

DOCUMENT RESUME

ED 384 963

EA 026 852

AUTHOR Leithwood, Kenneth; And Others  
 TITLE Preparing School Leaders: What Works?  
 INSTITUTION Danforth Foundation, Clayton, MO.  
 PUB DATE 95  
 NOTE 9p.  
 PUB TYPE Collected Works - Serials (022)  
 JOURNAL CIT Connections!; v3 n3 Spr 1995

EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS \*Administrator Education; \*Administrator Effectiveness; \*Educational Administration; Elementary Secondary Education; Higher Education; \*Leadership; Leadership Qualities; Leadership Training; Management Development; Principals; \*Program Effectiveness

ABSTRACT

This paper describes the results of a study that investigated the nature and consequences of a unique set of university-sponsored school leadership preparation programs. Begun in 1987, the Danforth Foundation Program for the Preparation of School Principals (DPPSP) was part of a two-pronged effort to more fully develop the potential of school leaders to contribute to school reform. Three groups at each of the 11 program sites completed surveys: the site coordinators, program graduates in each site, and teachers or "colleagues" currently working with the program graduates. Overall response rates were 44 percent for graduates and 30 percent for teacher-colleagues. The two survey instruments included: (1) The Principal Preparation Programs Survey (PPPS), which assessed leaders' perceptions of the value of the preparation program; and (2) The Survey of Leadership Practices (SLP), which asked program graduates' colleagues about the effectiveness of their principals' leadership. Findings indicate that formal school-leadership preparation makes a significant difference in leadership effectiveness and that good theory is of considerable value to school leaders. Regarding the forms of instruction used in the program, the graduates assigned highest ratings to participation in seminars, reflection, and problems-based learning. Colleagues generally perceived program graduates as demonstrating effective leadership. While there was very little variation in respondents' ratings of program characteristics, these small amounts of variation had important consequences for leader effectiveness. Finally, effective leadership programs provide authentic experiences, stimulate the development of "situated cognition," and foster real-life problem-solving skills. Contains 17 references. (LMI)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED 384 963

SPRING, 1995

VOLUME 3

NUMBER 3

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

*P. Wilson*

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

# Connections!

In this issue:

Preparing School Leaders:  
What Works? ..... 1

## Preparing School Leaders: What Works?

by Kenneth Leithwood, Doris Jantzi and George Coffin  
Centre for Leadership Development  
Ontario Institute for Studies in Education  
Toronto, Ontario M5S 1V6

### Introduction

This paper describes the results of a study inquiring about the nature and consequences of a unique set of university-sponsored school leadership preparation programs. Begun in 1987, the Danforth Foundation Program for the Preparation of School Principals (DPPSP) was part of a two-pronged effort to more fully develop the potential of school leaders to contribute to school reform (Griffith, Strout & Forsyth, 1988). These programs aimed to substantially improve the quality of the initial, formal preparation experiences typically received by men and women aspiring to the principalship.

Participating university departments of educational administration were to incorporate into their programs some common features, for example: a careful screening of candidates; a search for ethnic minority and female candidates; specific curricular themes; more authentic forms of instruction; internships; and mentoring. These departments, selected according to nine explicit criteria (see Gresso, 1993), received support from the Danforth Foundation in "cycles," with three to six departments added every 18 months over five cycles between 1987 and 1991. This support ranged up to about

\$40,000 in each of the sites over the duration of the program.

From the outset, the Foundation and participating universities engaged in systematic inquiry about the nature and consequences of programs developed with Foundation support. Cordeiro et al (1993) conducted a survey study of all sites (22) based on data collected from site coordinators. Milstein (1993) carried out week-long case studies in five sites using observations, documents, and interviews with a wide range of stakeholders. Reflections and local evaluation data about nine programs were reported by those central to those programs in an edited text which examined the Danforth initiatives from both historical and broader national perspectives (Murphy, 1993). Individual reports also have been

*Continued on page 2*

*Kenneth  
Leithwood,  
Director,  
Centre for  
Leadership  
Development,  
The Ontario  
Institute for  
Studies in  
Education*



DANFORTH PRINCIPAL PREPARATION NETWORK

EA 026 852

published which describe the work entailed for a university in mounting significant alternatives to its traditional preparation program (e.g., Daresh, 1994), and some of the outcomes of such alternatives (e.g., Pounder, 1995).

---

**These programs aimed to substantially improve the quality of the initial, formal preparation experiences typically received by men and women aspiring to the principalship.**

---

The present study extended these earlier efforts but with a decidedly "summative" focus. Coming at the end of the Danforth Foundation's funding commitment to the DPPSP program, its purpose was to provide a synoptic perspective on the outcomes of the program. As well, the study was to contribute to a general understanding of those features of administrator preparation programs that have the greatest effect on the development of school leadership.

---

**To what extent are program graduates who have entered administrative roles perceived by their colleagues to be demonstrating effective leadership in their schools?**

---

To accomplish these general purposes, information was collected in response to a number of more specific questions, of which five are addressed in the paper:

1. To what extent are each of the characteristics of the

Danforth-sponsored programs considered a valuable contribution to the development of leadership capacities by those who have experienced them?

2. Is there significant variation across preparation program sites in the extent to which program features are considered valuable in the development of leadership capacities?
3. To what extent are program graduates who have entered administrative roles perceived by their colleagues to be demonstrating effective leadership in their schools?
4. How strong are the relationships between the value that graduates ascribe to those program features which they experienced and the extent to which teacher-colleagues perceive graduates to be demonstrating elements of effective leadership in their schools?
5. What proportion of variation in perceived leader effectiveness is explained by variation in the value attributed to features of the preparation programs considered individually and collectively?

**Framework**

Conceptually, the starting points for the study consisted of two sets of variables, one consisting of potential program features, the other potential elements of effective leadership.

**Program Features**

The Danforth Foundation's sponsorship of administrator preparation programs depended on their reflection of a number of features that were associated with exemplary administrative preparation programs when such sponsorship began. The full range of these characteristics has been described in a number of sources; for example, Griffith, Stout and Forsyth (1988), Gresso (1993), Wilson (1993), Murphy (1992), and Achilles (1994). There are several categories of such program characteristics: methods used for recruitment and selection of students; the nature of the process used to plan the program; the

**CONNECTIONS:  
CONVERSATIONS ON ISSUES  
OF PRINCIPAL PREPARATION**

The newsletter for the Danforth Principal Preparation Network and for others interested in sharing conversations on issues of principal preparation.

Danforth Principal Preparation Network members include:

Brigham Young University  
California State University, Fresno  
East Tennessee State University  
Iowa State University  
Old Dominion University  
San Diego State University  
University of Alabama  
University of Central Florida  
University of Connecticut  
University of Houston  
University of Northern Colorado  
University of New Mexico  
University of Oklahoma  
University of Tennessee, Knoxville  
University of Virginia  
University of Washington  
University of Wyoming  
Virginia Tech

**Editorial Board**

Peter Wilson  
The Danforth Foundation  
Bruce Barnett  
Western Regional Coordinator  
David Paris  
Eastern Regional Coordinator  
Jo Ann Krueger  
U. Of New Mexico

**Address comments to:**

Dr. Jo Ann Krueger, Editor  
Connections!  
COE Ed. Office 209  
University of New Mexico  
Albuquerque, NM 87131  
Phone: (505) 277-4583 or  
(505) 277-2844  
Fax: (505) 277-4860

structure of the program; the use of cohort groups, internships, and mentors; program content; the nature of instruction; and methods and uses of evaluation. Starting with these sets of characteristics, one task in the initial stage of the study was to clarify the specific features actually incorporated into the programs of participating university sites. Based on reviews of literature and advice from participating sites, a set of criteria of what constitutes adequate implementation of each of these program features was also developed. This information served as the basis for developing one of the two survey instruments used in the study. Specific items in the survey defined the meaning of each of the major categories of features.

### **School Leadership**

Elements of effective leadership serving as starting points for the study were identified from a review of four distinct and recent sets of literatures by Duke & Leithwood (1994). These literatures included: a selected set of writings (12 books) reflecting the "new management" literature; an exhaustive sample of empirical research on "transformational" literature in schools (26 studies, reviewed by Leithwood, Tomlinson & Genge, in press); a set of recently reported empirical studies (21) on the consequences for school administrators of their involvement in various types of school restructuring initiatives; and a body of research conducted since 1982 concerned with an eclectic assortment of school leadership practices and the effects of such practices (19 studies). These four sets of literature touch on virtually all aspects of what practicing school administrators actually do, from initiatives which clearly reflect commonly held meanings of "leadership" to the "nuts and bolts" of routine administration.

The four sets of literature refer to management and leadership initiatives in varied and sometimes inconsistent ways; for example, as tasks, activities, behaviors, practices and dimensions. For purposes of consistency, Duke and Leithwood (1994) converted findings from this literature into

"functions". This conversion required no substantive change to the initiatives, whatever they were labeled in their original source. Seven primary functions were identified by the review, each encompassing "sub-functions" (a total of 40) and "specific activities" (a total of 219). The functions and sub-functions served as the basis for the survey developed to measure school leadership in the study. Included as functions were:

- Developing a mission and vision for the school and maintaining its relevance for all stakeholders.
- Developing and maintaining a school culture supportive of the school's mission and the work required to achieve that mission.
- Nurturing the capacity and commitment of staff.
- Structuring the school to facilitate achieving its mission and goals.
- Ensuring the continuous improvement of programs and instruction.
- Building and maintaining high levels of support for the school among its immediate clients and the wider community.
- Providing administrative support for achieving the school's vision, mission and goals.

---

**Graduates were asked to rate the value which they ascribed to each of the components of the program from which they graduated in the development of their leadership capacities.**

---

### **Method**

#### **Design**

Information was collected from three sources in each of 11 program sites: the university faculty member primarily responsible for coordinating the preparation program in each of the 11 sites; a sample of graduates of Danforth-sponsored programs in

each site (in the case of one program site, graduates of the "traditional program, as well); and teachers or "colleagues" currently working with program graduates, for the most part in the graduates' schools.

---

**Teacher-colleagues were asked to rate the effectiveness of the leadership demonstrated by the graduates in their schools.**

---

Graduates were asked to rate the value which they ascribed to each of the components of the program from which they graduated, in the development of their leadership capacities. Teacher-colleagues were asked to rate the effectiveness of the leadership demonstrated by the graduates in their schools. Site coordinators provided information about site-specific program features and elements of leadership considered important to develop.

#### **Instruments**

Two survey instruments were developed for the study. One survey, The Principal Preparation Programs Survey (PPPS), was to assess leaders' perceptions of the value of those characteristics of the preparation program from which they graduated, in most cases a Danforth Foundation-sponsored program. This instrument included 75 items making up 6 scales with 10 items requesting demographic information. The second survey, The Survey of Leadership Practices (SLP), was to collect opinions from colleagues of program graduates about the effectiveness of the graduates' leadership: it included 52 items making up 7 scales.

A three-stage process was used to develop both instruments. The first stage entailed identifying, from relevant literatures (those referred to in the Framework above), a comprehensive set of program features and leadership functions. As a second step, lists of these features and functions

were sent to program coordinators in each site with a request to rate their importance or centrality in their programs. Using the features and functions rated highly in each site (not always the same), draft instruments were developed (with some variation across sites) and returned to the site coordinators for final revision or approval. This three-staged process, with the site coordinators acting as a panel of experts, served as the primary method for validating the two instruments.

### Sample

The selected sample consisted of all graduates of 11 of the 22 Danforth-sponsored programs identified to the researchers by the site coordinators. Site coordinators also provided mailing addresses for each of these people. There was considerable cross-site variation in numbers of program graduates (ranging from a high of 51 to a low of 9). There was considerable variation in response rates, as well (from 29% to 89%). Response rates of teacher-colleagues invited by graduates to participate in the study ranged from 20% to 69%. This is likely an underestimate, however, since it is based on the number of SLP's sent to each graduate by the researchers, not the number that graduates actually distributed.

Overall response rates, at the time this report was prepared, were 44% for graduates and 30% (as qualified above) for teacher-colleagues. The final report of the study will be based on somewhat higher response rates since questionnaires were still being returned as this paper was being written (early April, 1995).

### Data Collection

Each graduate was mailed a package which included:

- a letter from the site coordinator expressing support for the study and encouraging participation;
- a survey (PPPS) for the graduate to complete along with a stamped, addressed return envelope;
- eight surveys (SLS) to be distributed to teacher colleagues, along with a letter of explanation, guarantee of anonymity,

and a stamped, addressed return envelope. Two follow-up reminders were carried out with non-respondents.

### Data Analysis

The unit of analysis for this report was the individual respondent. For analyses of graduates only, the full 126 graduates in the achieved sample were included. Responses from all 681 teacher colleagues in the achieved sample are provided on the teacher survey. For answers to questions related to graduates in administrative roles (Questions 3 through 5), analyses were limited to responses from the 585 teacher-colleagues of graduates who were in roles of responsibility other than classroom teacher (e.g., assistant principal, principal, department head). Although analyses were done on data aggregated at the level of the graduate, this report is based on the individual analyses because the data are perceptions of individual colleagues. The sample was not designed to be representative of the whole school, nor even necessarily of all relevant colleagues.

---

## Graduates generally considered their programs to have been valuable to their development as school leaders.

---

The ratings provided by the site coordinators in order to construct the surveys were entered on a PC spreadsheet and means calculated using Lotus software. SPSS was used to calculate means (Questions 1 & 3), standard deviations, scale reliabilities (Cronbach's alpha), and Pearson product-moment correlation coefficients (Question 4). A one-way analysis of variance (ANOVA) was performed on graduate ratings preparation of program features to determine whether variation in ratings across program sites was significantly greater than that among graduates within the sites (Question 2). Standard multiple regression was used to determine the effect of

ratings of specific program features (that differ from the other program features) on the perception of leadership as well as combined effect of all nine program features (Question 5).

### Results

This section summarizes evidence collected in reference to each of the five specific questions guiding the study.

#### **Question 1: To what extent are each of the characteristics of Danforth-sponsored programs considered a valuable contribution to the development of leadership capacities by those who have experienced them?**

Graduates generally considered their programs to have been valuable to their development as school leaders. Their overall rating of program features was 3.46 on the four-point scale, midway between "somewhat" and "extremely valuable." They attributed the highest value ( $M = 3.81$ ) to the opportunities provided by their program for participation within their cohort group, particularly activities such as engaging in group learning and developing and sharing a common purpose. Two other features valued highly were their internship ( $M = 3.64$ ) and mentoring ( $M = 3.59$ ) experiences, although there was considerable more variation in the ratings of the latter (standard deviations of .66 vs. .45). The four features ranking fourth to seventh were program evaluation, program structure, instructional strategies, and program content. Recruitment and selection was ranked eighth ( $M = 3.34$ ) and program planning was the feature valued least ( $M = 3.22$ ), although still perceived to have been somewhat valuable.

---

## Of those forms of instruction used in the programs, highest grades went to participation in seminars, reflection, and problem-based learning.

---

Within each category of program characteristic, some features were considered by graduates to have been particularly valuable. With respect to *recruitment and selection processes*, most valued was release time from one's job to participate in the program ( $M = 3.76$ ) and the careful screening of applicants that provided "high quality" colleagues from whom one could learn ( $M = 3.61$ ). In terms of *program planning*, most valued was systematic planning of the entire program by the university ( $M = 3.34$ ) and provision of a program directly responsive to one's needs ( $M = 3.30$ ). Part-time study ( $M = 3.76$ ) and the availability of evening courses ( $M = 3.74$ ) were the most appreciated aspects of *program structure*. The *cohort group*, where it was used, was valued most for the group learning opportunities it provided ( $M = 3.86$ ) and for the individual learning stimulated by one's colleagues ( $M = 3.81$ ). *Internships* were considered to be valuable, especially because of the problem solving capacities they developed (2 items:  $M = 3.76, 3.71$ ) and the opportunities to integrate theory and practice ( $M = 3.71$ ). The relationship developed with one's *mentor* was the most valuable part of that experience ( $M = 3.69$ ).

---

### **Ratings provided by colleagues ... indicated that these administrators were generally perceived to be demonstrating effective leadership in their schools.**

---

In terms of program content, graduates rated as by far the most important the emphasis on instructional leadership skills ( $M = 3.74$ ). Of those forms of *instruction* used in the programs, highest grades went to participation in seminars ( $M = 3.53$ ), reflection sessions ( $M = 3.47$ ) and problem-based learning ( $M = 3.41$ ). Opportunities for self-evaluation ( $M = 3.62$ ) were the most valued aspects of *program evaluation*.

### **Question 2: Is there significant variation across preparation program sites in the extent to which program features are considered valuable in the development of leadership capabilities?**

A one-way analysis of variance found no significant differences among the program sites in the extent to which program features were considered valuable by the graduates. Because one site deleted the mentoring feature from its questionnaire, it was not included in the analysis for that feature. Mean ratings of all program features ranged from 3.22 to 3.64, indicating ratings from "somewhat" to "extremely valuable".

### **Question 3: To what extent are program graduates who have entered administrative roles perceived by their colleagues to be demonstrating effective leadership in their schools?**

Ratings provided by colleagues of graduates who were in administrative roles indicated that these administrators were generally perceived to be demonstrating effective leadership in their schools. The overall mean rating for leadership was 3.47, which was between "agreement" and "strong agreement" that graduates used effective leadership practices. With respect to the seven categories of leadership functions, *fostering staff development* ( $M = 3.57$ ) was given the highest rating, followed by *setting school directions* ( $M = 3.54$ ). Ranked third to sixth were *building school-community relations* ( $M = 3.49$ ), *altering school structures* ( $M = 3.44$ ), providing administrative support ( $M = 3.44$ ), and building school culture ( $M = 3.42$ ). *Supporting curriculum and instruction* ( $M = 3.39$ ) was given the lowest rating, a notable contrast to the relatively high value graduates placed on the emphasis on developing instructional leadership skills within their programs.

### **Question 4: How strong are the relationships between the value that graduates ascribe to program features and the extent to**

### **which teacher-colleagues perceive graduates to be demonstrating elements of effective leadership in their schools?**

Relationships between values ascribed by graduates to features of their preparation programs and their colleagues' perceptions of effective leadership were significant, although of moderate strength. The mean value attributed to preparation programs was significantly related to the overall mean rating for leadership ( $r = .18, p < .01$ ), suggesting that graduates who felt more strongly that their programs had prepared them for leadership were also perceived by their colleagues to be providing effective leadership. The value placed on the instructional strategies had the strongest relationship with the overall leadership mean ( $r = .20, p < .01$ ) as well as having a significant relationship with each of the seven leadership practices. Of almost equal strength were the relationships between effective leadership and the value attributed to their cohort experience ( $r = .18, p < .01$ ), leadership and the value given program evaluation ( $r = .17, p < .01$ ), and between leadership and program planning ( $r = .16, p < .01$ ). Of the nine program features, only mentoring and program content were not significantly related with effective leadership practices.

The leadership element with the strongest relationship with the overall mean for program features was *building school-community relations* ( $r = .22, p < .01$ ). The weakest relationship was with *setting directions* ( $r = .10 < .05$ ).

### **Question 5: What proportion of the variation perceived in leader effectiveness is explained by the value attributed to features of the preparation programs, considered individually and collectively?**

Overall, regression analysis indicated that about 8 percent of the variation in perceptions of effective leadership is accounted for by the nine features of preparation programs included in the study ( $p < .001, DF = 9,475$ ). Only three program features, instructional strategies, cohort membership,

and program content, made significant unique contributions of 3%, 1% and 2%, respectively.

---

**With these data, it is possible to answer with more confidence than before, the two most basic questions about formal school leader preparation: Does it make a significant difference, and if it does, how should it be designed?**

---

**Discussion and Conclusions**  
Undertaken as a summative study of the Danforth Foundation's Program for the Preparation of School Leaders, this research follows a relatively intense series of previous studies also concerned with the nature and impact of this initiative. Most of those studies (all but Cordeiro et al, 1993) were primarily qualitative, providing relatively rich information about the nature of individual programs, challenges associated with their development, and perceptions of some of their effects. The study described in this paper was a quantitative effort to weigh the contribution, to the development of school leadership, of those features which have been viewed as the hallmark of Danforth-sponsored programs. This was done in two ways: directly, by asking the opinion of graduates; and indirectly, by searching for correlational evidence.

---

**Why, you might ask, do we feel unequivocal about the contribution to school leadership or formal programs based on this study?**

---

The study reflects the usual limitations associated with correlational designs. And while the response rates were acceptable for survey research, they were still low -- a challenge to the representativeness of the data. Nevertheless, the study adds an important perspective to the accumulating evidences about these school leader preparation initiatives. Independent samples of data were available to estimate the status of program characteristics and leadership practices. Furthermore, while the response rates were modest, the sample sizes were relatively large and permitted us to consider common program initiatives across sites. With these data, it is possible to answer with more confidence than before, the two most basic questions about formal school leader preparation: Does it make a significant difference, and if it does, how should it be designed?

---

**What is compelling about the results is the modest but significant amount of variation in leader effectiveness explained by program characteristics.**

---

The answer to the first and especially critical question is yes - indeed an *unequivocal* yes! Why, you might ask, do we feel unequivocal about the contribution to school leadership of formal programs based on this study? It is not just that most graduates still highly valued these programs several years after taking them and with the benefit of experience in school leader roles. Nor is it only because there were many significant correlations between the value attached to program characteristics by the graduates and teachers' perceptions of the effectiveness of the graduates' leadership. What also is compelling about the results is the modest but significant amount of variation in leader effectiveness explained by program characteristics. This means that, while there was actually very little variation in respondents' ratings

of program characteristics, even these small amounts of variation had important consequences (explained about 8 percent of the variation) for leader effectiveness as it was conceptualized and measured in this study. These consequences are *on top* of some basic contribution to leadership of participation in a formal preparation program vs. no such participation. So the total contribution of a high quality, formal, leadership program is more than 8 percent, perhaps much more. Given all of the other influences on a leader's

---

**(The results) also corroborate prior evidence suggesting that formal preparation programs are either quite useful or largely without value depending on their quality.**

---

development (family experiences, on-the-job training, and the like), this is clearly of educational, not just statistical, significance. These results offer independent support for the results of the prior case studies of Danforth-sponsored programs: they also corroborate prior evidence suggesting that formal preparation programs are either quite useful or largely without value depending on their quality (Leithwood, Steinbach & Begley, 1992; Leithwood, Begley & Cousins, 1992).

---

**Effective programs provide authentic experiences, stimulate the development of "situated cognition," and foster the real life problem-solving skills of their participants.**

---

If formal preparation programs can be effective in developing school leadership, what features

must they possess? Not surprisingly, the answer to this question seems to be much the same as would be the case for other practice-oriented occupations. Effective programs provide authentic experiences (Rogoff & Lave, 1984), stimulate the development of "situated cognition" (Brown, Collins & Duguid, 1989), and foster the real life problem-solving skills of their participants. These qualities were most evident to Danforth program graduates in the context of their cohort groups, internships, mentor relations and problem-based learning activities. Each of these instructional alternatives, in its own way, avoids the development of knowledge which is "inert" or unable to be used by its possessor (Bransford, 1993); they assist participants, in contrast, to acquire "proceduralized" knowledge (knowing how). This is a more functional way to define what is usually characterized as a "theory-practice" problem. Results of this study imply that good theory is of considerable value to school leaders. But not when it is left in "declarative" or inert form (knowing about). We think that when preparation programs are criticized as "too theoretical," it actually means either that such programs are based on bad theory or that an application of the theory in real school contexts has been seriously neglected--with the knowledge of theory remaining inert, even though its potential use might be quite substantial.

---

**Results of this study imply that good theory is of considerable value to school leaders.**

---

The challenge for developing truly effective leader preparation programs is to build them around robust theories relevant to the current and future work of school leaders and to offer forms of instruction that lead to proceduralized knowledge consistent with such theories.

**References**

Achilles, C.M. (1994). Searching for the golden fleece: The epic struggle continues. *Educational Administration Quarterly*, 27 (1), 5-29.

Bransford, J. (1993). Who ya gonna call? Thoughts about teaching problem solving. In P. Hallinger, K. Leithwood & J. Murphy (Eds.), *Cognitive perspectives on educational leadership*. New York: Teachers College Press.

Brown, J., Collins, A., & Duguid, D. (1989). Situated cognition and the culture of learning. *Educational Research*, 18(1), 32-42.

Cordeiro, P., Krueger, J., Parks, D., Restine, N., & Wilson, P. (1993). Taking stock: Learnings gleaned from universities participating in the Danforth program. In M. Milstein (Ed.), *Changing the way we prepare educational leaders*. Newbury Park, CA: Corwin Press.

Dareh, J. (1994). Restructuring educational leadership preparation: Identifying needed conditions. *Journal of School Leadership*, 4, January.

Duke, D., & Leithwood, K. (1994). *Management and leadership: A comprehensive view of principals' functions*. Prepared as part of research project for Connecticut State Board of Education, University of Connecticut.

Grosso, D.W. (1993). Genesis of the Danforth preparation program for school principals. In M. Milstein et al (Eds.), *Changing the way we prepare educational leaders: The Danforth experience*. Newbury Park, CA: Corwin Press.

Griffiths, D.E., Stout, R.T., & Forsyth, P.B. (Eds.) (1988). *Leaders for America's schools*. Berkeley, CA: McCutchan.

Leithwood, K., Begley, P., & Cousins, R. (1992). *Developing expert leadership for future schools*. London: Falmer Press.

Leithwood, K., Steinbach, R. & Begley, P. (1992). Socialization experiences: Becoming a principal in Canada. In G. Hall & F. Parkay (Eds.), *Becoming a principal* (pp. 284-307). Boston: Allyn & Bacon.

Leithwood, K., Tomlinson, D., & Genge, M. (in press). Transformational school leadership. To appear in K. Leithwood (Ed.), *The International Handbook of Educational Leadership*. Netherlands: Kluwer Press.

Milstein, M. (Ed.). (1993). *Changing the way we prepare educational leaders*. Newbury Park, CA: Corwin Press.

Murphy, J. (1992). *Leadership preparation: Reframing the education of school administrators*. Newbury Park, CA: Corwin Press.

Murphy, J. (1993). Alternative designs, new directions. In J. Murphy (Ed.), *Preparing tomorrow's school leaders: Alternative designs*. University Park, PA: UCEA.

Pounder, D. (1994). Theory to practice in administrator preparation: An evaluation study. *Journal of School Leadership*, 5(2), 151-162.

Rogoff, B., & Lave, J. (Eds.) (1984). *Everyday cognition*. Cambridge: Harvard University Press.

Wilson, P.T. (1993). Pushing the edge. In M. Milstein (Ed.), *Changing the way we prepare educational leaders: The Danforth experience*. Newbury Park, CA: Corwin Press.

## THE FINAL ISSUE OF CONNECTIONS!

The eight years between 1987, when the Danforth Foundation initiated its Program for the Preparation of School Principals, and 1995, the program's final official year, have also been years of ferment and reform focusing on how school administrators can be better prepared. For the past three years, *CONNECTIONS!* has been part of that discussion by examining issues of principal preparation.

It is fitting that this -- the final issue of *CONNECTIONS!* -- should feature a summative study of the Danforth Program for the Preparation of School Principals (DPPSP) by Kenneth Leithwood, Doris Jantzi and George Coffin of the Centre for Leadership Development, Ontario Institute for Studies of Education. The study addresses five research questions regarding outcomes of the Danforth programs and the effects of Danforth program features on the development of school leadership. In the authors' discussion, you will find answers to two basic questions: Does formal school leader preparation make a significant difference? If so, how should that preparation be designed?

These and other issues of administrator preparation will continue to be explored on the pages of the bulletin of The National Policy Board for Educational Administration, *DESIGN FOR LEADERSHIP*, which will subsume the issues orientation of *CONNECTIONS!* As a final note, the editorial board of *CONNECTIONS!* expresses its deep appreciation to its readers, to those who contributed articles for publication, and to the Danforth Foundation for its sponsorship.

---

## *Connections!*

The Danforth Foundation  
231 South Bemiston, Suite 1080  
St. Louis, Missouri 63105-6200

DR. PHILIP PIELE  
ERIC CLEARINGHOUSE  
UNIVERSITY OF OREGON  
1787 AGATE STREET  
EUGENE, OR 97403

