Transformational Leadership and Literacy in Career and Technical Education: Impact on Student Motivation to Read and Reading Comprehension

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As a part of a larger literacy study, 51 Career and Technical Education teachers in New York State completed a self-assessment measuring their transactional and transformational leadership through each of the nine components of the Full Range of Leadership Model. The outcome variables of this correlational study were gain scores over a period of eleven weeks for reading comprehension and motivation for reading. Idealized Influence-Behavioral and Idealized Influence-Attributed were both found to have significant relationships with both outcome variables. Intellectual Stimulation was found to have a significant relationship with reading comprehension. Several demographic and literacy variables were collected and analyzed. Significant relationships were found between reading comprehension and student gender as well as student socioeconomic status.

Introduction/Conceptual Framework

Many secondary students in the United States struggle with reading comprehension and motivation to read. Among eighth graders, 42% fall within the "basic level" of reading skills, indicating "partial mastery" of basic eighth grade-level reading. Additionally, twenty-seven percent of U.S. eighth graders cannot read at even the "basic level" (Perie, Grigg, & Donahue, 2005). When students struggle in reading, they are more likely to struggle with overall academic achievement. Moreover, literacy is essential for the acquisition of transferable skills needed for all vocations (Kakela, 1993). The majority of reading instruction occurs in the early grades; this insufficient approach to literacy instruction is referred to as the vaccination model (Shanahan & Shanahan, 2008). Since the majority of literacy research has focused on teachers and students in elementary schools, data intended to assist teachers and students in secondary education is limited. A student's low level of motivation to read a particular genre of text reduces the amount of practice the student will have with reading similar texts. The lack of practice subsequently lowers the student's level of reading achievement which can lead to even lower rates levels of student motivation to read (Moje, 2006). Moreover, low levels of student motivation often lead to underachievement and amplified dropout rates (Alderman & Maehr, 1994).

The struggle for literacy proficiency in the areas of reading comprehension and motivation to read becomes even more pressing within career and technical education (CTE). A considerable percentage of CTE students may be viewed "at-risk" for reading failure. To date, the amount of research in regard to literacy in CTE has been negligible. Students' motivation to read text is shaped by whether or not the students see a text as useful (Moje, 2006). CTE provides a unique opportunity to evaluate students' reading gains for motivation to read and reading comprehension because CTE programs are elective and practical in nature. Furthermore, many school literacy coaches devote their time to teachers in core academic areas (van der Mandele, Park, & Welch, 2008). Consequently, CTE teachers are often left to their own devices to incorporate literacy strategies and programs into their classrooms (Park & Osborne, 2007).

Additionally, the dynamic, highly contextualized influence relationship between teacher and student can easily be lost in attempts to implement important literacy efforts such as requiring sustained silent reading and introducing new literacy strategies. A conscious focus on adolescents' and teachers' insightfulness about their own psychological development and relationship to each other may significantly impact student interest in literature and reading. (Stringer & Mollineaux, 2003). It is imperative to take into account we cannot teach only vocabulary, phonetics, phonemic awareness, vocabulary, and reading strategies—we must teach individual students (Compton-Lilly, 2009). When teachers focus chiefly on initiatives and processes instead of students' needs, wants and sources of motivation, students may perceive them as detached, and manipulative (Bass, 1985). As Blanchard (2010) states, leadership is not something you do to someone. It is something that you do with someone. This statement holds true for literacy instruction as well. An augmented focus on teachers' leadership approach in the classroom could help mitigate this concern.

Theoretical Framework

John Gardner (1984) described a conversation he had with Martin Luther King Jr. during an education seminar. The speaker entitled her talk "First, Teach Them to Read." After hearing the title, Dr. King leaned over and said, "First, teach them to believe in themselves." As former secondary educators, the researchers have experienced frustration because of resistant readers and defiant students as well as the desire to respond with a directive, authoritarian approach to reading instruction. Paradoxically, it is the reliance upon leadership instead of "naked power" that can produce the most comprehensive and enduring changes (Burns, 1978). A novel approach to literacy instruction that has potential to enable teachers to raise students' levels of confidence, motivation, and effort is transformational leadership. The theoretical framework for this study is the Full Range of Leadership model (FRL; Avolio & Bass, 1990). The FRL (Figure 1) contains four components of transformational leadership, three components of transactional leadership, as well as Laissez-Faire leadership.
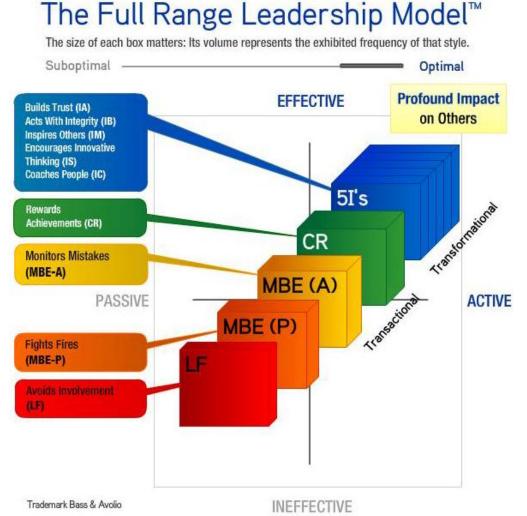
Figure 1. The full range of leadership model. Copyright 2007 by MLQ International. Reprinted with permission.

Transactional leadership depicts the interaction between leader and follower as a transaction. Whereas transformational leaders fortify the morality and motivation of their followers, transactional leaders cater to their followers' short-term self-interests. "A leader is transactional when the follower is rewarded with a carrot for meeting agreements and beaten with a stick for failing in what was supposed to be done" (Bass & Bass, 2008, p. 618). Transactional leaders provide subordinates with a clear understanding of what is expected of them and what should they hope to receive in exchange for fulfilling these expectations (Bass, 1985). Transactional leadership does not extend past the exchange or series of transactions. In this approach, leadership acts usually do not unite the leader and follower(s) in a continuing pursuit of a higher purpose (Burns, 1978). A classroom characterized by transactional leadership may be described as "a place of quick connections and quick fixes" (Burns, 1978, p. 258). While initiatives that incorporate rewards generate short-lived gains in reading achievement, research reveals that augmented levels of students' intrinsic motivation is more effective in developing adolescents into lifelong readers (Joyce, 2003).

Transformational leadership is a process whereby an individual works with others to raise the level of motivation and morality in both the leader and the follower in order to elevate performance beyond basic expectations (Bass & Avolio, 1990). Transformational leaders raise followers' awareness of the value of the intended organizational outcomes and the ways of reaching them, lead followers to transcend self-interest for the benefit of others, and raise followers' level of needs along Maslow's (1943) hierarchy of needs (Burns, 1978). Teachers who display transformational leadership pay attention to each student, empathizing with their concerns and developing needs (Bass, 1985). Instead of addressing how students' current needs and wants can be met, the teacher that displays transformational leadership is able to arouse or alter the strength of needs, motives, and wants which may have lain dormant (Bass). Being able to tap into and even unearth students' desires for self-actualization is pertinent to literacy research because of the resistance to reading displayed by students in within and outside of CTE. Most leaders display transformational, transactional, and laissez-faire behaviors at different times, but individual leaders tend to use one approach more than others (Bass & Riggio, 2006). Transformational leadership can build upon transactional leadership and has proven to be more effective than transactional leadership alone in a variety of contexts (Bass & Riggio). Laissez-Faire leadership is considered to be the least effective and satisfying.

Although early research demonstrated that transformational leadership was particularly powerful in military settings (Bass, 1985), recent research demonstrates that it is effective in a wider array of settings (Avolio & Yammarino, 2002). Additionally, transformational leadership is especially effective in creating higher levels of impact within small organizations due to the amount of time face-time with followers (Berson, Shamir, Avolio, & Popper, 2001). The relationship between organization size is interesting in the classroom context because each class may be considered an organization unto itself. Although there is mounting evidence of improved outcomes resulting from transformational leadership, few studies have examined these effects in classroom contexts (Pounder, 2008).

The five components of transformational leadership are *Idealized Influence-Attributed*, *Idealized Influence-Behavior*, *Inspirational Motivation*, *Intellectual Stimulation*, and *Individualized Consideration*. Leaders high in *Idealized Influence* behave in ways that allow them to serve as role models due to followers' admiration, respect, and trust. Followers often attribute extraordinary diligence and abilities to the leader. Idealized Influence includes two sub-components: Behavioral and Attributed. Both components are measured by the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 2000) and are treated as antecedent variables in this study. *Inspirational Motivation* is characterized by the leader articulating a vision that inspires and motivates followers. The leader provides meaning for the task at hand, communicates optimism concerning future goal attainment, and has high expectations. *Intellectual Stimulation* is the degree to which leaders stimulate their followers' efforts to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways. *Individualized Consideration* is the degree to which leaders pay special attention to each individual follower's needs for achievement and growth by acting as a coach or mentor. For example, some participants receive more encouragement, some more autonomy, others firmer standards, and still others more task structure (Bass & Riggio, 2006).

The three components of transactional leadership are Contingent Reward, Management by Exception-Active (MBE-Active), and Management by Exception-Passive (MBE-Passive). *Contingent Reward* involves establishing and clarifying expectations and constructive exchanges with particular rewards for followers' fulfillment of the expectations. *MBE-Active* is the degree to which the leader actively monitors for errors and deviances from standards and addresses the situation before the consequences are dire. *MBE-Passive* is characterized by the leader waiting for errors and deviances from standards to transpire before engaging in remedial action. The final factor of the FRL model is Laissez-Faire Leadership. This trait is typified by the avoidance or absence of leadership (Bass & Riggio, 2006).

Objectives, Methods and Procedures

The purpose of this study was to compare the effects of each of the FRL factors, as measured by the MLQ version 5X self-rater form, on students' reading comprehension as measured by the Gates-MacGinitie Reading Test (GMRT; MacGinitie, MacGinitie, Maria, Dreyer, & Hughes, 2006) and students' motivation for reading as measured by the Motivation for Reading Questionnaire (MRQ; Wigfield & Guthrie, 1997, 2004). The following hypotheses were tested:

1) H^o_1: There will be no statistically significant relationship between the gain scores for GMRT comprehension and:
    a. Teacher self-ratings in Idealized Influence-Attributed
    b. Teacher self-ratings in Idealized Influence-Behavior.
    c. Teacher self-ratings in Intellectual Stimulation.
    d. Teacher self-ratings in Individualized Consideration.
    e. Teacher self-ratings in Contingent Reward
    f. Teacher self-ratings in Management By Exception-Active
    g. Teacher self-ratings in Management By Exception-Passive
    h. Teacher self-ratings in Laissez-Faire Leadership.
2) H^o_2: There will be no statistically significant relationship between the gain scores for MRQ and:
    a. Teacher self-ratings in Idealized Influence-Attributed.
    b. Teacher self-ratings in Idealized Influence-Behavior.
    c. Teacher self-ratings in Intellectual Stimulation.
    d. Teacher self-ratings in Individualized Consideration.
    e. Teacher self-ratings in Contingent Reward.
    f. Teacher self-ratings in Management-by-Exception-Active.
    g. Teacher self-ratings in Management-by-Exception-Passive.
    h. Teacher self-ratings in Laissez-Faire Leadership.

Data Collection Procedures

The study began in February 2009 as a component of a larger literacy pilot study. Teachers attended one-day professional development on the research process and authentic literacy. The overall study began with 53 teachers. Two teachers dropped out of the study, leaving 51 teachers and 1,313 students to participate in the research process. The first observation (O_1) concluded by March 1; consisted of a demographic questionnaire, the MRQ,

and the GMRT Form S. The second observation (O_2) consisted of the MRQ and the GMRT Form T. Form S and Form T are equivalent, but distinct versions of the GMRT. These assessments were collected prior to May 15. Pre- and posttest scores on each of the assessments were compared and analyzed. The participating teachers collected all data. Teachers provided an identifying code number for each student to preserve student confidentiality. Prior to O_1, students' most recent grade point average, gender, grade level, ethnicity, parents' level of education, reading and socioeconomic status (SES) as measured by participation in subsidized lunch programs was collected through a demographic questionnaire. Teacher and parental consent, as well as student assent were secured for all participants in the study.

Students' motivation to read and reading habits were calculated using the MRQ. The MRQ consists of 29 questions to which students respond on a summated rating scale that ranges from (1) *very different from me*, to (7) *a lot like me.* The students' motivation to read score was treated as interval data and developed by summing the individual item responses for each question. Validity for the MRQ was established with a panel of experts at the National Reading Research Center. Reliability of the instrument ranges from .56 to .74 (Wigfield & Guthrie, 1997, 2004). The GMRT for grades 7-9 was used to measure students' reading comprehension to account for varying student reading levels. The GMRT comprehension is a norm-referenced test that uses 45 multiple-choice questions about several succinct passages to gauge reading comprehension. Reliability ranges from .88 to .92 (MacGinitie et al., 2006). At the conclusion of the study, each teacher was asked to complete the MLQ (5X) self-form; which consists of 36 standardized items: four questions assessing each of the nine FRL leadership dimensions (Bass & Riggio, 2006). The MLQ (5X) was developed based on confirmatory factor analyses by an expert panel of leadership scholars who recommended additions and deletions, and through previous research using the MLQ. In the most recent MLQ, "all factor loadings for the nine-factor model were significant and averaged .65 across the 36 items" (Antonakis, Avolio, & Sivasubrammaniam, 2003, p. 277). Additionally, the MLQ (5X) has exhibited good to excellent internal consistency with alpha coefficients above the .80 level for all MLQ scales (Bass & Riggio). However, some researchers have been critical of the MLQ's discriminant validity in regards to the nine FRL scales (Bycio et al., 1995). More recently, Antonakis et al. (2003) proposed the conflicting findings were due to heterogeneous samples of leaders in varying organizational levels, and from a wide variety of cultural backgrounds.

Two aspects of this study strengthen the research design. First, the sample was relatively homogeneous in ethnicity, participant hierarchical level (in that all participants that completed MLQ were teachers, instead of teachers and administrators, etc.), and student grade level. Secondly, many early studies involving transformational leadership employed weak research designs as leadership and dependent variables were measured at the same time by the same instrument (Judge & Piccolo, 2004). This study mitigates that concern by using the MLQ to measure leadership and pretest-posttest design using the GMRT and the MRQ to measure the dependent variables.

Variables. The antecedent variables were the factors of transformational leadership and transactional leadership, as well as Laissez-Faire Leadership. The outcome variables assessed are the gain scores for MRQ and GMRT comprehension. In order to control for preexisting student conditions and impact on gain scores not attributable to transformational leadership, the

demographic data points were treated as both additional antecedent variables and covariates. These included: grade point averages, student gender, student ethnicity, student native language, mother's level of education, father's level of education, student SES, teacher's gender, total number of minutes read throughout the study, and total number of literacy strategies used throughout the study. Using MANOVA as the method of data analysis afforded the opportunity to both control for and measure these additional antecedent variables. The demographic data points were not highlighted as hypotheses, but will be discussed in the findings section. Student pretest scores on motivation to read and reading comprehension and group (MAX Teaching, CTE Reading, or control) were treated as covariates.

Population

The population for the research was all secondary CTE teachers. Secondary CTE instructors teach a diverse array of subjects. Additionally, a considerable percentage of CTE teachers are alternatively certified, second-career teachers. This produces the advantage that the teacher has experience and training to draw from in managing the classroom and leading students. A noteworthy challenge facing many CTE teachers, however, is a lack of knowledge of or formal preparation with content area reading strategies (Park & Osborne, 2007).CTE students possess a broad spectrum of academic and reading abilities; ranging from students with learning disabilities to college-prep students. Moreover, for many CTE students for whom reading in traditional disciplines is relatively uncomplicated, the text in the highly technical CTE fields presents a challenge.

Teacher selection. Teachers were recruited through administrators at CTE centers throughout New York State. Teachers participating in the literacy study were emailed a request to take the MLQ through www.surveymonkey.com. No incentives were provided for teachers upon completion of the MLQ. Each teacher's local school principal and superintendent were notified of the teacher's desire to participate in the study. The administrator's permission was requested to allow the teacher to participate. The initial response rate was 68.62%. Teachers were asked on three separate occasions to fill out the MLQ. Additionally, the teachers who had not completed the survey were contacted by telephone. Half of the teachers called completed the survey. Thus, the final response rate was an acceptable 84.31%. The mean scores for the first half of the respondents were compared to the mean scores of the second half of the respondents. There was not a significant difference, indicating the sample was representative of the population.

Data Analysis

Statistical analysis. These analyses were conducted with each set of data collected. Student demographic data was analyzed using means and *t*-tests. The researchers analyzed the data using MANOVA. MANOVA is an extension of ANOVA intended to expose whether mean differences on multiple dependent variables might be have occurred by chance (Kinnear & Gray, 2006). Therefore, MANOVA was implemented to evaluate the difference between pretest and posttest scores because the study involved multiple dependent variables. As previously mentioned, grade point averages, student gender, student ethnicity, students' native language, mother's level of education, father's level of education, student SES, teacher gender, total

number of minutes read throughout the study, and total number of literacy strategies throughout the study were treated as both antecedent variables and covariates. Student pretest scores on motivation to read (MRQ) and reading comprehension (GMRT) were treated as covariates. For the MRQ questionnaire, researchers used a summated mean of individual items to garner conclusions about students' motivations for reading. The GMRT included a scoring rubric for comprehension. It would have been possible to conduct a univariate analysis of each dependent variable, but this analytical approach would have increased the possibility of making a Type I error (Kinnear & Gray; Field, 2000). In MANOVA, dependent variables must be multivariate normal. Gain scores for MRQ and GMRT comprehension met this criterion. A second assumption of MANOVA is the homogeneity of covariance. Box's Test of Equality of Covariance Matrices revealed a *p*-value of 0.003, which is less than the assumed 0.05 (Kinnear & Gray). However, since Box's M is extremely sensitive to violations of the assumption of normality, some researchers test at the *p*=.001 level, especially when sample sizes are unequal. The sample size for reading comprehension was larger than for the other dependent variable, change in motivation to read.

Results/Findings

Both students and teachers completed demographic questionnaires. The majority of students (87.5%) were high school juniors or seniors at the time of the study. Nearly 60% were female, and the vast majority were white (84.3%). More than 93% of the students spoke English as their native language. The researchers used the free and reduced price lunch programs (FRPL) to measure the students' socioeconomic status. More than 40% of the students were enrolled some form of these programs. Approximately 50% of the mothers' education level included more than high school education, and 39.6% of the fathers' education level was above a high school education. The large percentage of students from families with lower levels of income and education may help explain the teachers' remarkably high self-rating for *Individualized Consideration*. The majority of the teachers were female (68.6%). Approximately 90% of the teachers worked in CTE centers. The remaining teachers taught CTE courses in traditional high schools.

Teachers rated themselves on the FRL factors (Table 1). Teachers rated themselves highest in *Individualized Consideration*, followed by *Inspirational Motivation* and *Intellectual Stimulation*. The lowest rated items were *MBE-Passive* and *Laissez-Faire Leadership*.

Using MANOVA, researchers found statistically significant relationships between Idealized Influence-Attributed (p = .000), Idealized Influence-Behavior (p = .006), and Intellectual Stimulation (p = .006) and gain scores for GMRT comprehension. The researchers also found statistically significant relationships between Idealized Influence-Attributed (p = .000), Idealized Influence-Behavior (p = .000) and gain scores for MRQ. A marginally significant relationship was found between Inspirational Motivation (p = .051) and gain scores for MRQ. Additionally, Idealized Influence – Behavior (0.85 Partial Eta Squared) and Idealized Influence – Behavior (0.56 Partial Eta Squared) were found to have the largest effect size within the model. Cohen's (1977) classification of effect size describes 0.06 – 0.14 as a medium effect, and describing > 0.14 as "large." No other antecedent variables displayed an effect size above

0.14. The scores for both components of Idealized Influence were consistent on the following tests of effect size: Pillai's Trace, Wilk's Lambda, Hotelling's Trace, and Roy's largest root.
Table 1

Teachers' Mean Self-ratings on the FRL factors

FRL Factor	Mean	*S.D.*
Idealized Influence-Attributed	3.93	.51
Idealized Influence-Behavior	4.03	.50
Inspirational Motivation	4.27	.44
Intellectual Stimulation	4.15	.55
Individualized Consideration	4.46	.39
Contingent Reward	4.10	.58
MBE - Active	2.50	.67
MBE - Passive	1.87	.58
Laissez-Faire Leadership	1.78	.57

A statistically significant negative relationship was revealed between MBE-Passive ($p =$ .003) as well as Laissez-Faire Leadership (.015) and gain scores for MRQ. A statistically significant relationship was found between both student gender (female; $p = .006$) and SES ($p =$ .012) and gain scores for GMRT Comprehension. A statistically significant relationship was not found between grade point averages, student ethnicity, students native language, mother's level of education, father's level of education, teacher gender, total number of minutes read throughout the study or total number of literacy strategies throughout the study and either of the dependent variables.

Thus, upon conducting MANOVA, the researchers rejected the null hypotheses connecting GMRT comprehension and ($H^o_1{}^a$) idealized influence – attributed, ($H^o_1{}^b$) idealized influence – behavioral, and ($H^o_1{}^d$) intellectual stimulation (Table 2). They also rejected null hypotheses connecting MRQ and ($H^o_2{}^a$) idealized influence – attributed, ($H^o_2{}^b$) idealized influence – behavioral, ($H^o_2{}^h$) MBE-passive, and ($H^o_2{}^i$) laissez-faire leadership.

Conclusions and Discussion

As outlined previously, there are nine factors of the FRL model. The researchers sought to evaluate the relationship between each of these factors and the two dependent variables: motivation to read and reading comprehension. The results lent support to both Idealized Influence-Attributed and Idealized Influence-Behavior in regards to both motivation to read and

reading comprehension. Additionally, intellectual stimulation was found to have a statistically significant relationship with reading comprehension. The strong negative effect of Laissez-Faire Leadership and MBE-Passive was expected Judge and Piccolo (2004) found the results regarding Laissez-Faire Leadership nearly as important as the results from the presence of the factors of transformational leadership.

Table 2

Summary of Null Hypothesis Decisions

Null Hypothesis	MANOVA
1. H^o_1: There will be no statistically significant relationship between the gain scores for GMRT comprehension and:	
a. Teacher self-ratings in Idealized Influence – Attributed.	reject
b. Teacher self-ratings in Idealized Influence – Behavior.	reject
c. Teacher self-ratings in Inspirational Motivation	fail to reject
d. Teacher self-ratings in Intellectual Stimulation.	reject
e. Teacher self-ratings in Individualized Consideration.	fail to reject
f. Teacher self-ratings in Contingent Reward	fail to reject
g. Teacher self-ratings in Management By Exception – Active	fail to reject
h. Teacher self-ratings in Management By Exception – Passive	fail to reject
i. Teacher self-ratings in Laissez-Faire Leadership.	fail to reject
2. H^o_2: There will be no statistically significant relationship between the gain scores for MRQ and:	
a. Teacher self-ratings in Idealized Influence – Attributed.	reject
b. Teacher self-ratings in Idealized Influence – Behavior.	reject
c. Teacher self-ratings in Inspirational Motivation	fail to reject
d. Teacher self-ratings in Intellectual Stimulation.	fail to reject
e. Teacher self-ratings in Individualized Consideration.	fail to reject
f. Teacher self-ratings in Contingent Reward.	fail to reject
g. Teacher self-ratings in Management-by-Exception - Active.	fail to reject
h. Teacher self-ratings in Management-by-Exception - Passive.	reject
i. Teacher self-ratings in Laissez-Faire Leadership.	reject

Insignificant relationships were found between the remaining FRL factors and the dependent variables. The insignificant findings for the remaining transformational leadership factors were unanticipated. However, the insignificant relationships between the dependent variables and Contingent Reward and MBE-Active were consistent with the literature. Judge and Piccolo (2004) found Contingent Reward, which is considered the strongest factor of transactional leadership (Avolio & Bass, 1991), to be more effective in business situations than military, college, or public sector settings. It is likely that effectiveness of contingent reward is dependent upon the resources the leader is able to provide in return for goal attainment (Judge & Piccolo, 2004). Teachers possess grades and verbal praise, among other resources, instead of the ability to exchange promotions, raises, and bonuses for goal attainment.

This study has multiple limitations. First, the researchers utilized the MLQ (5X) self form. Self-ratings of one's own leadership behavior are prone to bias (Bass & Riggio, 2006). Additionally, as mentioned earlier, there is some evidence of inconsistency in the MLQ factor structure (Bass & Riggio). Moreover, the researchers used only surveys (MLQ) to measure the teachers' transformational leadership. Classroom observations and interviews with teachers and students could have been used to obtain a more valid and comprehensive assessment of the teachers' approach to leadership. This triangulation would have afforded the opportunity to study both the "what" and the "why" of leadership in this context (Conger, 1998).

Idealized Influence-Behavior and Idealized Influence-Attributed were the only antecedent variables found to have a statistically significant relationship with both dependent variables. This implies that CTE teachers who are admired, respected, and trusted because of their integrity to the degree students view them as role models may significantly raise student motivation to read and their actual level of reading. Remarkably, significant progress can be achieved over a period as short as eleven weeks. The impact of both components of Idealized Influence is noteworthy because none of the other antecedent variables measured, including the FRL factors as well as student gender, student ethnicity, student's native language, mother's level of education, father's level of education, student SES, teacher gender, total number of minutes read throughout the study, and total number of literacy strategies used throughout the study, were significant for both dependent variables. The significant relationship between Intellectual Stimulation and student's gain scores for GMRT comprehension implies that teachers who encourage their students to be innovative and creative by questioning assumptions, reframing problems existing in the text, and approaching old situations in new ways can facilitate increased levels of students' reading comprehension. These findings are significant because, as previously stated, although the effectiveness of transformational leadership has been documented in a myriad of contexts, little research on transformation leadership in education has been conducted within the classroom, instead of the larger school or school district context. Potential avenues to augment the Idealized Influence and Inspirational Motivation of teachers include both preservice for future teachers and professional development for current teachers.

There a multiple facets of transformational classroom leadership that warrant further investigation. Both Idealized Influence-Attributed and Idealized Influence-Behavior were found to be significant in this study. Interviews and focus groups seeking to answer the how and why of Idealized Influence's impact are needed. Since this study was completed with a relatively homogeneous sample within CTE, further investigation of the impact of contextual factors on the effectiveness of the FRL factors within the classroom. For example, further research could replicate this study with non-CTE teachers to ascertain whether or not both components of Idealized Influence have a significant impact in non-CTE classrooms. Research to ascertain the influence the educational level (elementary, middle school, or high school), the SES of a school or entire school district, or the type of community (rural, suburban, urban) in which a school is located on the effectiveness of the FRL factors may prove worthwhile as well. Finally, considering being a "role model" is a central tenant of Idealized Influence, further research could investigate whether or not a trickle-down effect exists between teacher ratings for Idealized Influence of their principals and student's ratings of their teachers.

This study revealed a significant impact of certain aspects of classroom leadership on gain scores for student motivation for reading and reading comprehension. While teachers are often viewed as the drones of the school's organizational bee hive, scurrying about, carrying out the sage direction provided by those above (Wilmore, 2007), an augmented focus on developing teachers as classroom leaders can play a significant role in breathing new life into education (Frost & Harris, 2003). The results of this study echo the sentiments concerning the potentially positive impact of viewing and developing teachers as transformational leaders within their classrooms.

References

Alderman, E., & Maehr, M. (1994). Motivation and school in middle grades. *Review of Educational Research, 64*(2), 287-309. doi:10.3102/00346543064002287

Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly, 14*(3), 261-295. doi:10.1016/S1048-9843(03)00030-4

Avolio, B.J., & Bass, B.M. (1991). *The full range of leadership: Basic and advanced manuals.* Binghamton, NY: Bass, Avolio, & Associates.

Avolio, B. J., & Yammarino, F. J. (2002). *Transformational and charismatic leadership: The road ahead.* Oxford, UK: Elsevier Science.

Bass, B.M. (1985). *Leadership and performance beyond expectations.* New York, NY: Free Press.

Bass, B.M. (1990). *Bass and Stogdill's handbook of leadership*: *Theory, research and managerial applications* (3rd ed.). New York: Free Press.

Bass, B. M., & Avolio, B. J. (1990). The implications of transactional and transformational leadership for individual, team, and organizational development. *Research in Organizational Change and Development, 4*, 231-272.

Bass, B.M., & Avolio, B.J. (2000). MLQ: *Multifactor Leadership Questionnaire (2nd ed.).* Redwood City, CA: Mind Garden.

Bass, B.M., & Bass, R. (2008). *The Bass Handbook of Leadership.* Free Press: New York: NY.

Bass, B.M., & Riggio, R.E. (2006). *Transformational Leadership,* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Berson, Y., Shamir, B., Avolio, B.J., & Popper, M. (2001). The relationship between vision strength, leadership style, and context. *The Leadership Quarterly, 12*, 53-73. doi:10.1016/S1048-9843(01)00064-9

Blanchard, K (2010). Leading at a higher level: Blanchard on leadership and creating high performance organizations. Upper Saddle River, NJ: FT Press.

Brophy, J.E. (1990). Effective schooling for disadvantaged students. In M.S. Knapp & P.M. Shields (Eds.), Better schooling for the children of poverty: Alternatives to conventional wisdom (vol. 2, ppIX-1-26) Washington, D.C: U.S. Department of Education.

Burns, J.M. (1978). *Leadership.* New York, NY: Harper Row, Publishers, Inc.

Bycio, P., Hackett, R.D., & Allen, J.S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology, 80*, 468-478. doi:10.1037/0021-9010.80.4.468

Cohen, J. (1977). *Statistical power analysis for the behavioral sciences*. New York: Academic Press.

Compton-Lilly, C.F. (2009). What can new literacy studies offer to teaching of struggling readers? *The Reading Teacher, 63*(1), 88-90. doi:10.1598/RT.63.1.10

Conger, J. A. (1998). Qualitative research as the cornerstone methodology for understanding leadership. *The Leadership Quarterly, 9*, 107-121. doi: 10.1016/S1048-9843(98)90044-3

Field, A. P. (2000). *Discovering Statistics: Using SPSS for windows.* London, England: Sage Publications.

Frost, D., & Harris, A. (2003). Teacher Leadership: Towards a research agenda. *Cambridge Journal of Education, 33*(3), 479-498. doi**:**10.1080/0305764032000122078

Gardner, J.W. (1984). *Excellence: Can we be equal and excellent too?* New York, NY: W.W. Norton Company.

Joyce, M.Z. (2003). Fostering reading through intrinsic motivation. *Knowledge Quest. 32*(1), 39-40.

Judge, T.A., & Piccolo, R.F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. ***J**ournal of Applied Psychology, 89*(5), 755-768. doi:10.1037/0021-9010.89.5.755

Kakela, J. (1993). The vocational interactive reading project: Working with content area specialists. *Journal of Reading, 36*, 390-396.

Kinnear, P.R., & Gray, C.D. (2006). *SPSS 14 made simple.* New York, NY: Psychology Press.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), pp. 370-396. doi:10.1037/h0054346

MacGinitie, W. H., MacGinitie, R. K., Maria, K., Dreyer, L. G., & Hughes, K. E. (2006). *Gates-MacGinitie reading tests.* Itasca, IL: Riverside Publishing.

MLQ International (2008). *The full range of leadership model.* Retrieved March 30, 2010, from http://www.mlq.com.au/flash_frlm.asp.

Moje, E.B. (2006) – Motivating texts, motivating contexts, motivating adolescents: An examination of the role of motivation in adolescent literacy practices and development. *Perspectives, 32*(3), 10-14.

Northouse, P.G. (2007). *Leadership theory and practice.* Thousand Oaks, CA: Sage Publications.

Park, T. D., & Osborne, E. (2007). Agricultural science teachers' attitudes about and use of reading in secondary agricultural science instruction. *Career and Technical Education Research, 32*(3), 161-186. Retrieved from http://scholar.lib.vt.edu/ejournals/CTER /v32n3/pdf/park.pdf

Pearson, P.D. (2000). Foreword. In L. Robb, *Teaching reading in middle school* (p. 6). New York, NY: Scholastic.

Perie, M., Grigg, W.S., & Donahue, P.L. (2005). *The nation's report card: Reading 2005.* Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://nces.ed.gov/pubSearch/pubsinfo.asp?pubid=2006451.

Pounder, J. S. (2008) Transformational leadership: Practicing what we teach in the management classroom. *The Journal of Education for Business*. 84(1), 2-6. doi: 10.3200/JOEB.84.1.2-6

Santamaria, L.A., Taylor, M.K., Park, T.D., Keene, B.K., van der Mandele, E. (2010). Practical literacy matters: Teacher confidence is key. *Techniques: Connecting Education & Careers, 85(5), 45-47.*

Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content-area literacy. *Harvard Educational Review. 78,* 40-59.

Stringer, S.A., & Mollineaux, B. (2003). Removing the word "reluctant" from "reluctant reader." *The English Journal.* 92(4), 71-76. doi: 10.2307/3650460

van der Mandele, E., Park, T. D., & Welch, D. L. (2008, December). How do agriculture teachers create a culture of literacy?: It just happens. Paper presented to the Association of Career and Technical Education Research Conference, Charlotte, NC.

Wigfield, A., & Guthrie, J. T. (1997). Relations of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology, 89*(3), 420-432. doi: 10.1037/0022-0663.89.3.420

Wigfield, A., & Guthrie, J. T. (2004). *The motivations for reading questionnaire*. College Park, MD: Department of Human Development, University of Maryland.

Wilmore, E.L. (2007). *Teacher leadership: Improving teaching and learning from inside the classroom.* Thousand Oaks, CA: Corwin Press.