

Chapter 1

Introduction

The rapidity by which economic and related social systems are continually changing and the ever increasing complexity involved in the use of technology have required that governments review the educational preparation of its citizens. This has become necessary in order to ensure that all citizens acquire at least a level of literacy and mathematical competency that will make them competitive and marketable and so more able to contribute to their own economic survival (National Commission on Mathematics and Science Teaching for the 21st Century, 2000). This concern places the focus on the core areas of reading and mathematics, as evidenced by the research literature, the two areas that form the basis for determining the level of student academic performance and, consequently, the extent to which schools are considered effective (Hoy, Hannum & Tschannen-Moran, 1998; Krug, 1992).

The awareness of the essential role of the school in providing the quality of education that will facilitate the achievement of the goal of a more literate and technologically prepared society has provided much of the impetus behind the move to ensure that all schools become more effective.

Historical Overview.

There has always been considerable interest in the effects of schooling on student outcomes. At different times in a country's development, and depending on the perceived needs at those particular junctures, specific outcomes become the focus of attention and influence not only what is being taught in the schools, but the processes involved in the transference of that knowledge (Stringfield, Ross, & Smith, 1996).

Of the various student outcomes, a constant has always been student academic achievement, which following the publication of the report Equality of educational opportunity (Coleman, et al. 1966) has become even more so, the standard by which schooling is measured. The report, in examining the effectiveness of American schools with regard to student academic achievement, concluded that the influence of school on student academic achievement did not make a significant difference when compared to that of the student's background and general social context. As such, the most significant variable accounting for student academic performance was the student's socioeconomic class (Coleman et al, 1966). Such a conclusion of course, challenged the basic notion of the purpose of schooling and reverberated throughout the research community, generating considerable attention and initiating a spate of research into the issues related to the effects of schooling on student academic achievement, (See Brookover & Lezotte, 1979; Edmonds, 1979; Edmonds & Frederiksen, 1979; Jencks, et al.1972; Rutter, Maughan, Mortimore, Ouston, & Smith, 1979).

Without doubt the empirical evidence that came out of the above mentioned research efforts is of critical importance. The continuing investigation into the issue of school effectiveness served a major purpose in broadening the scope of the research by dissecting the issues and subjecting each to a detailed investigation. The empirical evidence was both confirmatory and contradictory of Coleman et al's. (1966) conclusions. For example, Jencks, et al. (1972), and Hanushek (1996) found little if any relationship between school resources and student academic achievement, and so came to a similar conclusion to Coleman et al (1966). Hanushek's position was premised on economic factors. He questioned the economic viability of increasing financial investment without a corresponding increase in student academic

achievement, and stated categorically that increased expenditures, translated into increased resources, do not lead to increased school effectiveness.

Other researchers did not readily accept the almost fatalistic conclusions that the contribution of the school to student academic outcome was at best marginal (Brookover & Lezotte, 1979; Edmonds, 1979; Rutter et al. 1979). They conceded that a student's socio-economic background was a major factor in explaining student academic outcomes, however, they were able to show that there were schools in which children from low income families were highly successful. Based on this evidence, they concluded that schools could and did make a difference. The critical issue then was not the degree to which the school influenced the student's academic outcome. The concern became the reasons for the existence of the differences between schools that allowed some to function at a level of effectiveness that resulted in student success as measured by their academic achievement while others did not (The Association for Effective Schools, 1996).

The attempts to answer these questions relocated the research agenda from an interest in the basic elements that placed an emphasis on resources and other input variables to a focus on the processes and the relation of these processes to student outcome (Good & Brophy, 1986). Thus, the Coleman et al. 1966 report has to be credited with stimulating the in-depth interest in school effectiveness, for it was in reaction to this report that the effective schools research emerged.

School Characteristics

The interest in the differences between schools informed future research and intensified the effort to identify the salient factors that could explain the reason for the differences. Weber (1971) attempted to answer this question by studying the processes employed by successful

inner-city schools. He used as his measure of school effectiveness a test of reading achievement that was developed specifically for the study. The results identified four schools in which student performance on the reading test equaled or exceeded the national norm.

Based on these findings, the research then sought to identify the factors that facilitated the reading success of these four schools. In other words, “the qualities of the school” that “enhance or detract from the learning environment.” (Northwest Regional Educational Research Laboratory School Improvement Program (NWREL), 1995, p.1). Eight factors were identified and although some were specific to the teaching of beginning reading, the following five could be generalized to all schools. These are: (a) strong leadership; (b) high expectations; (c) good atmosphere; (d) individualization that is, concern for each child's progress; and (e) careful evaluation of pupil progress.

Many major studies followed Weber's (1971) and as the research had unequivocally established the existence of effective schools, these studies focused on school processes and other factors internal to and within the control of the school. Two studies stand out as major contributors to the body of knowledge in the field. These are Brookover and Lezotte's (1979) investigation of the social system of the school and the effects on student achievement, academic self-concept, and student self-reliance, and Rutter et al.'s (1979) longitudinal study of secondary schools in inner city London. These studies more than any other highlighted the importance of school processes as a major determinant of student performance. Similar to Weber's study, the correlates that were identified as principal factors in influencing student outcomes were: (a) leadership, (b) teacher expectations, (c) time spent on instruction, and (d) the school environment.

Good and Brophy (1986) in a review of the effective schools research cite Purkey and Smith's (1983) integrative reviews of the school effects research. Purkey and Smith had conducted extensive reviews of outlier studies; that is studies that seek to identify factors that explain differences through a comparison of opposing extremes. Thus, they compared extremely effective schools with those that were extremely ineffective. The integrative review also included case studies and evaluative studies. As reported by Good and Brophy, from this extensive review, the researchers identified the following nine variables as important process measures contributing to school effectiveness:

- School-site management
- Instructional leadership
- Staff stability
- Curriculum articulation and organization
- School-wide staff development
- Parental involvement and support
- School-wide recognition of academic success
- Maximized learning time
- District support.

As critical as these measures are to maximizing school effects, they cautioned that the effectiveness was contingent upon an environment that facilitated collaborative planning and collegial relationships, fostered a sense of community, articulated clear goals and high expectations, and maintained order and discipline (Good & Brophy, p.581).

This caution attests to the complex nature of schooling and by making clear the conditions that give affordance to effectiveness, warns against any tendency to simplify the

problem by seeking to apply a “one size fits all” solution. At this point it is prudent to recall that the initial research into school effects was to show that schools could and did make a difference, even in the presence of factors that mitigated against their possible effectiveness (Edmonds, 1979). The fact that there was such extreme variation between schools of similar resources and populations, centered the interest on determining the processes and characteristics that supported, or more specifically, correlated with the success. However, despite the determination of correlates that appear to be salient to school effectiveness, there are myriad subtle differences within schools and between schools that give each its unique culture and environment that support positive school outcomes (Rutter et al., 1979). Consequently, the existence of these correlates does not indicate a causal relationship (Magana, 2000), and so, are not guarantees of school effectiveness. It is for this reason that solutions are not generalizable but must be tailored to the specific situation and institution.

The Association for Effective Schools (1996) has put forward a list of seven correlates which they argue continue to appear in the replication research. These are defined as:

- Clear school mission. The school mission is clearly articulated and understood by all, and there is a shared commitment to the instructional and curricular goals of the school, and an acceptance of responsibility for student learning.
- High expectations for success. The learning environment reinforces the belief that all students have the ability to learn and the teachers the capability to successfully teach all children
- Instructional leadership. The principal is intimately involved with the management of instructional programs and initiates and maintains communication with the staff, students, and parents.

- Frequent monitoring of student progress. Utilizing a variety of assessment procedures, student progress is frequently measured. These results are used to improve individual student performance and program planning.
- Opportunity to learn and student time on task. A high percentage of student time is devoted to structured, teacher directed, planned learning activities.
- Safe and orderly environment. The school environment allows for a feeling of safety, and the climate is business-like, calm, and purposeful.
- Home-school relations. The relationship between the school and parents is cordial, respectful and collaborative. The parents are partners in the school's effort to achieve its mission.

From the defined correlates, four basic principles can be extricated. These principles ground the correlates, and to a large extent, form the pillars that lend support to the school in achieving its mission. These principles are; (a) the genuine belief that all children can learn, (b) a belief that the school must take the responsibility for teaching and ensuring as far as is possible that all students learn, (c) the development of clear goals and systematic and rigorous assessment strategies for assessing student progress, and, finally, (d) the establishment of a home-school partnership that makes the school one with the community.

A review of the extant research literature in the 1990s does not suggest any additional correlates or characteristics not already identified. However, the further explorations and varying perspectives have lead to a broadened conceptualization and deeper understanding of the correlates. This in turn has facilitated a more specific identification and detailed definition of the factors that constitute the correlates.

The NWREL (1995) has identified what it terms key factors that support student success.

These include:

Efficient planning and clear goals, validated organization and management practices, strong leadership and continuous improvement, positive staff and student interactions, a commitment to educational equity, regular assessment, support programs and positive relationships with parents and community members. (NWREL, 1995, p.1)

Successful schools have been able to create an environment that has allowed for the operationalization of these key factors. For example, with regard to efficient planning and clear goals, the research has shown that effective schools place priority on learning and school policies that emphasize student learning, and, in so doing, hold all students to a standard that demands at minimum the attainment of the priority learning goals (Edmonds, 1979; Fullan, 1992). All goals are set based on the desired academic outcomes and these are reflected in the planned curriculum and the objectives chosen to achieve the goals. In addition to this, both the administration and the teaching staff transmit an air of expectation of success that in turn influences the students' self-confidence and motivation which are translated into behaviors that support success (Bamburg 1994; Deal & Peterson, 1993; Hord, 1992; Levine & Lezotte, 1990; Shann, 1990; Wang, Haertel, & Walberg, 1993).

The professional relationship among the staff and between the staff and the administration is collegial and supportive of each other. The teachers are allowed time to collaborate and plan, to arrive at consensus that is in congruence with the schools' objectives. This working together permeates all aspects of the planning process and in reality actualizes a team approach to the planning and implementation of the school curriculum (Slavin, 1994).

Another critical difference between effective schools and those that are less effective can be found in the quality of management. Bachus (1992) and Taylor and Levine (1991) have recommended the formation of school-based management teams with the authority to make decisions. These teams must be representative of the competing interests and have the support of the district. However, the school-based management team does not operate in isolation. Its operation is in conjunction with administrative practices that “assure that school time is used for learning” (NWREL, 1995, p.4), maximize positive affect with regard to student attitude toward achievement (Oakes, 1989), and set clear guidelines that are understood by all with respect to school discipline (Levine, & Lezotte, 1990).

Just as important as the management of the school is the quality and regularity of the assessment procedures adopted and implemented by the school. As elaborated by Calfee and Perfumo (1993), Levine and Lezotte (1990), and Stiggins (1992), assessment of student learning is crucial for a determination of remedial action to prevent learning problems. All staff must be involved in the assessment process, utilizing the results to inform curricular modifications and to adopt alternative forms of assessment.

Often schools do not see the community and particularly the parents as partners in the education process. The reciprocal is also true; parents often do not see themselves in a partnership with the school. However, a hallmark of effective schools is the strong relationship that exists between the school and the home as exemplified by the regularity of the home-school communication and the genuine encouragement for parents and the wider community to be part of the students' education. Engaging parents and the wider community, including the local businesses, in the education process is astute for they provide a ready and available resource,

both financial and otherwise, that can help improve the learning environment and so, enhance the learning process (Pavan & Reid, 1994; Wang, Haertal & Walberg, 1993).

As stated by Magana (2000), there is no one characteristic or combination of characteristics that can be identified as the most salient to, or responsible for school effectiveness. It is the combined presence of the characteristics in an environment that lends support that affords success. However, tying all the strands together is leadership (Dow & Oakley, 1992; Edmonds, 1979). The leadership must be strong yet facilitative, must have a clear sense of direction, must be able to identify the resources and skills needed to achieve the policy objectives; and be willing and able to implement the changes necessary to accomplish the goals. Successful leadership therefore demands continuous review of the school's programs and practices with a view to constant improvement or at the minimum, the maintenance of the present standards (Fullan, 1993; Leithwood, 1994).

Leadership affects all aspects of the school's learning environment; this is because the leadership sets the tone that can either be conducive to or unfavorable to learning (Macintosh, 1991). To ensure an effective learning environment, the leadership must be seen by all to be part of the effort to achieve success, and additionally, must motivate and encourage staff by recognizing their efforts and providing constructive and timely feedback on performances. Of critical importance, the students must also see the leadership as having confidence in their abilities, conveying the belief that they can be successful learners (Pavan & Reid, 1994).

It must be noted that leadership does not necessarily refer to the principalship, but “may be offered by many different people in a school, and may also arise from non-personnel sources” (Leithwood & Jantzi, 1998, p.1). Despite the above statement, as evidenced in the review of the literature, school leadership is conceived as the principalship. While most would agree with

Leithwood and Jantzi (1998) that such a conception represents a narrow focus of school leadership and as a consequence excludes the study of the effects of other possible sources of school leadership on student outcomes, they would also acquiesce with Silins' (1994 a) assertion that while

principals do not have a monopoly on leadership, ... they do have a position of privilege in terms of status, power and mechanisms readily available to them that facilitate the operationalization of leadership into process strategies which can lead to school improvement. (p.273)

This statement gives recognition to the positional power of the principal, and more importantly posits that because of that power, the principal is by default the leader.

The literature on school leadership is as rich as it is vague. The difficulty often arises in determining the theoretical framework within which the researcher conceptualizes leadership, and emanating from this conceptualization, the definitions that are applied to leadership and consequently, the interpretations that are applied to the results of the studies.

There are various conceptions of leadership. Eminent among these are the instructional, transactional, and transformational forms of leadership. In Chapter 2, these forms of leadership will be addressed in detail. However despite the importance attached to the various forms of leadership, intuitively, there is a sense of the importance of the critical role played by the leadership in the successful functioning of the organization. According to Fullan (1992), there can be no innovation without a leadership that is committed to its success. In the school, that leadership is most often embodied in the principalship.

Statement of the Problem

A review of the research literature on school effectiveness has identified leadership as a dominant factor in effectiveness of schools as determined by student academic outcomes (Bachus, 1992; Edmonds, 1979). Intuitively, this conclusion makes sense. However, as stated by Ogawa and Hart (1985), “the results of research aimed at verifying the effects of a variety of leadership variables on organizational performance have been inconclusive” (p. 59), and although much of the later research studies do attest to a positive relationship (Eberts & Stone, 1988; Goldring, & Pasternack, 1994; Leithwood & Jantzi, 1999), others, for example Leitner (1994), have found a non-significant relationship. This raises the issue of (a) whether there is a relationship between leadership and school effectiveness, (b) the extent of the relationship, and (c) the dimensions of leadership and leadership style that are most effective within and across school levels.

The above concerns assume even greater importance when one considers that some researchers suggest, “there is no best leadership style for all situations” (Manasse, 1984, p. 45), which implies that there is no best leadership style that could be generalized to all schools. This statement brings to attention the context and the situation specificity that could influence and so determine the leadership approach adopted. Thus, the concern for empirical evidence becomes a critical adjunct for it is possible that while leadership may never be generalizable across all situations, it may be possible, through the process of categorical model testing, to identify contexts in which certain approaches to leadership may be more effective. Therefore, creating classes based on study attributes, and fitting these to effect sizes becomes a necessary extension to an analysis of the strength of the influence of leadership.

Purpose of the Study

Any review of the literature on school effectiveness identifies leadership as a major, if not the major factor in facilitating the conditions that allow for the school to be effective (Bachus, 1992; Macintosh, 1991; Leithwood, 1994). This fact, even when not stated, is often implied in the literature through a focus on the principalship, the school administration and /or administrator, the instructional leadership, transformational leadership, and school and site-based leadership. With such emphasis placed on the importance of the leadership, be it a collective leadership, or one that resides in the principal, it is important that the effects of leadership on school effectiveness, defined in terms of student outcomes, be investigated. This study through a synthesis of the quantitative literature sought to determine the extent to which school leadership influences the effectiveness of the school.

Additionally, there is a lack of consensus as to what constitutes effective leadership, for different researchers frame their definitions within different theoretical frameworks. Therefore, the study in reviewing and comparing the major conceptualizations of leadership, also attempted to identify through the meta-analysis, the aspects of leadership deemed most effective with regard to student outcomes: the major goal of the school, and the generalizability of these across the various school contexts.

The Significance of the Study

A great deal of emphasis is placed on the training and certification of persons to be educational leaders and/or administrators, the use of one term often being a proxy for the other as can be gleaned from the advertisements seeking applicants for senior administrative positions in education. However, although the literature confirms that there is a relationship between the level of effectiveness of the school leadership and the degree of school effectiveness, the extent

of that relationship remains an issue of continuing debate. It is therefore important to deconstruct leadership to examine the extent to which the various aspects and approaches facilitate the conditions that allow for or facilitate school effectiveness. This knowledge would certainly add to the body of literature and provide the empirical base for the continued provision and improvement in leadership training programs.

Research Questions

Emerging from the above stated concern, the study specifically sought to answer the following questions:

1. What empirical evidence is there to confirm or support the notion that there exists a relationship between leadership and school effectiveness?
2. As identified in the quantitative analysis of the available research, what is the strength of the relationship between leadership and school effectiveness?
3. Based on empirical evidence, what aspects, dimensions, or clusters of leadership behaviors relate to school effectiveness?
4. Related to the above, how do these dimensions compare in their relationship to school effectiveness?

Definition of Terms

Like other key constructs in the social sciences, a definitive consensus of what is leadership is non-existent. According to Bennis cited in Hoy and Miskel (1991), leadership “is like beauty: it is hard to define, but you know it when you see it” (p.252).

It is therefore not surprising that with the lack of a common meaning, conceptualizations vary depending on the researchers and the purposes of the studies. The following definitions taken from Hoy and Miskel (1991, p.252) exemplify the diversity in interpretations.

1. Leadership is power based predominantly on personal characteristics, usually normative in nature (Etzioni, 1961, p. 116).
2. The leader is the individual in the group given the task of directing and coordinating task-relevant group activities (Fiedler, 1967, p. 8).
3. The essence of organizational leadership is the influential increment over and above the mechanical compliance with the routine directives of the organization (Katz, & Kahn 1978, p. 528).
4. Leadership is the initiation of a new structure or procedure for accomplishing an organization's goals or objectives or for changing an organization's goals or objectives (Lipham, 1964, p. 122).
5. Leadership takes place in groups of two or more people and most frequently involves influencing group member behavior as it relates to the pursuit of group goals (House, & Baetz, 1979, p. 345).

The variation in interpretation is not limited to leadership, and attempting to capture the breadth of the various interpretations applied to the constructs would defy brevity. However, despite that stated caveat, for the purposes of this study, the following definitions apply. These brief definitions are given to aid clarity thus limiting the possibility of ambiguity that may lead to misinterpretations. Some of the definitions are composites derived from the literature, while others are taken directly from the work of others.

Leadership: As a process, leadership is the use of noncoercive influence to direct and coordinate the activities of group members to meet a goal. As a property, leadership is the set of characteristics attributed to those who are perceived to use such influence successfully (Moorhead & Griffin, 1998).

School Leadership: The influential behaviors applied by the school administration or principal that facilitate teachers and the wider school community working towards the achievement of the mutually agreed upon organizational goals of the school.

Transactional Leadership: The complex set of behaviors utilized by the leader that results in the subordinate performing tasks in an effort to earn rewards or avoid sanctions from the leader. These rewards and sanctions may be tangible or intangible (Bass, 1985).

Transformational Leadership: The process by which the leader brings out the best in his or her subordinates. It involves converting “followers into leaders, ... and leaders into agents of change” (Bennis & Nanus, 1985, p. 3)

Instructional Leadership: This entails the communication of the school’s mission and goals, and the effective management of the instructional program of the school. This is accomplished through the provision of direction, emphasis, and support to the school’s central mission of teaching for the success of all children.

School Climate: The existing learning environment. This environment can either facilitate effective teaching and be conducive to student learning, or affect the quality of the teaching and be an impediment to student academic progress (NWREL 1995).

Correlates: School characteristics that have been identified as essential to the effectiveness of the school in teaching all children.

Effective Schools: Settings in which students display high levels of academic achievement, satisfaction, morale, and pride in their schools (NWREL 1995). In this research synthesis, for most of the studies, school effectiveness is measured in terms of student academic achievement as indicated by scores on various statewide tests. However, for the Leithwood and Jantzi study, school effectiveness is defined as student engagement in school while Blank (1987) used, in

addition to student academic performance, student attendance in determining school effectiveness.

Limitations of the Study

A major challenge in conducting a meta-analysis is arriving at common language and definitions. In addition to the different theoretical conceptions of leadership that inform the interpretations and definitions, the terms leadership and school effectiveness are generic. This fact is reflected in the lack of consensus found in the literature and specifically in the structure and emphasis of the different instruments that purport to measure leadership. Therefore there is the possibility that the definitions selected to avoid ambiguity and lend clarity to the study may themselves be ambiguous and so limiting as to negate generalizability.

Noting the cautionary advice given by Hallinger and Heck (1998), the “normative notions of the principal leadership continue to evolve surprisingly rapidly in response to new environmental demands” (p. 160). Consequently, this synthesis was being conducted on a moving target. Therefore any characterization of the field that emerges is limited to that point in time.

Related to the above concern, this study looked at student achievement outcomes, which although broad, are often constrained to a conceptualization that focuses on some specific form of academic achievement. Obviously, this constitutes a very limited interpretation of what schools do (Leithwood & Jantzi, 1999). A consequence of this concern led a few researchers to examine outcome variables that mediate student achievement. Examples of these are Leithwood and Jantzi (1999) who looked at student engagement in school; Cheng (1991) whose focus was organizational effectiveness; and Blank, (1987) who included level of school attendance as one

of his measures of school effectiveness. The majority of the studies however, utilized some measure of student academic achievement as the outcome variable.

Another limitation comes from the methodology used. A quantitative synthesis requires that the varying operational definitions, theoretical conceptualizations, methodological approaches and analytical procedures be subjected to standardization procedures before the statistic of interest could be calculated. A consequence of this reduction of an entire study to a statistic is in reality an enforced limiting of the scope and breadth of the individual studies, the result of which is a loss of data that lend richness to the individual studies.

A third limitation of the study is the selection of studies analyzed. These studies all had to meet a set criterion thus limiting the research base. Moreover, and more importantly, the quality of the studies would have a direct effect on the validity of the meta-analysis thus affecting the generalizability of the results.

A final limitation is that the synthesis comprises only the studies that were available or able to be accessed. There are many other studies that appeared to have met the criterion for selection in the meta-analysis. These studies, although classified available on the on-line retrieval systems, upon request were not available for review either electronically or through the inter-library system. With regard to the issue of the availability of studies, it is important to note that there may also be studies that found no effects that were not published and so remain unavailable. Therefore, based on the above discussion, this meta-analysis is a limited synthesis of the existing quantitative studies on school leadership as this variable relates to school effectiveness.