To better understand the role that "power behavior" plays in deciding promotions in the school system, the power behaviors of school principals who had been promoted and those who had not been promoted were examined. A power model developed by R. Muth was adapted to provide the framework for assessing power use. The central questions addressed the types of power behavior and resources principals and their supervisors use, the use of power behaviors and resources, the role of gender and/or the use of power behaviors and resources in gaining promotions, and whether males and females report similar power behaviors. Results are based on 200 surveys completed by principals and school administrators in Colorado. The findings revealed no significant difference between the power types used by principals who reported that they had not been promoted and the power types of those who made the promotions, undermining the argument that power is an important, if not the most important, ingredient in receiving a promotion. Furthermore, nonpromoted and promoted principals did not report different patterns of power use. (RJM)
POWER, PRINCIPALS, AND PROMOTION

Sandra T. Elliott

Rodney Muth

University of Colorado at Denver

Paper Presented at the Annual Meeting of the

American Educational Research Association

Chicago, IL

March 1997
POWER, PRINCIPALS, AND PROMOTION

Sandra T. Elliott and Rodney Muth

University of Colorado, Denver, Colorado

To rise in an organization, to move up the ladder, to get a promotion, to be tapped for the next higher position—these are the dreams of many principals. Positions titled Executive Director, Assistant or Associate Superintendent, Deputy Superintendent, and Superintendent are considered promotions from the principalship.

But promotions are not the result of dreams. They are the result of selection by a supervisor, a selection based on a variety of individual and organizational factors. Individual factors that influence promotion are performance, skills, education, experience, commitment, hierarchical position, attitudes, and an interest in being promoted (Comings & Montmarquette, 1991). Organizational factors include position openings due to retirements, resignations, position deletions or additions, job requirements, and growth. The promotion of an individual is the most common affirmation or reward for managerial success, and with it comes the acquisition of additional power and resources in the organization.

It is widely documented that, although women make up the majority of teachers and a sizable minority of the principals (Shakeshaft, 1987; Choy, et al., 1993), they are under represented in senior management positions. This discrepancy in the number of women compared to the number of men being promoted to senior management cannot be attributed to education, training, skills, or motivation (Sadker, Sadker, & Klein, 1991; Shakeshaft, 1987).

If the lack of women in senior management is not explained by individual attributes or organizational factors, what does explain it? The answer may not lie with what, but with who,
as organizations do not make decisions about who is promoted and who is not, they only influence the decision makers. Rather, individuals within organizations make decisions. These decision makers operate with internal schema or mental models that, while influenced by the organization, determine the fit between the employee and the desirable employee prototype (Perry, Davis-Blake, & Kulik, 1994).

Promotions are not just rewards for service and performance; they also serve to reproduce the organization (Kanter, 1977). For this study, organizational reproduction refers to the selection of leaders who are perceived as being able to continue the supposedly previously successful practices of their predecessors as a means of guaranteeing the survival of the organization as it is constituted. Individuals anthropomorphize the organizations for which they work not only in words but in their wish for the organization to remain viable, if for no other reason than for their continued employment.

One of senior management's primary purposes is to ensure the survival of an organization, in this case the school system. This necessitates the promotion of individuals who are capable or perceived as being capable of maintaining the structural, cultural, and performance integrity of the organization. According to the theory of homosocial reproduction (Kanter, 1977), decision makers or supervisors controlling promotion select individuals who have the same attributes as themselves, thus ensuring continuity and predictability. Attributes include individual factors such as performance, skills, and attitude. An individual's ability to use power has also been identified as important to being promoted (Pfeffer, 1992). The perceived needs and biases of the managers about factors that predict success, such as socioeconomic status, gender, ethnicity, communication styles, also influence the decisions. If a senior manager or managers view themselves as successful, they will look for individuals who emulate their model. The closer the match, the greater the likelihood of success.

Theory/Research Base

The majority of educational leaders start as teachers, most of whom are female. In 1985, women constituted 83.5% of the elementary teachers and 50.1% of the secondary
teachers, but women made up only 16.9% of elementary principals and 3.5% of secondary principals (Shakeshaft, 1987). In a study conducted by the U.S. Department of Education (Choy, et al., 1993), women held 70.5% of the elementary teaching jobs in 1987-88 and 71.9% in 1990-1991. They also increased their representation in the elementary principal ranks from 16.9% in 1985 to 24.6% in 1987-88 and to 30.0% in 1990-91. But the data also indicate that only 3% of the superintendents are female.

Promotion Factors

The pool for educational leaders is primarily female, but few women are represented in the senior leadership ranks. Yet, the under representation of women in senior positions is neither connected to their education, training, or skills (Sadker et al., 1991) nor to lack of ambition: women do want to be administrators and want to have the same opportunities for promotion as men (Shakeshaft, 1987). But males take a different view than females. Calabrese and Wallach (1989) found in a survey of male and female principals and administrators that males, more than the females, believed that women did not want to be administrators, that their family obligations interfered, that they were emotionally unable to deal with conflict, and that they were too sexual and too submissive. In addition, those same males felt that discrimination was not a factor and that women were encouraged to apply for administrative positions. Apparently, male decision makers believe it is the fault of female candidates, rather than the organization--or males' attitudes--for the low numbers of women in senior management.

If objective factors such as education, age, training, and experience are comparable between the genders, and decision makers see women as the cause of their under representation, what factors might explain the disparity in the number of females versus males in educational leadership positions? One possible explanation is that gender differences in demonstrating power are viewed through the limited schema or mental model of the supervisor (generally male) who controls promotions (Perry et al.,1994).
Schemata commonly develop from repeated observations of similar events, explicitly taught lessons, or from modifications to an existing schema as a result of additional information (Perry et al., 1994). In the case of leadership in education, repeated observations indicate that females do not occupy many of the senior leadership positions, reinforcing the schemata of decision makers that females, leadership, and power do not go together. Definitions of leadership in the educational culture also support the idea that women do not evidence decisive and managerial or male traits (Shakeshaft, 1987). This definition is then incorporated into the decision makers' schema and affects who gets promoted.

Confirming evidence is provided by Adler (1994) who studied male and female supervisors and policy makers and found that males were more likely than their female colleagues to be promoted to supervisor and policy making positions. Gender, however, did not affect the degree of power and authority males and females had once they attained the position. The factors causing unequal position access were left to future research.

**Power as a Promotion Factor**

An individual's exercise of power, or the ability to get things done on her/his own or through others, has been identified as crucial to promotion (Gallese, 1991; Pfeffer, 1992; Yukl & Falbe, 1991). Mintzberg (1983), Yukl and Falbe (1991), and Pfeffer (1992) also suggest that organizational behaviors such as promotion patterns can be explained in part by understanding power and influence tactics. Motivating subordinates to accomplish their jobs requires the effective use of various types of power, ranging from position power to expert power. The effectiveness of the supervisor depends upon how well subordinates comply with routine as well as extraordinary requests.

Morrison (1992) describes power differences as more important in determining promotion than gender or ethnic differences. For promotion to occur, not only should skills and education be evident, but a match should exist between the decision maker's power schema and the power behaviors evidenced by the individual seeking promotion.
Historically and culturally, women have had less power in organizations (Kanter, 1977; Ragins & Sundstrom, 1989). In addition, women tend to demonstrate different forms of power than men (Rosener, 1990; Shakeshaft, 1987). These differences may contribute to observable patterns that reinforce schemata for not promoting women as they do not validate the preferred models.

Power may develop over time as one learns to exercise various forms of power, especially expert power (Ragins & Sundstrom, 1989). As individuals learn to recognize how their own power affects other individuals and their goals, they become better at learning when and how to use different forms of power. In addition, power--referent, knowledge, or authority--can be acquired as useful resources by individuals over time. This development of power over time may affect the rate that careers advance as individuals acquire job skills, mentors, and authority that provide observable proof to supervisors that they can handle more power when promoted.

Studies have indicated that women and men differ in their use of power (Ragins & Sundstrom, 1989; Adler, 1994; Rosener, 1990). Homosocial reproduction theory (Kanter, 1977) suggests that decision makers are more apt to choose candidates similar to themselves. The research done by Perry, Davis-Blake, & Kulik (1994) supports the idea that a decision maker’s internal schema functions as the framework for making choices. The decision maker will look for factors that the organization and her/his internal model identify as important to the job. If exercising power to accomplish goals is a factor, then it will be considered in the promotion criteria with skills, experience, and education.

**Birds of a Feather**

The primary purpose of a school system is to accomplish the goals that make student achievement and the operation of the system possible. Principals routinely demonstrate that they have the power or ability to accomplish goals themselves or through others.

The majority of superintendents who observe these principals and control which of them get promoted are male. This patriarchy tends to see the world through an androcentric or male
viewpoint. This causes "male things," or traits and values usually perceived as belonging to males, to be viewed as superior to females' traits and values, rather than simply different (Shakeshaft, 1987). When these male attitudes and statements are examined further, it becomes apparent that these views are incorporated into the mental models of what it takes to be promoted, and those models can vary for men and women (Perry et al., 1994).

If this is the case, then superintendents making decisions as to whom to promote may also lean toward and select individuals who are most like themselves. If men and women see themselves and are perceived as using power in different ways according to gender, then male superintendents are likely to select power users most like themselves. If they perceive that only males use power in the same way, then males would be promoted more frequently. If they see power usage as being basically the same across the genders, then a more equitable promotion spread may exist between the genders (Powell, 1993). Promotions would be based on similarities to the decision maker other than gender.

**Problem Focus**

Why should school systems want more women in positions of authority? One reason might be simply that the best people should be in leadership positions, regardless of their gender. Another would be to provide female role models for younger women and students. A third might be to attract the best graduates from colleges and universities, thus leading to a more successful organization. Research on bases for decisions about promotion can identify major issues and provide options for addressing them, in this case helping organizations to understand how they choose leaders and to not lose talented individuals because they do not foresee promotion as a possibility. In addition, such research can be used as a source of information for individuals who aspire to senior management positions.

This study assumes that principals are central to improving schools. For this reason, it is important that school systems have the best leadership in order to have the vision and skills necessary for guiding schools effectively. While we know that men and women can be equally
effective as leaders (Morrison, 1992), the numbers of women promoted to leadership positions does not match the numbers in the pool of aspirants (Shakeshaft, 1987).

Few studies identify the factors in school leadership that explain the disparity between men and women in achieving senior leadership positions. One of the assumptions underlying this study is that, in spite of documented differences in leadership style and shared experiences, it is the similarities between individuals that draw people together.

Superintendents have the responsibility to select the most qualified person to fill educational leadership positions. Understanding the perceptions of superintendents about the kinds of power they value and view as necessary for promotion should be of concern to any individual seeking advancement. The possible differences that could be ascribed to the internal schema of the promoter, to gender, and to the use of power itself should be examined because power is identified as a key requirement for promotion (Morrison, 1992). The gender of the superintendents and the types of power they use or perceive themselves to use may also affect the types of power they value in a principal who is seen as promotable.

Theoretical Framework

For this study, a power model developed by Muth (1984) was adapted to provide the framework for assessing power use. This revised model is based upon French and Raven’s (1959) five bases of social power--reward, coercive, legitimate, referent, and expert. In addition, information power (Raven & Kruglanski, 1975), connection power (Hersey & Blanchard, 1982), and the typology of power developed by Bacharach and Lawler (1980) have been incorporated into Muth’s power continuum.

Muth’s (1984) typology allows a full range of power types to be studied. Coercion, the ability to compel compliance through physical threat or force, is opposite influence, the use of persuasion to achieve compliance without the use of force or authority, on Muth’s continuum. Authority, which resides in the middle of the continuum, elicits voluntary compliance with a request based on the legitimacy granted the requester. Any of the bases of power may be used coercively, legitimately, or influentially.
French and Raven (1959) defined the five bases of power as coercion, reward, referent, expert and legitimate. Coercive power comes from the ability to compel another through physical threat, force, or withdrawal of approval. Reward power is the ability to provide tangible benefits such as raises, promotions, or personal approval. Referent power is based upon others' feeling connected to the referent and complying for that reason. Expert power is based on individual knowledge or access to knowledge that another wants. Legitimate power is based upon organizational structures or expectations with which that grants the right to expect others to comply.

Questions

The questions that guide this phase of this study are:

1. What types of power behaviors and resources do principals report that they use?
2. What types of power behaviors and resources do decision makers report that they use?
3. Do promoted and non-promoted principals report the use of power behaviors and resources similar to those reported by decision makers who make promotion decisions?
4. Do promoted and non-promoted principals report use of similar power behaviors and resources?
5. Do gender and/or the use of power behaviors and resources play a role in who gets promoted?
6. Which power behaviors and resources do promoted and non-promoted principals and decision makers consider most important?
7. Do males and females in and across the three groups report similar power behaviors and resources?¹

Methodology

To compare the power of principals promoted and those not promoted in the last three years with the power of the decision makers who make promotion decisions, a survey instrument was constructed to collect data on types of power and resources used, the gender, promotion status, and reasons for the promotion or non-promotion of principals in Colorado.²
For this study, promotion is defined as movement to positions with more responsibility and/or salary. Decision makers, who also were surveyed with a similar instrument, are defined as those individuals identified as primarily responsible for final decisions to promote a principal to a higher level of responsibility.

Sample

Surveys were mailed to Colorado principals and central office administrators with the title of director and above. Names were acquired from the Colorado Department of Education, following the technique of cluster sampling outlined in Jaeger (1988): a sample of administrators were selected from the list of all administrators in each district. Only the largest districts in Colorado were chosen because their internal applicant pool increased the probability that aspirants would know who was responsible for their promotion. In addition, the state is growing rapidly, and opportunities for promotion from the principalship to higher-level positions is frequent.

Five hundred forty surveys were mailed to principals (472) and administrators (68 to superintendents or upper-level administrators) in the nine largest districts in Colorado—Adams-Arapahoe, Boulder, Cherry Creek, Denver, Douglas, Jefferson, Mesa, Thornton-Northglenn, and Poudre. Administrators in El Paso were not surveyed because the senior author is employed there. So far, 27 (40%) administrator and 173 (38%) principal surveys have for a return rate of been returned. Follow-up procedures have been undertaken to increase the final returns.

Instrument

Two version of the survey were mailed to the samples. Version A was sent to the principals in each district. Version B was sent to the administrators with Superintendent or the equivalent of Executive Director. (In Colorado, these individuals are usually responsible for promotion decisions.) The surveys included an introductory letter about the study, which explained that the professional aspirations and mobility of educational administrators and their administrative behaviors were being examined. It also informed the respondent that ID codes
were for tracking purposes only and would not be used to identify them. The letter did not indicate that comparisons would be made as that might have predisposed the respondents to answer in socially acceptable ways. Included with the cover letter and the survey was an informed consent form and a pre-addressed, stamped envelope.

Survey A asked questions about who had been promoted or sought promotion in the last three years and the titles of the decision makers they felt were primarily responsible for promotion decisions. Respondents were also requested to provide the names of those individuals if they were comfortable doing so. Respondents fell into one of three categories: individuals who had been promoted within the last three years, individuals who had sought promotion but were not promoted within the last three years, and individuals who had not sought promotion.

Demographic information was collected because gender, ethnicity, experience, and time in current district were deemed potentially significant in determining promotion patterns. This information was examined for patterns of promotion based upon gender, ethnicity, years of service and internal versus external hiring.

Information about how the principals and central office administrators perceive their use of power was collected through the modified Administrator Behavior Scale. Also, administrators were asked to indicate if they were willing to participate in further studies about professional aspirations and administrator behavior.

Confidentiality of subjects names, rather than anonymity, was promised because of the need to collect titles and names, if possible, of the matching superintendents or promotion decision makers for future research. In addition, respondents were assure that data will be released only in aggregate to help protect confidentiality (Dillman, 1978).

Information was also collected on the reasons the respondents thought they were promoted. This consisted of a list of the commonly cited reasons for promotion. Participants were asked to rank order the list of statements based upon how well they described the reason or reasons for their most recent promotion.
Version B of the survey was similar to Version A, but asked the senior administrators about their involvement in promotion decisions. Promotion decision makers were individuals with the title of superintendent or deputy, assistant or associate superintendent, and executive director. Like the principals, they received a cover letter thanking them for participating in the study and informing them about confidentiality.

**Administrator Behavior Scale (ABS)**

The ABS was originally developed by Muth (1971) to study power, conflict, and consensus in high schools in the Chicago area. It measured respondents' perceptions of their principals' influential, authoritative, and coercive behaviors. The statements were oriented to administrator behaviors that dealt with organizationally defined duties (authority) and those that supported the idea of force and persuasion (coercion and influence). Teachers responded to each item on a Likert-type scale and indicated the degree to which their principal demonstrated the behavior described in the statement.

As indicated earlier, Muth's scale was revised for this study by adding additional items that measure which power bases the respondents use. In addition, all items were rewritten in the first person active. New items were either originally drafted or taken from scales developed by Hersey and Natemeyer (1979), Rahim (1988), and Hinkin and Schriesheim (1989). Because each of the source instruments used statements written in the third person, these too were revised to reflect the degree to which the respondents see themselves as behaving as described.

The expanded ABS consists of 47 statements (originally 18) with a Likert-type scale ranging from 1 (never) through 6 (always). Items 1, 4, 7, 9, 12, 15, 16, 18, 20, 22, 23, 27, 30, 33, 35, 37, 43, and 46 are modified from Muth's (1971) ABS, and items 2, 5, 8, 10, 11, 13, 14, 19, 26, 28, 34, 36, 38, and 40-42, were substantially revised from items found in Rahim's (1988) Leader Power Inventory. Items 6, 25, and 39 were drawn from the Hinkin and Schriesheim scales (1989), and items 17 and 31 were drawn from Hersey and Natemeyer (1979). Items 3, 21, 24, 29, 32, 44, 45, and 47 were developed for this study.
This expanded instrument provides a minimum of 3 items for each of the five dimensions of power: coercion, referent, reward, legitimate, and expert as well as a minimum of five items for each of the power behaviors: coercion, authority, and influence. This prevents problems of reliability generally found in single-item measures (Nunnally, 1978).

**Validity and Reliability**

The instruments used to develop the expanded ABS were tested for content validity and reliability by their originators. Muth's (1971) Administrative Behavior Scale determined content validity through the use of ten expert judges. They were given a list of definitions corresponding to coercion, authority, and influence and asked to indicate on a five-point scale the ease or difficulty of assigning each statement to one of the three categories. No item received complete agreement, but each of the final eighteen items reflected an agreement of more than 71%.

Reliability was determined by using the teacher respondents' responses to the 18 items. These responses yielded Cronbach's alpha coefficients that were relatively high; .750 for the total test. Factor analysis of the items resulted in restructuring the scales by assigning items to more appropriate categories, thus increasing the reliability for the overall scale to .763.

The Power Perception Profile was developed by Hersey and Natemeyer (1979). It categorizes power according to the French and Raven (1959) typology with two added categories: connection power and information power. Items addressing these two forms of power were not included in the ABS. (The Power Perception Profile was originally developed for use in training situations rather than research or diagnostic purposes.) Content validity was determined through the use of expert judges with validity estimated between .6 to .69 (Delaney, 1980). Reliability of the instrument was found to be -.27 to .70, with legitimate, referent, reward, and information scoring below .50.

The Rahim Leader Power Inventory (1988) also was designed to measure the French and Raven power bases through subordinates' perceptions of how much of each power base was possessed by their leader. Each item was measured on a five-point Likert scale with a higher
score indicating a greater use of that power base. Construct validity was determined through a factor analyses with a resulting Cronbach's alpha of .83. Retest reliability coefficients of between .77 and .91 were computed from data collected from students who completed the instrument twice with a week's interval.

Hinkin and Schriesheim (1989) developed scales to describe power behaviors rather than traits or characteristics. The power behaviors were related to the French and Raven reward, coercive, legitimate, referent, and expert power bases. The twenty-five-item scale used a five-point Likert scale to measure respondent agreement with each item. Content validity was determined through formal examination by two independent panels of judges. Reliability was estimated through analyses of scale independence. All coefficient alpha reliabilities were greater than .77.

**Preliminary Analyses**

Reliability estimates (SPSS for Windows 7) for the seven ABS power scales ranged from .468 to .709. The total test alpha for the preliminary data was .875 for 172 cases. These initial reliability coefficients suggest that the scales, given the revised wording of items, cohere statistically, although planned factor analyses may show that some items should be dropped or shifted. The alpha coefficients, while not as consistently high as might be preferred, are good enough at this point for additional preliminary analyses.

Among the principals returning the survey (n = 173), influence—the use of persuasion to achieve compliance—was ranked as the most frequently used method of using power (M = 4.920). Authority, the expectation of compliance to a request because of its legitimacy, was the second most used method with a mean of 3.879. And coercion, or the ability to compel compliance through threat or force, was third with a mean of 2.204. Principals, then, report that they rely more on influence to get what they want than they do on coercion or authority.

This is the same ranking, with nearly the same means, as the decision makers (n = 27), for whom influence had a mean of 4.751, with authority (M = 3.843) and coercion (M = 2.249) ranking second and third respectively. The means for authority and coercion were
nearly identical to those of the principals, indicating clear correspondence between decision makers and principals for the reported use of power and their relative importance.

Some differences did occur in the rankings provided by the three groups for the types of power resources they said that they used. When grouped, promoted and non-promoted principals described themselves as first using referent power (M = 4.491), followed closely by expert power (M = 4.311) and reward power (M = 4.289). These means indicate that principals said that they used these resources often to frequently. Legitimate and coercive resources were reported to be used less, with means of 3.426 and 2.204 respectively.

Decision makers reported the same rankings as the principals with referent power being the most frequently used (M = 4.487), followed even more closely than for the principals in the rankings by expert (M = 4.479) and reward power (M = 4.399). Again, legitimate and coercive power followed in the rankings with means of 3.4691 and 2.2490 respectively.

Once again, similar to the pattern established for the use of types of power, decision makers and principals look very much alike in their use of power resources. However, when principals were separated by their replies to whether or not they had received a promotion within the last three years, principals reporting that they had received a promotion (n = 17) ranked reward (M = 4.635) as their most commonly used power base, while referent and expert were ranked second and third with means of 4.514 and 4.294. They ranked legitimate and coercive power bases fourth and fifth. Principals who reported they had sought but not received a promotion (n = 13) ranked referent power (M = 4.7033) as their most used power base, with reward and expert ranking second (M = 4.403) and third (M = 4.291). As in the other cases, legitimate and coercive bases were ranked fourth and fifth.

Because the numbers of principals reporting recent promotion or non-promotion are small (and some confusion may have existed among respondents generally when responding to this question) and the difference between the means of the top-ranked bases are quite small, no real differences may exist. What is interesting here is that all groups--principals generally, promoted principals, non-promoted principals, and decision makers--report that they primarily
use types of power and power bases that rely on persuasion through the use of expertise, rewards, and reference to achieve their ends.

Again, probably due to the small numbers in each group at this stage of the data collection and analysis, initial t-tests for independent samples showed that no significant differences existed among the groups. As additional data are available for analysis and a second state added to the data pool, these results may change.

**Discussion of Preliminary Results**

Finding that no significant difference exists between the power types used by principals who reported that they had not been promoted and those reported by decision makers runs counter to the arguments that power is an important, if not the most important, ingredient in receiving a promotion (Pfeffer, 1992; Shakeshaft, 1987). Further, it was expected that non-promoted and promoted principals would report different patterns of power use, and this was not so. In fact, for the data available so far, all the respondents were more alike than not.

While it might be argued at this point that the relatively small "n"s for each group might mitigate the results and that gender analyses may show alternative patterns, analyses to date suggest that the use of power and its resources are very consistent among the administrators in the sample. Further analyses related to years in position, promotion over time, and ethnicity may shed more light. In addition, all of those who responded had already been promoted at one point or another, and their power styles enabled them to be promoted. Populations that may differ in the use of power may be teachers or assistant principals. Moreover, other factors may influence promotion, including the availability of openings or a mismatch of the applicant's skills and experience and position requirements. Another explanation could be that the "n" for non-promoted principals is too small. Finally, the survey instrument itself may have confused the respondents. All of these issues will be addressed in the next analyses.
Notes

1 The analyses for the questions related to gender have not been completed.

2 The data reported here represent only the initial returns from Colorado administrators. Additional data also will be collected from administrators in Florida.
References


U.S. Department of Education
Office of Educational Research and Improvement (OERI)
Educational Resources Information Center (ERIC)

REPRODUCTION RELEASE
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: Power Principals, and Promotion

Author(s): Sandra Tarbell Elliott / Rodnemuth

Corporate Source: University of Colorado at Denver

Publication Date: March 1997

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

Check here
For Level 1 Release:
Permitting reproduction in microfiche (4” x 6” film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 1

Check here
For Level 2 Release:
Permitting reproduction in microfiche (4” x 6” film) or other ERIC archival media (e.g., electronic or optical), but not in paper copy.

The sample sticker shown below will be affixed to all Level 2 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Level 2

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

"I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature:

Printed Name/Position/Title:

University of Colorado at Denver

C/O 2255 Angelbluff C

Signature: Sandra T. Elliott/Principal

Printed Name/Position/Title: Sandra T. Elliott/Principal

Telephone: 719-522-6706

E-Mail Address: j95226706@ucdenver.edu

Date: 12/20/97

organizational_address:

E-mail Address:

Telephone:

Fax:

Printed Name/Position/Title:

University of Colorado at Denver

C/O 2255 Angelbluff C

C/O Springs CO 80919