

## Chapter 21: The Principal's Role in School Effectiveness: An Assessment of Methodological Progress, 1980-1995

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There is relatively little disagreement in either lay or professional circles concerning the belief that principals play a critical role in the lives of teachers, students and schools. This belief has led to considerable research into the nature of principals' work, attitudes, values, thought processes, and behaviour (Leithwood, Begley & Cousins, 1990, 1992). When consulting the empirical literature, however, both the nature and degree of principal impact continue to be subject to debate (e.g., Pitner, 1988; Rowan, Dwyer & Bossert, 1982; van de Grift, 1990).

Over the past 15 years several substantive reviews of this research literature have been conducted with the aim of consolidating our understanding of the principal's role in schooling (e.g., Boyan, 1988; Bossert, Dwyer, Rowan, & Lee, 1982; Bridges, 1982; Leithwood & Montgomery, 1982; Leithwood et al., 1990; Murphy, 1988; Murphy, Hallinger & Mitman, 1983; Pitner, 1988). These reviews consistently paint a picture whose broad strokes seem quite clear from afar, but which becomes much fuzzier when viewed up close. While most of these scholars agree on the importance of the principal's leadership, we still lack many details concerning how principals respond to their schools' environmental contexts as they seek to shape organizational processes and student outcomes. Reviewers have concluded that the tradition of research on the impact of principals has not generally done justice to the complexity of the topic in terms of either theoretical or methodological sophistication (Bossert et al., 1982; Bridges, 1982; Murphy, 1988; Rowan, et al., 1982).

For example, following a review that focused focusing primarily on methodological features of research of educational administrators, Bridges (1982) asserted:

Research on school administrators for the period 1967-1980 reminds one of the dictum: 'The more things change, the more they remain the same'.... Although researchers apparently

show a greater interest in outcomes than was the case in the earlier period, they continue their excessive reliance on survey designs, questionnaires of dubious reliability and validity, and relatively simplistic types of statistical analysis. Moreover these researchers persist in treating research problems in an ad hoc rather than a programmatic fashion.... Despite the rather loose definition of theory that was used in classifying the sample of research..., most of it proved to be atheoretical. Likewise the research seemed to have little or no practical utility. (pp. 24-25)

While it was not the specific focus of his review, Bridges (1982) further noted that research on administrator impact was both consistent with the above characterization and plagued by additional problems as well.

The lack of integration of theory with procedures of scientific inquiry in studying the consequences of school administration is especially disheartening. We must have confidence that researchers have accurately described and explained the phenomenon under consideration if this research is to be useful in informing policy efforts to improve schooling. Methodology concerns the process by which we construct knowledge. As such analyses of methodology must address how data are collected, analysed, and interpreted, as well as the theoretical and technical justification for these procedures (Everhart, 1988; Kaplan, 1964). Therefore, we must attend to the underlying assumptions of any scientific approach, as well as to its strengths and weaknesses (see Everhart (1988) for a thorough discussion of the relationship between methodology, method, and techniques of scientific inquiry in educational administration).

Over the past 15 years researchers in educational administration have increased their attention to the study of the principal's leadership role and its impact on a variety of school processes and outcomes. This was stimulated in part by parallel research into processes of school improvement and effectiveness. These efforts have been coupled with analytical innovations such as structural equation modelling. In combination, they have yielded a new generation of research on principal effectiveness.

Findings from this research that have found their way into scholarly and professional publications tend to give the impression that principals make a difference in student learning (e.g., Andrews & Soder, 1987; Bamberg & Andrews, 1990; Cheng, 1994; Eberts & Stone, 1988;

Heck et al., 1990). In our view, however, the interpretation of substantive findings from a body of literature must be considered in light of conceptual and methodological underpinnings. Both are crucial to determining the extent to which findings from research can be accepted as valid.

This chapter reviews research that explores the relationship between the leadership of the school principal and school outcomes concerned with student learning. The period of review extends from 1980 up to 1995. Our lens focuses more on the interplay between methodological and conceptual features of this body of research than upon the substance of the actual findings. Our aim is assess the contribution to knowledge made by these studies by understanding more clearly both the theoretical frameworks and processes of scientific inquiry used to generate the results. The purpose of the chapter, therefore, is threefold:

- 1) to analyse the theoretical frameworks that have been employed by researchers in the most recent generation of research on the principal's role in school effectiveness;
- 2) to examine the methodological features of this literature;
- 3) to propose a theoretical framework and appropriate methodological approaches that might guide future investigations of principal impact.

We begin by discussing the perspective for this review and issues that concern policymakers and researchers with respect to the impact of administrative leadership in schools. We briefly examine how this emerging concern was addressed by researchers during the 1980's and the resulting influence on our thinking about this review. Next, we consider conceptual and methodological issues as they emerged in our analysis of the studies. This analysis rests on the assumption that the way the research problem is conceptualized and the means of studying it both lead to what is observed and how those observations are interpreted. The chapter concludes with an attempt to frame an agenda for research on the principal's role in school effectiveness for the next generation of studies.

#### THE PERSPECTIVE AND SELECTION OF STUDIES FOR THIS REVIEW

Any attempt to integrate a body of research into a coherent framework that summarizes both conceptual and methodological issues must begin with an acknowledgement of its limitations. First, the field's

conceptualization of organizational processes, including the school leadership construct, is constantly evolving (Glasman & Heck, 1992; Hallinger, 1992; Leithwood & Hallinger, 1993; Leithwood et al., 1992). Hence, we assert that there is no universal paradigm or theory for examining organizational behaviour that is valid in all contexts. This point is especially salient for the current review since we include studies conducted internationally.

Second, proposed theories often become problematic when they seek to model the actual detail and richness of life in organizations (Bossert et al., 1982; Hallinger & Murphy, 1986b). The complexity of extra- and intra-organizational processes represents a challenge for researchers who seek to study causal relationships (Boyan, 1988; Marcoulides & Heck, 1993; Pitner, 1988). Social scientists who seek to develop valid theoretical models and apply appropriate analytic techniques to assess how those models work in the empirical world confront a formidable set of tasks.

We began this review with the assumption that the number of studies to be included would not be so large as to require a sampling strategy (Bridges, 1982). At the same time, we sought to conduct a highly inclusive review. We first searched the ERIC (Resources in Education) and Current Journals in Education (CJIE) databases and used the resulting sources as well as our personal knowledge of published and presented research to identify additional studies.

Three criteria guided our selection of studies for review. First, we were interested in studies that had been designed explicitly to examine the school principal's beliefs and leadership behaviour. The research must have clearly conceptualized and measured principal leadership as one of the independent variables. While our assumption was that most studies would use some measure of instructionally-oriented leadership, we observed that the definition of principal leadership has changed considerably over the decade and half of our review.

Second, the studies also had to include an explicit measure of school performance as a dependent variable. Most often performance was measured in terms of student achievement data, but occasionally other definitions such as effectiveness were also used. It was our desire, though not a necessary condition for inclusion, to also identify studies that examined the principal's impact on teacher and school level variables as mediating factors. The dual focus reflects the priority that we assign to student outcomes as the goal for school improvement, since we assume that an understanding of principal impact on student outcomes must also account for the operation of classroom and

school-level variables. Notably, however, we did not include studies that examined principal impact on intervening variables if they did not also incorporate a measure of school outcomes. This criterion shifted the focus of the review towards quantitative studies of impact, as opposed to studies about the nature of the principal's work.

Third, given both the focus of the Handbook and the growing interest in international perspectives on school improvement, we made an extra effort to seek out studies that examined the impact of principals conducted in a variety of countries. We were reasonably successful in attaining this goal. Although we do not undertake comparative analysis in this chapter, we have included studies conducted in a diverse set of cultural contexts including the United States, Canada, Singapore, England, Netherlands, Marshall Islands, Israel, and Hong Kong. Eleven of the studies reviewed were conducted outside of the United States.

Consequently, the review includes published journal articles, dissertation studies, and papers presented at peer-reviewed conferences. We are reasonably confident that the chapter has captured most empirical studies of principal impact on school effectiveness disseminated internationally between 1980 and 1995. We owe particular debts to the earlier efforts of Bossert and colleagues (1982), Boyan (1988), Leithwood and colleagues (1990), and Pitner (1988) for laying the groundwork for this review.

#### THE PRINCIPAL'S ROLE IN SCHOOL EFFECTIVENESS: METHODOLOGICAL AND CONCEPTUAL ISSUES

Using these criteria, we identified 40 studies that explored the relationship between principal leadership and school outcomes or effectiveness conducted during this time period. Twenty-two of the studies were published in blind-refereed journals. Eleven were presented as papers at peer reviewed conferences (primarily the annual meeting of the AERA). Five were doctoral dissertations. One was a book chapter and one was a synthesis of several studies conducted by the author. Of the studies identified, we were unable to obtain two papers presented at professional meetings (Edington & Benedetto, 1984; Teddlie, Falkowski, Stringfield, Desselle, & Garvue, 1983).

With this overview in mind, we assess the conceptual and methodological trends that emerged from these 40 studies as a group. We content analysed the studies using a classification scheme suggested by Pitner (1988) (described in further detail later in the chapter). Working