP (n=49)
Affirmation	10	11
Communication	9	9
Change Agent	16	16
Contingent Rewards	1 (highest)	1(highest)
Visibility	2	3
Situational Awareness	17	15
Resources	15	14
Knowledge of Curriculum, Instruction & Assessment	4	4
Culture	12	17
Discipline	7	8
Flexibility	18	19
Focus	21(lowest)	21(lowest)
Outreach	11	13
Optimizer	6	6
Monitoring/Evaluation	13	12
Input	19	18
Involvement in Curriculum, Instruction & Assessment	8	10
Ideals/Beliefs	20	20
Intellectual Stimulation	5	5
Order	14	7

Relationships	3	2
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The top three ranked behaviors included *Contingent Rewards* (13.98), *Visibility*, (13.53) and *Relationships* (13.38) the lowest ranked behaviors included *Focus* (7.25), *Ideals/Beliefs* (8.25) and *Input* (8.51). Using the Friedman Test with the overall mean rankings, the three highest behaviors were the same as the three highest in this category and the three lowest ranking behaviors were consistent in this category with the three lowest behaviors compiled in the overall Friedman test.

The Kendall's tau-b correlation analyses of the mean ranking of the leadership behaviors based on the respondents' school AYP status revealed a statistically significant, strong positive relationship between groups ($\tau(21) = .848, p < .001$). Clearly, regardless of whether the school met or did not meet AYP had no influence on the respondents' mean ranking of the 21 leadership behaviors.

Conclusions and Discussion

The results from the Friedman tests displayed in tables 2 thru 6 and 8 show that there is a hierarchical rank order of what expert teachers believe to be the most important principal behaviors that impact classroom instructional practice. From the assessed outcomes of these rankings, it was determined that more than half of the sample of expert teachers ranked 18 of the 21 behaviors as being Very Important. At least 73.1% of the teachers ranked all 21 behaviors as either Very Important or Important leadership behaviors which promote exemplary teacher instructional practice. There were six behaviors identified by teachers as Not Important, which was indicated by 3.4% of the teachers or less, depending on the leadership behavior. This indicates that all 21 leadership behaviors are important to teachers. These particular leadership behaviors were selected because they are highly correlated to improve student achievement (Marzano et al., 2005). This is noteworthy because principals can focus their attention on the specific behaviors which, from the expert teachers' viewpoint, could assist them in improving instructional practice by modeling those that are most significant.

Female and male teachers both ranked *Contingent Rewards* as the most preferred behavior, and *Focus* as the least preferred. However, further statistical analysis (i.e., Mann – Whitney test) found there to be statistically significant difference between male and female responses for the mean rank ordering of the behavior, *Focus*. This finding minimally supports past research on gender differences in educational leadership (Cleveland, Stockdale & Murphy, 2000).

Based on the rankings *Contingent Rewards* was ranked first or second by all three grade levels. *Relationships* and *Visibility* were also ranked with the top five leadership behavior by teachers for all three grade levels. The least important leadership behavior, which was ranked the same by all three groups, was *Focus*. Elementary teachers ranked *Optimizer*, a leadership behavior which promotes innovative ideas and creativity as the second most important while the middle school teachers ranked it number 12 and high school teachers ranked it number 5. Middle school teachers ranked *Discipline*, protecting teachers from issues and influences that often interfere with the regular teaching time, as the third most important behavior while elementary and high school teachers ranked it 10 and 7 respectively.

The findings which were based on teacher grade level might be considered important to the selection of principals by districts with multiple grade levels. Based on differences in the perceptions of teachers as to which leadership behaviors are most important to facilitate the instructional practice of teachers, school boards and other stakeholders involved in the hiring process may want to formulate questions during the interview process which would help gain an understanding of the leadership behavior priorities of their candidates. By having a clear understanding of the needs of teachers in terms of which leadership behaviors are most desired to help improve instructional practice, the candidate who appears to be the ‘best fit’ can be hired to fill the position for a particular grade level school. This supports the work of Valentine (2010) on the focus of middle school leadership and the need for a continuous vision among teachers who share common values and beliefs. Principals in a particular school, depending on the grade level of their students, can focus their attention on modeling those leadership behaviors which appear to be most effective based on teacher responses.

Based on the Free and Reduced Lunch categories, FRL plays a significant role in the perception of teachers and leadership behaviors, which impact classroom instructional practice. The results found *Contingent Rewards* ranked first and *Visibility* was also noted in the top five by all FRL categories. *Focus* and *Flexibility* were identified as least important in all four FRL categories. *Input*, which involves teacher in the design and implementation of important decisions and policies, was ranked number 12 and 16 respectively by teachers in schools with the highest two FRL levels than by teachers in schools from the lowest two FRL categories, ranking it 20 in both. This might suggest that teachers from the higher FRL school populations might have ideas they think could be beneficial and want to become more involved in the processes and plans for positive change.

Teachers from schools meeting or not meeting AYP was the last category. In both categories, teachers from schools meeting AYP and not meeting AYP ranked *Contingent Rewards* first and *Focus* last. This possibly indicates that regardless of whether the school meets or does not meet AYP, teachers across the categories are in agreement as to what leadership behaviors facilitate quality instructional practices.

The 21 leadership behaviors identified in the literature (Marzano et al, 2005; Waters et al, 2003) as the most effective for improving student and school performance were ranked in this study in twelve different ways. A final comparison among the behaviors concludes that among all 21 leadership behaviors ranked, *Contingent Rewards*, the leadership behavior identified as “recognizes and rewards individual accomplishments” (Marzano et al., 2005, p.42), was consistently ranked first among all categories explored. Based on this finding, it appears to be imperative that teachers be rewarded for their accomplishments by the principal leader of the school. This sample of expert teachers found this to have the greatest impact for improving instructional practice.

Identified as the least important of the 21 leadership behaviors was *Focus*, which is defined as “establishes clear goals and keeps those goals in the forefront of the school’s attention (Marzano, et al., 2005, p.42). This ranking was also consistent across all twelve categories that were studied. These findings suggest that while it is important for school leadership to have a set of clear goals when it comes to facilitating exemplary classroom instruction, *Focus* as a leadership behavior has the least impact. Table 9 shows the highest and lowest ranked leadership behaviors for each category.

Table 9
Comparisons of Highest and Lowest Ranking Principal Behaviors

	Highest Ranked Leadership Behavior	Lowest Ranked Leadership Behaviors
Overall	Contingent Rewards	Focus
Female	Contingent Rewards	Focus
Male	Contingent Rewards	Focus
K - 5	Contingent Rewards	Focus
6 – 8 (MS)	Relationships	Focus
9 – 12 (HS)	Contingent Rewards	Focus
FRL ≤ 24%	Contingent Rewards/Relationships	Focus
FRL 25 % - 49%	Contingent Rewards	Focus
FRL 50% - 74%	Contingent Rewards	Focus
FRL ≥ 75%	Contingent Rewards/Optimizer	Focus
Met AYP	Contingent Rewards	Focus
Did not Meet AYP	Contingent Rewards	Focus

Although much of the research on leadership behaviors and traits over the past twenty years adequately supports a position that tells us that leadership is very much influenced by context (Hargreaves & Fullan, 1998; Senge, 1990), results reported here seem to indicate that concerning the facilitation of exemplary classroom instruction there may be a cadre of common behaviors school principals need to practice across all contextual platforms.

It has been suggested that successful school leaders practice a common set of behaviors, which have a positive effect on student learning. Many of these common practices are included in the 21 leadership behaviors. These include the ability to provide a vision, develop relationships, provide staff development, facilitate intellectual stimulation, build relationships and promote and nurture a productive school culture (Harris, 2007; Robinson, Lloyd, & Rowe, 2008).

Leithwood and Riehl (2005) clearly indicate the importance of school leadership as an essential factor for improving student achievement and posits that school leadership influences the school, classroom conditions, and teachers, which all directly and indirectly influence student learning. Cotton (2003) also confirms how critical the principal is to the success of the school. It is our hope that the results of this study benefit principals by providing a suggested hierarchy of importance of leadership behaviors that have been associated with improving student achievement (Marzano et al., 2005).

It is the hope that the results of this study provide current practicing principals with a starting point as to the specific leadership behaviors that contribute to a sound instructional leadership practice. Principals can use these rankings to help them reflect upon their own leadership behaviors, actions and practices in order to better facilitate the instructional practice of teachers in their schools. Additionally, results from this study may also inform principal preparation programs by providing them with an archetype for potentially defining instructional leadership or at the very least a starting point for a collaborative discussion with principal candidates about the construct.

The selection and hiring process of a school principal for any school district is an important one and a huge responsibility for all stakeholders. Ideal candidates must possess the knowledge and skills that it takes to meet the increasing challenges. They are accountable for student achievement as never before in the history of education. Consequently, it is the intent

that the results of this study will serve as a guide for school boards in that selection process by providing a better and more practical understanding of the types of leadership behaviors that are essential to improving the instructional practice of teachers which in turn, will help their students to be successful both academically and socially and in the end afford each of one of them the opportunity to reach their overall individual potential.

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