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ABSTRACT

This study explored chief vocational administrators' (CVAs) perceptions of the importance of on-the-job experiences to leadership development. In telephone interviews, CVAs with the highest scores on the Leadership Effectiveness Inventory in a 1993 study (n=69) identified experiences most helpful to leader development: new positions offering increased responsibilities; special start-up work assignments; handling personnel problems; mentoring, counseling; and working with a supervisor. Experiences provided the following opportunities for leadership development: challenge of new or complex problems; chance to learn new ideas, practices, insights; application and practice of skills and knowledge; encouragement and confidence building; and exposure to positive role models. These opportunities developed certain leadership qualities: communication skills; administrative/management knowledge and skills; interpersonal skills; team building skills; sensitivity, respect; confidence; self-acceptance; broader perspective about the organization; and appropriate use of leadership styles. CVAs recommended these types of experiences for future leaders: mentoring, counseling, and support; formal training programs; internships; special assignments (while on-the-job); and simulations/case studies. Developmental aspects of these experiences were as follows: the chance to learn new ideas, practices; freedom to make decisions and mistakes; application and practice of skills and knowledge; challenge of new or complex tasks; exposure to positive role models; and opportunity to plan and reflect. (Appendixes contain 47 references and written comments.) (YLB)

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National Center for Research in
Vocational Education

University of California, Berkeley

**IMPORTANCE OF ON-THE-JOB EXPERIENCES
IN DEVELOPING LEADERSHIP CAPABILITIES**

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by Judith J. Lambrecht, Charles R. Hopkins, Jerome Moss, Jr., and Curtis R. Finch

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Success as a leader in vocational education is conceived primarily as facilitating the group process and empowering group members. However, a telephone survey conducted in early 1990 of members of the University Council for Vocational Education revealed that there were very few identifiable activities being offered by member institutions intended for leadership development. In addition, while many faculty recognized the need for more and better leadership development activities, they lacked the time to create them. Therefore, NCRVE decided to offer special incentives to institutions of higher education and state agencies to initiate innovative leadership development programs for graduate students and inservice personnel in vocational education. This article discusses the resulting data about leadership development. By J. Moss, Jr., G. W. Leske, Q. Jensrud, T. H. Berkas.

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Gender, Leadership, and Vocational Education


Nearly half of vocational education professionals are female, yet few leaders are female. Is there any difference between men and women in their effectiveness as leaders? To answer this, Moss and Jensrud review a number of studies comparing female and male managers. Most studies find that female administrators are superior, by a small but significant difference, to males. The authors note that various biases could account for this difference. For instance, because the socialization process for women encourages an empowering, facilitating leadership style, which is now seen as desirable, females may be judged as more effective. The best route in seeking leaders is to disregard gender. If discrimination against women continues, they warn, the better leaders will be lost. By J. Moss, Jr., Q. Jensrud.

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Vocational education is now in a transformational period due to changes in the nature of work, increasing public demands upon the educational system, and changes in the ethnic/cultural composition of the student body. The necessity for good leaders becomes especially critical during periods of change. What constitutes effective leadership? Certain attributes have been postulated as shaping and guiding effective leadership behaviors in a wide variety of vocational education situations. NCRVE conducted a series of three studies which reveal a strong relationship between the postulated leadership attributes and effectiveness. This reprint, first published in the Summer 1991 issue of the *Journal of Industrial Teacher Education*, presents data from these three studies. By J. Moss, Jr., C. R. Finch, B.-C. Johansen.

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EXECUTIVE SUMMARY

The purpose of this study was to explore the importance of on-the-job experiences as a means of complementing and supplementing leadership development provided in formal education programs. Not only do on-the-job experiences have potential to assist persons who are actively involved in leadership programs; they may also be of value in reaching and impacting vocational education professionals who have not had an opportunity to attend these programs. This study used the following seven questions to guide its procedures:

1. What are the characteristics of on-the-job experiences that successful vocational education administrator-leaders consider most helpful to their development as leaders? Are there differences that relate to gender?
2. What leader qualities are perceived to be improved by the on-the-job experience?
3. What developmental aspects are associated with various types of on-the-job experiences? (What is it about the experiences that make them effective?)
4. What developmental aspects of on-the-job experiences are associated with improved leader qualities?
5. What improved leader qualities are associated with various types of experiences?
6. What types of experiences do vocational education administrator-leaders recommend for preparing future leaders?
7. What are the perceived developmental aspects of the experiences recommended for future leaders? (What is perceived to make the experiences effective?)

This study builds directly on research findings from the corporate world that indicate how on-the-job experiences relate to leadership development. This research also responds to the need to determine the ways in which these findings apply to education in general and vocational education professionals in particular. And, finally, this study links closely to and builds directly on over six years of leadership research and development conducted by the National Center for Research in Vocational Education (NCRVE). It was the next logical step in NCRVE's long-term research and development program.

From among the 220 chief vocational administrators who participated in the collection of normative and standard data for the *Leader Attributes Inventory (LAI)* and the *Leader Effectiveness Inventory (LEI)*, the 78 with the highest scores (top one-third) on the LEI were identified and asked to participate in a study to examine the importance of on-the-job experiences in the development of leadership capabilities. Sixty-nine vocational education administrator-leaders (26 women and 46 men) from 12 states participated in the telephone interview process. The Behavioral Event Interview (BEI) technique was chosen as the data collection method because of its ability to focus on meaningful dynamic behaviors demonstrated by leaders that they judge have had an impact on their development as leaders.

The Interview Protocol asked each vocational administrator-leader to describe two on-the-job incidents that had the most impact on their professional development as leaders. Specific probes were then used: (1) Can you give a brief overview of the incident (that had the most impact on the development of your leadership qualities)? (2) Can you briefly describe what made this on-the-job incident developmental? (3) When in your career did the incident take place? (4) Who or what initiated the incident? (5) How did the incident unfold? (6) In what ways did your leadership qualities improve or develop as a result of the incident? (7) Are there other things I should know about the context of this incident? (8) If I wanted to provide a similar on-the-job developmental experience for someone else, what else would I need to know?

The intent of these probes was to gain as much information as possible about the incident and to obtain specific examples to capture what happened and what the administrator was thinking and feeling during the experience. The ultimate goal was to gain an understanding of how this experience was developmental and how its developmental effects might be replicated on the job for others. A total of 140 incidents were described by the vocational education administrator-leaders.

Five types of experiences were identified by successful vocational education administrator-leaders as most helpful to their development as leaders: (1) new positions that offer new and/or increased responsibilities; (2) special start-up work assignments; (3) handling personnel problems like conflicts and firings; (4) being mentored, counseled, supported; and (5) working with a supervisor. These experiences were perceived to provide the following kinds of opportunities for leadership development: (1) the challenge

of new and/or complex tasks or problems; (2) the chance to learn new ideas, practices, insights; (3) the opportunity to apply and practice skills and knowledge; (4) encouragement and confidence building; and (5) exposure to positive role models. The kinds of leadership development opportunities identified were most frequently perceived to result in the development of the following leadership qualities: (1) communication (listening, oral, written) skills; (2) administrative/management knowledge and skills; (3) unspecified interpersonal skills; (4) team building skills; (5) sensitivity, respect; (6) confidence, self-acceptance; (7) a broader perspective about the organization; and (8) the appropriate use of leadership styles.

Men tended more than women to initiate their own challenging experiences, and were more frequently motivated by the risk of failure and/or by the interest and excitement generated by the experience. On the other hand, challenging experiences for women came more often from new and complex tasks, where they had the support of superiors and/or other positive role models, or from job stress and barriers they perceived to accomplishing the tasks. Further, more men than women used their on-the-job experiences to improve their team building, motivational, and use of leadership styles qualities, while more women than men felt they improved their insightful, networking, and organizational skills. With two exceptions, men and women agreed upon the qualities most frequently perceived to have been improved by on-the-job experiences. Women included networking and organizing rather than team building and using appropriate leadership styles among the seven most frequently perceived improved qualities. It is also noteworthy that a higher proportion of women than men reported gains in insightfulness, while a higher proportion of men than women indicated the quality of motivating others to have been developed.

The five most frequently recommended types of experiences for future leaders were (1) mentoring, counseling and advocate support; (2) formal training programs (e.g., leadership academy); (3) internships; (4) various special assignments (while on-the-job); and (5) simulations/case studies. Missing from this list were three of the most frequently mentioned types of on-the-job experiences that respondents had reported were effective in developing their own leadership abilities: (1) providing new and/or increased responsibilities, (2) special start-up assignments, and (3) handling personnel problems like conflicts and firings. Men and women differed somewhat in their recommendations for the types of experiences that future leaders should have. A higher proportion of women than men favored mentoring, counseling and advocate support as well as formal training

programs and simulations/case studies. A greater proportion of men than women favored internships.

Based on the results of this study, on-the-job experiences can certainly be promoted as one effective, and perhaps indispensable, means for developing future leaders. Successful leaders participating in this study all had vivid positive memories of experiences which they said significantly effected their development as leaders. Further, the successful leaders advocated on-the-job activities that they believed could be used effectively in developing future leaders for vocational education. The findings of this study are consistent with studies in business and industry which also report that certain kinds of on-the-job experiences are effective for developing leaders. Thus, it is important that current vocational education administrator-leaders take advantage of the opportunities they have for using on-the-job experiences to develop and improve the leadership capabilities of persons on their staffs who are preparing to assume new and more advanced leadership roles.

Not all on-the-job experiences are equal in their potential effectiveness for leadership development. Two characteristics of effective experiences have been consistently revealed by this and other research. On-the-job learning is most likely to occur for both men and women when

1. Individuals are placed in a variety of challenging situations with problems to solve and choices to make under conditions of risk. These situations (1) motivate individuals to learn, (2) provide opportunities to gain new ideas and knowledge and to practice skills and apply knowledge, and (3) encourage new insights through reflection on prior actions.
2. Individuals gain their experiences in a supportive environment with supervisors who provide positive role models and constructive support and mentors who provide counsel.

Some examples of challenging situations include the provision of new or increased responsibilities; special start-up assignments such as initiating a new program or project; and handling personnel problems such as hiring and firing.

Given that men were more likely than women to be the initiators of their developmental experiences, vocational education administrator-leaders may need to be more

aggressive in identifying and providing appropriate on-the-job developmental opportunities for women preparing for leadership roles.

The most important kinds of outcomes from on-the-job experiences for both men and women appear to be growth in personal and interpersonal leadership skills, knowledge, and values. These outcomes most typically include improvement in communication (listening, speaking, writing) skills, sensitivity to and respect for others, team building skills, appropriate use of leadership styles, self-confidence, networking, planning, organizing, and decisionmaking. Additionally, it is common for on-the-job experiences to further develop administrative/management knowledge and skills specific to the context, as well as to broaden one's perspective about the organization.

Vocational education administrator-leaders participating in this study were not asked to identify examples of formal education program-related experiences through which they developed their leadership qualities. Thus, relatively few (9%) reported formal training programs (e.g., leadership academies) and the use of simulations/case studies as significant leadership development experiences in their own development. Yet, about 30% of them recommended the use of formal preparation programs for future leaders. Formal preparation programs should *not* be considered as a substitute for appropriately challenging on-the-job experiences, but only as a very useful supplement to them.

It is safe to conclude that when using on-the-job assignments for leader development purposes, the key is to provide multiple opportunities to assume responsibility for challenging assignments and to reflect on the meaning of these events for accomplishing important common purposes within given communities of practice.

TABLE OF CONTENTS

Executive Summary	i
Introduction	1
Need	1
Purpose	3
Procedures	5
Sample	5
Developing the Instrumentation	10
Training Interviewers	12
Conducting the Telephone Interviews	13
Coding and Analyzing Data	13
Results	17
Characteristics of Experiences Considered Most Helpful	
in Leader Development	17
Leader Qualities Perceived To Be Improved by On-the-Job Experiences	25
Developmental Aspects Associated with Types of On-the-Job Experiences	28
Developmental Aspects of On-the-Job Experiences Associated	
with Improved Qualities	31
Improved Qualities Associated with Types of Experience	34
Types of Experiences CVAs Recommend for Preparing Future Leaders	37
Perceived Developmental Aspects of Experiences Recommended	
for Future Leaders	41
Summary of Results	43
Discussion	46
Implications for Practice	48
Nature of Desirable On-the-Job Experiences	49
Timing of On-the-Job Experiences	49
Leadership Qualities That Will Be Developed	50
A Word About Non-Job Education-Related Experiences	50
References	51
Appendix A: Interview Write-Up	57
Appendix B: Interview Coding System	61

INTRODUCTION

Yukl (1994) noted in his comprehensive book on leadership in organizations that many of the skills learned by corporate managers are based on experience rather than formal education. He went on to say that “Managers are more likely to learn relevant leadership skills and values if they are exposed to a variety of developmental experiences on the job, with appropriate coaching and mentoring by superiors and peers” (p. 456). Others (Bray, Campbell, & Grant, 1974; Hall, 1976; MacKinnon, 1975) agree that much if not most managerial-leadership development takes place on-the-job rather than in seminars or classrooms, and that early leadership experiences are among the key influences on career development (Margerison & Kakabadse, 1984).

Some, such as V. A. Howard (1995), have developed arguments for why leadership cannot be taught. Howard has argued that many of the propositional (knowledge about leadership) and procedural (knowledge about leading) components of leadership are teachable—at least available for discussion and reflection. However, he sees leadership as more like creativity, virtue, and musicianship than solely a cognitive accomplishment. That is, leadership is as much learned as it is taught. The learning is dependent “upon the *interpretive abilities and practical opportunities* of the learner given everything that has been taught” (p. 119). He would suggest that the instances when leadership can be identified as having occurred, and thus been “successful leadership” cannot be attributed to the behavior of a single individual. These successes are contingent on too many contextual factors. Thus, the cycle seems to return to emphasis on experience. In Howard’s words,

Now leadership is very similar to musicianship in that regard [its teachability]. While it cannot be taught directly, it can be learned depending upon the interpretive ability and practical opportunities of the learner given everything that has been taught. (p. 119)

Need

Until recently, the specific characteristics and impact of effective on-the-job experiences have been largely unexplored (Kotter, 1988; McCauley, 1986). Beginning in the 1980s, researchers at the Center for Creative Leadership (CCL) conducted a series of studies directed toward on-the-job learning. One of these studies (McCall, Lombardo, & Morrison, 1988) focused on interviews with nearly 200 senior business executives to

determine experiences that had the greatest impact on their careers and what had been learned from them. Findings of this study were used to create an instrument capable of assessing developmental opportunities in diverse management jobs. The instrument's manual and trainer's guide (Ohlott, McCauley, & Ruderman, 1993) states that the fundamental conclusion of the McCall et al. (1988) study and the basic premise of the instrument are that

on-the-job learning is most likely to occur when managers are faced with challenging situations. Challenging situations place the manager in dynamic settings full of problems to solve and choices to make under conditions of risk and uncertainty. These situations are developmental for two reasons. First, they provide a motivation for learning . . . Second, challenging situations provide the opportunity to take action and to learn from the effectiveness of the action. (p. 1)

The McCall et al. (1988) study results also revealed that what was learned from challenging on-the-job experiences was not technical in nature, but consisted of leadership attributes such as handling relationships, temperament, basic values, and personal awareness. These results were confirmed by Valerio (1990) in her study of New York Telephone Company managers.

The results of several CCL studies support the notion that persons' on-the-job experiences can have a positive impact on managers' leadership development. McCall (1988) prepared a report that summarized a series of studies focusing on successful, high-potential executives. Sixteen developmental experiences were described, as well as the elements that made them developmental, and what executives stated they learned from the experiences. A report written by Lombardo and Eichinger (1989) documented five broad categories of experience that research has shown executives indicate are potentially developmental: challenging jobs, other people (mostly bosses), hardships, coursework, and off-the-job experiences. The authors then detailed 88 developmental experiences that executives can use to help them have a greater variety of leadership challenges and to assist them in learning from these challenges. In a companion report, Eichinger & Lombardo (1990) recommended 22 ways that staff managers could develop leadership skills and, thus, close the leadership gap between staff jobs and careers.

Thus, research conducted in business settings has shown that the timing and type of on-the-job experiences (e.g., use of mentors, cross-organizational experience opportunities) are relevant variables in the study of on-the-job leadership development.

Further, the extent and nature of the challenge an experience presents to an individual are of significance in its developmental effectiveness. Researchers have also identified a number of ways that on-the-job experiences can be used to improve and enhance executives' and staff managers' leadership capabilities. Unfortunately, little is known about the ways on-the-job experiences contribute to public educators' leadership capabilities. Research related to leadership development in public education settings has traditionally tended to focus on the study of formal leadership programs and their impact on participants with little consideration given to how leadership may be developed on-the-job (Griffiths, Stout, & Forsyth, 1988).

Purpose

The purpose of this study was to explore the importance of on-the-job experiences as a means of complementing and supplementing leadership development provided in formal education programs. Not only do on-the-job experiences have potential to assist persons who are actively involved in leadership programs; they may also be of value in reaching and impacting vocational education professionals who have not had an opportunity to attend these programs. This study used the following seven questions to guide its procedures:

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4. What developmental aspects of on-the-job experiences are associated with improved leader qualities?
5. What improved leader qualities are associated with various types of experiences?
6. What types of experiences do vocational education administrator-leaders recommend for preparing future leaders?

7. What are the perceived developmental aspects of the experiences recommended for future leaders? (What is perceived to make the experiences effective?)

This study builds directly on research findings from the corporate world that indicate how on-the-job experiences relate to leadership development. It also responds to the need to determine the ways in which these findings apply to education in general and vocational education professionals in particular. And, finally, this study links closely to and builds directly on over six years of leadership research and development conducted by the National Center for Research in Vocational Education (NCRVE).

NCRVE's research activities related to leadership focused initially on establishing a definition and an explanatory model for leadership (Moss & Liang, 1990) and verifying the model (Finch, Gregson, & Faulkner, 1991; Moss, Finch, & Johansen, 1991; Moss & Jensrud, 1995; Moss & Liang, 1990). Additional research and development efforts have included the stimulation, conduct, and evaluation of leadership programs for graduate students and inservice practitioners (Moss, Jensrud, & Johansen, 1992); creation and field testing of leadership case studies and an organizational simulation designed for use in leadership development programs for professionals (Finch, 1992; Finch, Reneau, Faulkner, Gregson, Hernández-Gantes, & Linkous, 1992); development of a *Leader Attributes Inventory (LAI)* (Moss, Lambrecht, Jensrud, & Finch, 1994b) and a *Leader Effectiveness Index (LEI)* (Moss, Lambrecht, Jensrud, & Finch, 1994a); and preparation of a comprehensive, transportable leadership development program targeted at underrepresented groups in the vocational education profession (Moss, Schwartz, & Jensrud, 1994). This study is the next logical step in NCRVE's long-term research and development program.

PROCEDURES

This study included in its research procedures (1) selecting the sample of chief vocational administrators to be interviewed, (2) developing the instrumentation, (3) training the interviewers, (4) conducting the interviews, and (5) coding and analyzing the data gathered. Each of these areas is described below.

Sample

The sample of chief vocational administrators who participated in this study was drawn from the larger sample of vocational educators who were part of the 1993 study to collect normative data and standards for the *LAI* (Moss et al., 1994b) and the *LEI* (Moss et al., 1994a). The selection of the original sample will be described, followed by a description of how the smaller sample of chief vocational administrators was identified.

National Sample of Vocational Educators

In order to collect national normative data on the *LAI* and the *LEI*, vocational educators with three different roles (each with an expectation that effective leadership should be provided) were used to form three purposive samples:

1. *Chief Vocational Administrators (CVA)*. These were the chief line administrators in (1) specialized public secondary vocational institutions (e.g., principals, directors); and (2) both specialized and comprehensive public postsecondary institutions (e.g., presidents, directors, deans).
2. *Vocational Department Heads (VDH)*. These were administrators/managers of clusters of vocational programs (e.g., department heads and coordinators in specialized public secondary vocational institutions, and both specialized and comprehensive public postsecondary institutions).
3. *Vocational Teacher Leaders (VTL)*. These were professionals in non-administrative/management positions (e.g., teachers and counselors) who were viewed by their chief administrator and/or department head as particularly influential among their peers. Examples are teachers who held elective positions in faculty associations, professional organizations, or unions.

With the advice of consultants, a group of 12 states was selected from which the three samples were drawn. These states were deemed to have well-developed secondary and/or postsecondary vocational systems with relatively high proportions of minority teachers and administrators. Table 1 presents the total population of CVAs in each of the 12 states by type of institution. It is from this population that the sample of CVAs was selected for participation in this study.

All of the 329 CVAs in the 12 states were contacted by letter and then by telephone. The study and their role was explained, and their agreement to participate was solicited; 311 CVAs agreed to participate. Whether or not the CVAs agreed to participate, they were also asked to nominate three VDHs including (where possible) at least one member of a minority group and one female; and up to three VTLs, giving consideration to minorities and females whenever possible.

VDHs were then called and their participation in the study solicited. Minority VDHs were contacted whenever they had been nominated by CVAs. When no minority member had been nominated, or if the nominee declined to take part in the study, an attempt was made to randomly select an equal number of men and women to contact for the VDH sample. Two hundred eighty nine VDHs consented to take part in the study. During the interviews, VDHs were asked to provide the names of up to three VTLs, giving consideration to including minorities and females whenever possible.

Finally, VTLs were called and invited to be a part of the study. Minority members who had been nominated by either the CVA or VDH at a given institution were called first. If no minority member had been nominated, or if she or he refused to participate, individuals who had been named by both the CVA and the VDH were called. In lieu of joint nominees, an attempt was then made to randomly telephone an equal number of men and women. A total of 305 VTLs agreed to participate in the study.

Table 1
Population of Chief Vocational Administrators
(N=329)

State	Technical College Administrators	Community College Administrators	Secondary Administrators
Arkansas	24		
Colorado		12	
Florida		27	
Georgia	32		
Illinois		38	
Iowa		18	
Maryland			33
Ohio			60
Oklahoma			30
Oregon		13	
Tennessee	26		
Wisconsin	16		
Totals	98	108	123

Collecting the Normative Data

Each of the 905 persons who consented to take part in the norming and standards study was sent a packet of materials containing the following pieces:

- a cover letter explaining what they as ratees were being asked to do
- a form to collect demographic information about the ratee (participant)
- a form for the ratee to name the five persons who were to complete the *LAI* and the *LEI* as observer-raters

- five copies of the *LAI* rating-by-observer forms
- five copies of the *LEI*
- five copies of a cover letter
- envelopes (return addressed and postage paid) for completed forms to be sent back directly to the researchers

Directions to the participants stipulated that the *LAI* and *LEI* were to be given to five persons who “(a) Report to you either directly or indirectly (or in the event that you do not have five subordinates, they may be peers); (b) know you well at work; and (c) who, as far as possible, include females and persons from minority groups.”

One follow-up was conducted with individuals who had agreed over the telephone to participate in the study, but who either had not returned completed forms containing demographic information, or who had fewer than three observer-raters return completed *LAI* and *LEI* instruments. (A minimum of three raters was considered essential for reliable ratings.) Most of the follow-ups were conducted by telephone; the remainder were sent letter reminders.

All of the completed *LAIs* were electronically screened for eligibility and then scored. To be eligible, the respondent had to report that she or he (1) knew the participant/ratee “very well” or “fairly well” (not “casually” or “not at all”); and (2) was a subordinate or peer (not a superior) of the ratee. The responses of ineligible raters were eliminated and if this reduced the number of eligible raters below three, the ratee was dropped from the sample. Table 2 summarizes the numbers of participants by each of the three samples at key stages of the data collection process.

The required number of completed *LAI* forms (at least three) were received from 77% of the individuals who had agreed over the telephone to participate in the study. After screening the completed *LAI* forms for eligibility, 61% of those who had agreed to participate remained in the three samples.

Table 2
Numbers of Participants by Sample Groups
at Key Stages of the Data Collection Process

Data Collection Stage	Chief Vocational Administrators	Vocational Department Heads	Vocational Teacher Leaders	Total
1. Total Number in the 12 Selected States	329	-	-	-
2. Agreed To Participate in the Study	311	289	305	905
3. Returned a Sufficient Number of Responses	260	221	212	693
4. Returned a Sufficient Number of Eligible Responses	220	168	163	551
5. Eligible Responses as a Percent of Those Agreeing To Participate	71%	58%	53%	61%

Selection of On-the-Job Interviewee Sample

From among the 220 CVAs who participated in the collection of normative and standard data for the *LAI* and the *LEI*, the 78 with the highest scores on the *LEI* were identified; that is, those who scored in the top one-third of their norm group. In a letter, the 78 CVAs were told their actual scores on the *LEI*, that they were in the top one-third of their norm group, and asked if they would be willing to be part of the current study to examine on-the-job experiences as a means for developing leadership capabilities. This letter was followed up by a phone call to determine if the CVA would be willing to participate in a telephone interview which was estimated to take approximately 30-45 minutes.

When CVAs agreed to participate in the study, they were told that they would be asked to describe two incidents that had the greatest impact on the development of their leadership capabilities. Since each person needed to have time to think about these two incidents, the interview was not carried out immediately. Rather, a time for the actual

interview was scheduled for a later day, generally within the next two weeks. The initial phone call was followed up by a fax to confirm the interview date and time and restating the request for two critical incidents. A total of 69 CVAs agreed to participate in the telephone interviews and to relate at least two on-the-job incidents that affected their development as leaders. Table 3 presents the number of subjects by gender and type of employer.

Table 3
Number of Subjects by Gender and Type of Employer

Employer				
Gender	Secondary	Technical College	Community College	Total
Female	9	10	7	26
Male	17	12	14	43
Total	26	22	21	69

Developing the Instrumentation

The interview technique was selected as the primary approach to collect field data because of its ability to assist in interpreting the significance of particular variables (Borg & Gall, 1989; Richardson, Dohrenwend, & Klein, 1965). It was chosen over other techniques and "objective" instruments because of its flexibility and adaptability (Kerlinger, 1986). The interview this study used can, in part, be labeled as moderately structured (Stewart & Cash, 1985). This is because the interview contained open-ended and probing questions that followed each major question. The probes were a mixture of open-ended and closed-ended questions. This funneling technique allowed the freedom to probe into and to adapt to different interviewee answers like the nonstructured interview does, but it also provided a schedule for the interview. As with the structured interview, this technique can be replicated fairly easily; it produces data that can be analyzed and compared, and it does not require the use of a highly trained interviewer. In effect, the moderately structured interview was selected based on a decision to utilize the strength and not the weaknesses of both the structured and nonstructured interviews (Stewart & Cash, 1985).

Though Kerlinger (1986) and Borg and Gall (1989) describe the face-to-face interview as “perhaps the most powerful and useful tool of social scientific research” (Kerlinger, 1986, p. 379), it is also costly, time consuming, and is subject to compromises made to improve the social context of the interview (Frey, 1983). Consequently, this study utilized the telephone to minimize the cost and time.

A key element of the interview schedule was a Behavioral Event Interview (BEI). The BEI was developed by David McClelland (1978) and colleagues at McBer and Company. It is based on the Critical Incident Technique that was created by Flanagan (1954). Flanagan had job incumbents write behavioral descriptions of critical incidents they experienced in their work. However, a problem with this technique was that the written incidents tended to not be detailed enough to determine what the job incumbent was thinking, feeling, and specifically doing. As a result, the BEI was developed so that a particular critical incident could be explored until behaviors, thoughts, and feelings were adequately reported (McClelland, 1978). Though BEI respondents may initially only discuss behaviors they believe are critical, additional probing can reveal other relevant behavior that occurred in the event. Klemp (1979) maintained that through the use of extensive probing, the interviewer can elicit descriptions of behaviors that were actually performed in the event, rather than more selective recollections of behaviors.

The BEI served to rectify some of the weaknesses that have been identified in studies of leadership (Boyatzis, 1982; Campbell, Dunnette, Lawler, & Weick, 1970; Murphy, 1988). The BEI has had a very successful history of use in a variety of settings, including business, industry, education, and the military (see Goleman, 1981; Huff, Lake, & Schaalman, 1982; Schmidt, Finch, & Faulkner, 1992; Spencer, 1979). Campbell et al. (1970) describe the Critical Incident Technique (upon which the BEI is based) as one of the most effective methods for assessing managerial behavior. In summary, the BEI was chosen because of its ability to focus on meaningful dynamic behaviors demonstrated by leaders that they judge have had an impact on their development as leaders.

Each CVA was asked to describe two on-the-job incidents that had the most impact on their professional development as leaders. The specific probes to be used by the interviewers were developed through group discussion by the research team as a whole. The intent of these probes was to gain as much description as possible about the incident and to obtain specific examples to capture what happened and what the administrator was

thinking and feeling during the experience. The ultimate goal was to gain an understanding of how this experience was developmental and how its developmental effects might be replicated for others.

The eight-part Interview Protocol used the BEI technique. The following were the initial probes:

1. Can you give a brief overview of the incident (that had the most impact on the development of your leadership qualities)?
2. Can you briefly describe what made this on-the-job incident developmental?
3. When in your career did the incident take place?
4. Who or what initiated the incident?
5. How did the incident unfold?
6. In what ways did your leadership qualities improve or develop as a result of the incident?
7. Are there other things I should know about the context of this incident?
8. If I wanted to provide a similar on-the-job developmental experience for someone else, what else would I need to know?

Training Interviewers

The BEI requires that interviewers have a common understanding of the questions to be asked, the manner in which rapport can be established with an interviewee, and effective use of follow-up questions for probing answers. The research team sought the assistance of a specialist in the BEI process who shared instructional materials about how such interviews should be conducted. The entire research team met at a single site to role-play interviews with administrator-volunteers. These interviews were observed and taped for self-critique and critique by the entire group. When the team judged that a common level of interviewing expertise was evident among all researchers, the individual interviews with CVAs were scheduled.

Conducting the Telephone Interviews

Interviews were completed with 69 CVAs in 12 states. These telephone interviews were recorded on tape (with the CVA's permission) for later transcription and coding. A total of 140 incidents were described by the CVAs. Table 4 presents the number of on-the-job incidents reported by gender and type of employer.

Table 4
Number of On-the-Job Incidents by Gender and Type of Employer

Gender	Employer			Total
	Secondary	Technical College	Community College	
Female	18	21	15	54
Male	35	23	28	86
Total	53	44	43	140*

*Two subjects provided three incidents each.

Interviewers found that the original time estimate of 30-45 minutes per interview was generally accurate, though some interviews extended for longer periods of time. The interviews were transcribed in their entirety as they were completed.

Coding and Analyzing Data

This section describes the procedures used to code and analyze information collected from interviews. It should be noted that analysis was not a separate phase of the study to be implemented following completion of interviews. As has been done in previous studies (Finch et al., 1991; Lofland, 1971), the researchers chose to interview and analyze concurrently. Miles and Huberman (1984) also advocate analysis during data collection, stating that it allows interviewers to improve their craft. They maintain that such activity enables the researchers to "cycle back and forth between thinking about the existing data and generating strategies for collecting new—often better quality data" (p. 49). Through the use of this concurrent scheme, researchers were able to grow through experience and

formulate a meaningful thematic structure for the final text from the collection of critical events.

As each interview was conducted, the interviewer completed a “write-up” for each incident. The “write-up” was prepared in the language of the interviewee, thus reading in the first person. It read like a story telling what actually happened. The purpose of the “write-up” was to organize and present the interview transcript and note-taking information in a more easily understandable sequence and format. Even though each interview was recorded and transcripts of the interview tapes were prepared, the “write-up” provided researchers with meaningful information that had been carefully organized to better facilitate coding and analysis (Mentkowski, O’Brien, McEachern, & Fowler, 1982). Information contained in the “write-up” was organized into sections which paralleled the Interview Protocol described in the earlier section on “Developing the Instrumentation.”

A sample of an interview “write-up” is provided in Appendix A. The interview “write-ups” were checked against the original tapes of the interviews by another member of the research team in order to assure their accuracy and completeness.

After a few interviews had been completed, the research team met to discuss the coding scheme. Based on the initial Interview Protocol, actual experience from the interviews, the interview “write-ups,” and using the conceptual structure of the *LAI* (Moss et al., 1994b), a coding sheet was prepared that integrated the potential attributes developed by the on-the-job incidents with the Interview Protocol. This coding scheme was to become the formal guide for interview analysis. As Boyatzis (1982) has noted, “the coding system attempts to explain how an interview should be assessed to determine the presence or absence, or degree of presence, of a particular characteristic” (p. 51). A coding system must, therefore, be clearly delineated so that various researchers agree as to how information will be coded.

While the initial Interview Protocol and the conceptual structure of the *LAI* were the starting points for the code list, other items were added so that all aspects of the interviews could be placed into a logical category. The decision to add new categories as needed aligns with the perception of Lofland and Lofland (1984) and Miles and Huberman (1984), who advocate modifying coding schemes during data collection and analysis instead of forcing data into predetermined coding schemes.

In addition to basic demographic coding for administrator code, interview code, gender, and type of employer, the following broad categories were coded for each interview:

1. Type of Experience, such as varied jobs/positions, new positions, within a position, or non-job activities.
2. Developmental Aspects of the Experience, such as motivating aspects and facilitating aspects.
3. Timing of Experience, including the judgment of whether the timing was critical.
4. Initiator of the Experience, namely, the administrator or another.
5. Qualities Improved or Developed, based on the attributes included in the *LAI*.
6. Type of Planned Experience To Be Provided for Others, such as on-the-job experiences in varied jobs or positions, new positions, or within a position, or non-job activities that may or may not be education-related.
7. Important Aspects of Planned Experience, such as motivating aspects or facilitating aspects.
8. Macro or Overarching Insights that could not be coded elsewhere.

The complete Interview Coding System sheet is provided in Appendix B. This sheet contains the finer detail of the outline under each of the elements listed above. The researchers agreed that a response should be coded in each of the eight categories, and that more than one response may be appropriate for some of the categories. However, a particular code was used only once per interview "write-up." In other words, while the interviewee may have provided several descriptions within an incident that would support the use of a particular code, the code was applied to that interview only once.

The researcher who conducted an interview did the first coding of that interview from the prepared "write-up." After the first coding of an interview, each interview was then coded a second time from the original "write-up" by a different member of the research team. This second person had also coded his or her own interviews prior to completing the

seconding of a different set of interviews. Thus, each interview was coded twice by persons familiar with the interviewing, "write-up," and coding process. Both persons who had coded a set of interviews then met to discuss each interview. Where codes differed, the rationale for the coding was discussed until consensus was reached.

The coded interviews were entered into *The Ethnograph V4.0* (Seidel, Friese, & Leonard, 1995) software package in order to obtain summary data about the frequency of each type of code and listings of the passages for each code type. Crosstabulations were carried out between major code categories to examine relationships between types of incidents and the leadership qualities which were developed. These summaries and crosstabulations are presented in the "Results" section.

RESULTS

As discussed previously, 69 individuals (26 females and 43 males) described 140 incidents they believed helped them to develop their leadership qualities. Participants were asked to identify the characteristics of the incidents they considered most helpful to their development as leaders, the qualities they perceived improved as a result of the experience, and the types of experiences they would recommend for preparing future leaders. The information provided in these incident interviews is discussed in the sections that follow. Included within blocked borders are illustrative quotations from interviewees that help explain and support the results.

Characteristics of Experiences Considered Most Helpful in Leader Development

CVAs were asked to provide detail about the 140 incidents and resultant experiences they reported. This included such information as whether the experience was job or non-job related, whether it occurred in a new position or within an existing position, whether the timing of the experience was important to their career development, what the developmental aspects of the experience were, and who initiated the experience.

Table 5
Types of Experiences by Gender

Item No.	Experience	Female	Male	Total	% of 185
Job Experiences					
<i>Varied Positions</i>					
8	Across educational inst./org.	1	2	3	
9	Across educational functions	0	3	3	
10	Work in business/industry	5	5	10	
11	Work in government	1	0	1	
12	Other	0	2	2	
	Subtotal			19	10
<i>New Position</i>					
13	Change in context	2	3	5	
14	New/increased responsibilities	10	9	19	
15	Other	0	0	0	
	Subtotal			24	13
<i>Within a Position</i>					
16	Internship	0	3	3	
17	Spec. assignment: start-up	10	13	23	
18	Spec. assignment: fix-its	1	6	7	
19	Spec. assignment: other	4	3	7	
20	Teaching/counseling	1	6	7	
21	Personnel: hiring	2	0	2	
22	Personnel: conflict/firing	10	7	17	
23	Personnel: developing	3	5	8	
24	Work on teams/committees	4	4	8	
25	Mentors/counseling/advocate support	6	11	17	
26	Work with supervisor	5	8	13	
27	Other	2	5	7	
	Subtotal			119	64
Non-Job Activities					
<i>Education-related</i>					
28	Professional association/union	0	3	3	
29	Formal training	8	4	12	
30	Simulation/case study	0	0	0	
31	Shadow/observation	0	2	2	
32	Networking	0	0	0	
33	Other	0	0	0	
	Subtotal			17	9
<i>Noneducation-related</i>					
34	Community service	1	3	4	
35	Other	1	1	2	
	Subtotal			6	3
Total		77	108	185	100%*

*The percentages do not total 100% because of rounding.

A. Type of Experience

1. As can be seen in Table 5, 185 types of experiences were reported in the 140 incidents as most helpful to the respondents' development as leaders. Sixty-four percent occurred on-the-job as respondents worked within a position. The greatest number of these effective on-the-job experiences resulted from challenges inherent in special assignments to start-up new tasks/projects and from handling personnel problems. Receiving support and counseling from mentors and working with a supervisor were also considered important characteristics of effective on-the-job experiences.

"I recall that at that time I was only 29 years old. I don't know how many 29 year olds have had that kind of responsibility, but it makes you grow up pretty fast. I did a lot of homework at night."

* * * * *

"As an intern-administrator I had an opportunity to write a grant and develop a set of programs that were secondary programs for a postsecondary campus. It was one of the early shared time programs, where students came to the community college campus to get secondary vocational program."

* * * * *

"As a new supervisor, I had a confrontation with the instructors working under me regarding new procedures. This confrontation was a turning point for me in my career."

* * * * *

"Having the most profound effect on me in my leadership role, as a superintendent, was my mentoring with my prior superintendent."

2. Of the 185 types of experience, just 10% occurred as the result of respondents holding a variety of positions, mainly in business and industry.

3. Thirteen percent of the 185 types of experiences came from movement to a new position, principally as a result of new and increased responsibilities.
4. Only 9% of the 185 types of experiences took place in a non-job, education-related activity, like a formal training program, while 3% occurred in a variety of other noneducation-related situations.
5. There were few meaningful differences between men and women in the types of their experiences considered most helpful; women reported a somewhat greater proportion of experiences as a result of moving to a new position and education-related experiences.

Table 6
Timing of Incident by Gender

Timing	Gender					
	Female		Male		Total	
	#	%	#	%	#	%
Significant	27	31	15	28	42	30
Not significant	57	66	36	66	93	66
No relevant response	1	1	2	4	3	2
No response	1	1	1	2	2	1
Total	86	99%	54	100%	140	99%

B. Timing of the Incident

1. Timing, that is, when the incident came during their careers, was considered significant in 30% of the incidents reported by respondents. See Table 6.
2. There appeared to be no meaningful difference between male and female respondents on this factor.

Table 7
Developmental Aspects of the Experience

Item No.	Aspect	#	% of 385
<i>Motivating Aspects</i>			
36	Interest/enjoy	18	5
37	Risk of failure	22	6
38	New/complex	58	15
39	Overload/stress	10	3
40	Barriers	19	5
41	Other	0	0
<i>Subtotal</i>		127	33%
<i>Facilitating Aspects</i>			
42	Negative experience/failure	16	4
43	Plan/reflect	21	5
44	Assessment of personal strengths/weaknesses	18	5
45	Learn new ideas/practices	59	15
46	Apply/practice knowledge	41	11
47	Confidence building	28	7
48	Positive role model	27	7
49	Negative role model	10	3
50	Freedom	16	4
51	Other cultures	13	3
52	Other	4	1
<i>Subtotal</i>		253	66%
<i>No Response</i>			
53	No relevant response	5	1
Total		385	100%

C. Developmental Aspects of the Experience (What makes them effective?)

1. As shown in Table 7, 385 developmental aspects of the 185 types of leadership development experiences were reported. Developmental aspects of the leadership development experiences were identified as being either motivational or facilitating. Motivational aspects were those factors that cause a person to act or perform in a certain way. Facilitating aspects were those factors in the experience that made it easier to perform the task or

activity. Thirty-three percent of the developmental aspects were identified motivational, while 66% were identified as facilitating.

Table 8
Developmental Aspects of the Experience by Gender

Item No.	Aspect	Gender					
		Female		Male		Total	
		#	% of 54	#	% of 86	#	% of 140
	<i>Motivating Aspects</i>						
36	Interest/enjoy	4	7	14	16	18	13
37	Risk of failure	6	11	16	19	22	16
38	New/complex	25	46	33	38	58	41
39	Overload/stress	7	13	3	3	10	7
40	Barriers	9	17	10	12	19	14
41	Other	0	0	0	0	0	0
	<i>Facilitating Aspects</i>						
42	Negative experience/ failure	8	15	8	9	16	11
43	Plan/reflect	7	13	14	16	21	15
44	Assess personal	6	11	12	14	18	13
45	Learn new ideas/practices	22	41	37	43	59	42
46	Apply/prac. knowledge	17	31	24	28	41	29
47	Confidence building	13	24	15	17	28	20
48	Positive role model	12	22	15	17	27	19
49	Negative role model	3	6	7	8	10	7
50	Freedom	8	15	8	9	16	11
51	Other cultures	3	6	10	12	13	9
52	Other	1	2	3	3	4	3
	<i>No Response</i>						
53	No relevant response	1	2	4	5	5	4

- Of the 127 *motivating aspects*, the most frequently reported (63%) were the challenges associated with a new or complex task or problem and the risk of failure. Table 8 shows the differences in experiences reported by men and women. Men appeared motivated more by risk of failure than women, while women reported a higher proportion of challenging experiences with a new

or complex task or problem. It is also noteworthy that a higher proportion of women than men reported job overload/stress and barriers as significant developmental aspects, while more men found the experiences to be interesting, enjoyable, and exciting.

"It was a challenge. There was a lot of money that we had to raise. We had to have this gorgeous facility to meet standards. We had to hire a physical therapist—who are high-dollar (professionals). Every place we went people said, "You can't do this. You can't find faculty, and you can't do this at a votech, and you can't, can't, can't . . ."

3. Among the *facilitating aspects*, the most frequently reported developmental aspects (40%) were the opportunity to learn new ideas and practices and to apply and practice knowledge and skills. (See Table 7.) Exposure to positive role models and the encouragement and confidence gained from the experience were also frequently reported by both men and women (22%), although by a slightly higher proportion of women than men. (See Table 8.) These findings are consistent with the types of experience respondents considered most effective as reported earlier. A slightly higher proportion of women than men also reported that an experience that was negative or resulted in failure was also developmental.

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"This was my first introduction to participative management and individualized, competency-based instruction. I was taught a certain way of management in college—a more traditional sort of management."

* * * * *

"Everything I was learning here was nontraditional—not rank and file, or top to bottom, but getting people involved and letting them participate in the decisions that affected them."

* * * * *

"It allowed me to put my human relations, human assessment, and human development skills to the ultimate test, and to literally hone them down through trial and error. I had good human relation skills. That was why I was hired for the job, but when you hire that many people and you are developing such a diverse population—from a welder, to a nurse, to a chef, to a carpenter, to a plumber—it really stretches your abilities. I learned what works in training people and what doesn't work."

* * * * *

"It gave me more confidence to step out and I felt on a sounder footing because I had more depth of knowledge in the other disciplines that I did not have when I came here."

* * * * *

"She was really a good leader. She listened to people. She took time with people. She always ate in the lunch room with us, where some deans did not; they stay together. She had us (teachers) over to her house. She tried to maintain friendly contact over and above work. If there was a crisis, or something happened, she handled it very calmly. Then, later on, even if you made a mistake, she talked with you privately. . . . You knew that she thought that working at that school and vocational education was the best thing in the world; it was the best job you could have."

Table 9
Initiator of Incidents by Gender

Item No.	Initiator	Gender					
		Female		Male		Total	
		#	%	#	%	#	%
67	Self	13	24	39	45	52	37
68	Superior	24	44	18	21	42	30
69	Peer	1	2	2	2	3	2
70	Subordinate	2	4	4	5	6	4
71	Other	8	15	16	19	24	17
72	No relevant response	6	11	7	8	13	9
	Total	54	100%	86	100%	140	100%

D. Initiator of the Experience

Participants were asked to identify the person who initiated the experience being discussed—that is, self, superior, peer, subordinate, and other.

1. The most common initiators for the sample as a whole were self (37%) and superior (30%). (See Table 9.)
2. Men, however, depended most upon themselves (45%) to initiate the experience, while women depended most upon superiors (44%).

Leader Qualities Perceived To Be Improved by On-the-Job Experiences

Participants were asked to identify the leadership qualities perceived as improved as a result of the experiences. Table 10 shows the responses to this question both as a total of all respondents and by gender.

1. The seven qualities perceived to have been improved by the greatest number of total respondents as a result of their on-the-job experiences were (1) communication

(36%); (2) sensitivity, respect (29%); (3) administrative/management knowledge and skills (27%); (4) unspecified "interpersonal" skills and orientation to people (27%); (5) team building (24%); (6) appropriate use of leadership styles (24%); and (7) broader perspective about the organization (24%).

"Because I needed to present proposals either in outline form or in writing, I learned business language and improved my organization and communication skills, especially as they relate to written communication."

* * * * *

"There are a lot of administrators out there who don't have the desire to do a good job. You have to be willing to put a whole lot of time in. You have to like people, and along with being fair and consistent, you have to respect people. You have to respect their beliefs and their input."

* * * * *

"This experience helped me sharpen my skills in accessing resources. I can recall thinking of resources as being primarily financial, but I learned that there are a lot of different alternatives to get objectives met. They don't all include money."

* * * * *

"I never really understood the big picture here until it (that the college had a business side to it) was explained to me. Now I have found out, and I guess it was a big revelation to me at least, that as an administrator there are two sides to considerations about decisions and relationships with people."

* * * * *

"So the people skills had to be developed continually, working with some very diverse personalities to get them on board and to use their expertise."

Table 10
Qualities Perceived as Improved by Gender

Item No.	Quality	Gender				Total #	% of Incidents N = 140
		Female		Male			
		#	% of 54	#	% of 86		
73	Energetic	0	0	3	3	3	2
74	Insightful	11	20	9	10	20	14
75	Adjustable	6	11	9	10	15	11
76	Visionary	8	15	8	9	16	11
77	Ambiguity	1	2	3	3	4	3
78	Achievement oriented	1	2	5	6	6	4
79	Accountable	5	9	4	5	9	6
80	Initiating	4	7	11	13	15	11
81	Confident self	11	20	18	21	29	21
82	Accept responsibility	5	9	9	10	14	10
83	Persistent	1	2	5	6	6	4
84	Enthusiastic	1	2	3	3	4	3
85	Frustration	1	2	3	3	4	3
86	Dependable	0	0	2	2	2	1
87	Courageous	4	7	5	6	9	6
88	Even disposition	2	4	1	1	3	2
89	Common good	6	11	13	15	19	14
90	Personal integrity	4	7	5	6	9	6
91	Intelligent	2	4	5	6	7	5
92	Ethical	3	6	4	5	7	5
93	Communication	19	35	31	36	50	36
94	Sensitivity	14	26	27	31	41	29
95	Motivating	2	4	19	22	21	15
96	Networking	14	26	11	13	25	18
97	Planning	12	22	13	15	25	18
98	Delegating	5	9	13	15	18	13
99	Organizing	13	24	11	13	24	17
100	Team building	8	15	26	30	34	24
101	Coaching	5	9	10	12	15	11
102	Conflict mgmt	4	7	8	9	12	9
103	Time mgmt	1	2	3	3	4	3
104	Stress mgmt	1	2	1	1	2	1
105	Leadership styles	11	20	23	27	34	24
106	Beliefs	2	4	5	6	7	5
107	Decision making	6	11	16	19	22	16
108	Problem solving	5	9	3	3	8	6
109	Inf. mgmt	3	6	3	3	6	4
110	Admin./mgmt	17	31	21	24	38	27
111	Broad persp.	15	28	19	22	34	24
112	Status	3	6	5	6	8	6
113	Interpersonal	18	33	20	23	38	27
114	Other	3	6	7	8	10	7
115	No relevant response	0	0	1	1	1	1

2. The greatest number of men respondents and the greatest number of women respondents agreed upon the above seven qualities with two exceptions. As the exceptions, women included networking and organizing among their seven most frequently perceived improved qualities while men included team building and using appropriate leadership styles.
3. Although not among the seven most frequently named qualities to have been improved, it should be noted that a higher proportion of women than men reported gains in insightfulness (reflecting on the relationship among events and grasping the meaning of issues quickly) while a higher proportion of men than women indicated motivating others as having been developed.

Developmental Aspects Associated with Types of On-the-Job Experiences

There appeared to be an empirical relationship as well as a logical one between the types of experience most frequently considered helpful to respondents and the developmental aspects of the experience that made them helpful. Empirically, the crosstabulation shown in Table 11 revealed that the five most frequently named types of experience tended to be most highly related to the seven most frequently named developmental aspects. The associations were also logical because they seemed to reflect what one might reasonably expect. For example:

1. The experience of new and/or increased responsibilities was most frequently related to (1) the challenge of new and/or complex tasks or problems; (2) the chance to learn new ideas, practices, insights; and (3) the opportunity to apply and practice skills and knowledge.
2. The experience of a special on-the-job start-up assignment was most frequently associated with (1) the challenge of new and/or complex tasks or problems; (2) the chance to learn new ideas, practices, insights; (3) the opportunity to apply and practice skills and knowledge; and (4) the opportunity to plan and reflect.

3. The experience of handling personnel problems like conflicts and firings was most frequently associated with (1) the challenges of new and/or complex tasks or problems; and (2) the opportunity to apply and practice skills and knowledge.
4. The experience of being mentored, counseled, or supported was most frequently associated with a positive role model and a chance to learn new ideas, practices, insights.
5. The experience of working with a supervisor was most frequently associated with (1) negative experience/failure; (2) encouraging/confidence building; (3) exposure to a positive role model; and (4) exposure to a negative role model.

Table 11
Type of Experience by Developmental Aspect

Item No.	Experience	Developmental Aspect													No Rel	Total				
		36	37	38	39	40	41	42	43	44	45	46	47	48			49	50	51	52
		Inter Risk	New	Ove	Barr	Oth	Neg	Plan	Asmt	Lear	App	Con	Pos	Neg	Free	Cult	Oth			
8	Across educ. inst./org.	1	0	0	0	0	1	0	1	1	0	1	0	0	0	1	0	0	0	6
9	Across educ. functions	0	0	9	0	0	0	0	0	2	0	0	0	0	1	0	1	0	0	13
10	Work in business/industry	1	1	3	0	2	0	2	0	7	3	1	0	0	1	1	0	0	0	24
11	Work in government	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
12	Other	0	1	2	1	1	0	1	0	1	0	1	0	1	1	0	0	0	0	10
13	Change in context	1	1	3	1	0	0	2	1	3	2	2	2	0	2	0	0	0	0	20
14	New/increased respons.	2	2	14	2	4	0	3	4	9	8	4	2	0	3	1	0	0	59	
15	Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	Internship	0	0	2	0	1	0	0	0	2	2	0	0	0	1	1	0	0	9	
17	Spec. asgmt: start-up	6	8	17	1	4	0	3	9	11	11	8	3	0	8	5	1	0	98	
18	Spec. asgmt: fix-its	1	2	4	1	0	0	1	1	2	3	0	1	0	0	0	0	1	17	
19	Spec. asgmt: other	3	0	3	0	0	0	1	2	5	4	2	1	1	0	3	0	0	25	
20	Teaching/counseling	0	1	1	0	0	0	0	0	2	1	0	1	1	0	0	0	0	7	
21	Personnel: hiring	0	0	1	1	0	0	1	0	1	2	1	1	0	1	0	0	0	9	
22	Personnel: conflict/firing	0	7	8	5	5	0	6	4	5	8	5	0	3	2	0	0	0	61	
23	Personnel: developing	0	1	2	1	2	0	0	0	1	3	1	0	1	0	0	0	0	12	
24	Work on teams/committees	2	1	3	0	0	1	2	2	4	5	1	3	0	1	1	0	0	26	
25	Mentors/couns./advocate	1	1	5	1	1	0	0	2	8	4	3	11	0	1	2	0	0	45	
26	Work with supervisor	0	2	3	2	3	0	5	1	3	3	5	5	6	1	0	0	0	41	
27	Other	4	1	4	0	1	0	0	1	1	2	0	1	1	0	1	2	1	21	
28	Prof. association/union	1	0	0	0	1	0	0	0	2	0	1	0	0	0	0	0	0	5	
29	Formal training	0	0	3	1	1	0	1	3	8	4	2	2	0	0	2	0	0	27	
30	Simulation/case study	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
31	Shadow/observation	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	3	
32	Networking	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
33	Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
34	Community service	0	1	1	0	1	0	0	0	2	3	1	0	0	0	1	0	0	10	
35	Other	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	
Total		24	30	88	17	27	0	22	32	25	82	69	39	34	14	23	19	4	2	551

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Developmental Aspects of On-the-Job Experiences Associated with Improved Qualities

As can be seen in Table 12, there also appears to be an empirical and a logical relationship between the aspects of experiences most frequently considered developmental (those aspects that made the experience effective) and the leader qualities that were most frequently perceived as having been improved. For example:

1. The developmental aspect of new and/or increased responsibilities was most frequently related to the improved leader qualities of (1) communication (listening, oral, written); (2) sensitivity, respect; (3) team building; (4) confident, accepting of self; (5) appropriate use of leadership styles; (6) administrative/management knowledge and skills; (7) broader perspective about the organization; (8) unspecified "interpersonal" skills; (9) organizing; and (10) planning.
2. The developmental aspect of a chance to learn new ideas, practices, insights was most frequently associated with the improved leader qualities of (1) communication (listening, oral, written); (2) unspecified "interpersonal" skills; (3) appropriate use of leadership styles; (4) administration/management knowledge and skills; (5) broader perspective about the organization; (6) sensitivity, respect; (7) networking; (8) planning; (9) team building; and (10) confident, accepting of self.
3. The developmental aspect of opportunity to apply and practice skills and knowledge was most frequently related to the improved leader qualities of (1) communication (listening, oral, written); (2) unspecified "interpersonal" skills; (3) team building; (4) administrative/management knowledge and skills; and (5) sensitivity, respect.
4. The developmental aspect of encouraging, confidence building was most frequently related to the improved leader qualities of (1) confident, accepting of self; and (2) communication (listening, oral, written).
5. The developmental aspect of exposure to positive role models was most frequently related to the improved leader qualities of (1) administrative/management knowledge and skills; (2) sensitivity; (3) unspecified "interpersonal" skills; (4) broader perspective about the organization; (5) team building; and (6) communication (listening, oral, written).

Table 12
Developmental Aspects by Qualities Improved

Item No.	Quality	Developmental Aspects																Total		
		36 Inter Risk	37 New	38 New	39 Ove	40 Barr	41 Oth	42 Neg	43 Plan	44 Asmt	45 Lear	46 App	47 Con	48 Pos	49 Neg	50 Free	51 Cult		52 Oth	53 No Rel
73	Energetic	1	2	3	1	1	0	0	0	1	2	1	1	0	0	0	1	0	0	6
74	Insightful	6	5	12	2	7	0	6	6	4	12	11	6	4	3	5	8	1	0	66
75	Adjustable	2	1	6	2	2	0	3	4	3	8	3	5	3	2	1	2	0	0	34
76	Visionary	3	3	12	0	3	0	2	4	4	9	6	4	3	1	4	4	1	1	43
77	Ambiguity	1	2	2	0	0	0	1	2	1	3	2	3	1	1	2	0	0	0	16
78	Achievement oriented	1	2	4	0	0	0	0	1	1	5	3	3	0	0	1	2	0	0	16
79	Accountable	1	2	6	1	4	0	4	1	0	4	3	3	1	1	2	2	0	0	21
80	Initiating	4	7	11	1	3	0	2	5	4	7	10	4	4	1	2	3	0	0	42
81	Confident self	6	7	16	4	4	0	2	8	7	15	13	13	3	1	4	6	1	1	74
82	Accept responsibility	1	3	7	4	2	0	3	1	2	4	3	2	0	2	2	0	0	0	19
83	Persistent	1	2	5	0	1	0	1	1	2	3	4	3	0	0	1	1	1	0	17
84	Enthusiastic	2	1	3	0	0	0	0	0	2	4	2	2	1	1	0	3	0	0	15
85	Frustration	1	0	0	0	2	0	1	0	0	2	1	1	0	0	0	0	0	0	5
86	Dependable	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
87	Courageous	1	2	5	0	3	0	0	1	3	3	2	3	0	0	2	1	1	0	16
88	Even disposition	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	3
89	Common good	4	4	9	3	6	0	3	2	3	9	7	5	2	3	3	3	0	1	41
90	Personal integrity	0	2	4	2	3	0	3	0	0	2	1	1	2	2	1	1	0	0	13
91	Intelligent	0	3	2	0	1	0	3	0	1	4	2	1	0	1	1	0	0	0	13
92	Ethical	1	2	2	1	2	0	3	0	1	1	0	1	2	0	0	1	0	0	9
93	Communication	8	17	24	8	10	0	6	15	12	20	22	13	8	6	8	5	0	0	115
94	Sensitivity	2	10	17	6	11	0	10	9	5	16	15	7	9	5	6	3	0	1	86
95	Motivating	4	7	9	1	2	0	3	7	5	7	10	7	3	3	4	1	1	0	51
96	Networking	7	3	11	1	4	0	1	5	7	16	7	7	7	1	3	6	2	1	63



Table 12 (cont.)

Item No.	Quality	Item No.	Developmental Aspects													Total							
			36	37	38	39	40	41	42	43	44	45	46	47	48		49	50	51	52	53		
97	Planning	3	4	14	3	3	0	3	0	3	6	5	5	16	11	4	3	0	5	3	0	0	56
98	Delegating	2	4	11	2	0	0	0	5	4	12	7	8	7	7	0	4	1	4	1	0	0	48
99	Organizing	5	3	15	4	3	0	2	7	7	13	9	10	4	4	0	4	4	4	0	0	0	60
100	Team building	5	9	18	3	4	0	2	11	10	16	17	6	8	4	7	5	0	0	0	0	0	86
101	Coaching	3	5	6	1	2	0	2	3	2	4	6	3	4	1	2	1	1	2	1	1	1	30
102	Conflict mgmt	3	2	4	1	3	0	2	1	1	6	4	1	1	1	1	0	2	0	0	0	0	19
103	Time mgmt	1	0	2	1	0	0	1	1	0	3	2	0	2	0	0	1	0	0	1	0	0	10
104	Stress mgmt	0	2	2	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
105	Leadership styles	9	9	16	4	5	0	5	12	9	18	13	7	7	5	8	4	0	0	0	0	0	88
106	Beliefs	1	3	4	0	2	0	2	2	1	5	5	2	1	0	1	2	0	1	2	0	0	21
107	Decisionmaking	3	5	13	4	6	0	4	3	1	9	6	4	3	4	4	0	1	4	0	1	1	40
108	Problem solving	0	2	4	1	2	0	1	1	2	4	3	1	3	0	0	1	0	0	1	0	0	16
109	Inf. mgmt	0	1	3	0	0	0	0	1	1	5	2	1	2	0	1	0	0	1	0	0	0	13
110	Admin./mgmt	8	4	16	4	3	0	4	6	10	18	16	9	10	3	4	6	1	4	6	1	1	88
111	Broad perspective	7	7	15	2	2	0	2	6	11	18	12	10	8	1	4	7	1	4	7	1	0	80
112	Status	2	0	4	0	0	0	1	1	2	5	2	3	4	0	1	2	0	1	2	0	0	21
113	Interpersonal	9	8	14	4	4	0	2	11	11	19	20	7	8	3	5	5	3	5	3	1	1	95
114	Other	1	0	5	1	1	0	0	0	0	2	1	3	1	0	1	0	0	1	0	0	1	9
115	No relevant response	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total		120	156	340	75	113	0	90	149	146	331	264	174	130	57	103	97	15	10	1,566			

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Improved Qualities Associated with Types of Experience

The prior two sections have reported empirical and logical relationships between types of on-the-job experiences and the developmental aspects associated with those experiences, and between the developmental aspects of the on-the-job experiences and the leader qualities improved. It is not unexpected, therefore, to find empirical and logical relationships between the types of experience most frequently considered helpful to respondents and the qualities that were improved/developed by the experience. As shown in Table 13,

1. The on-the-job experience of new and/or increased responsibilities was most frequently related to the leader qualities of (1) communication (listening, oral, written); (2) administrative/management knowledge and skills; (3) broader perspective about the organization; and (4) unspecified interpersonal skills.
2. The experience of a special start-up assignment was most frequently associated with the improved leader qualities of (1) visionary; (2) communication (listening, oral, written); (3) team building; (4) administrative/management knowledge and skills; and (5) unspecified interpersonal skills.
3. The experience of handling personnel problems like conflicts and firing were most frequently related to the improved leader qualities of (1) communication (listening, oral, written) and to (2) sensitivity, respect.
4. The experience of being mentored, counseled, or supported was most frequently associated with the improved leader qualities of (1) confident/accepting of self; (2) communication (listening, oral, written); (3) sensitivity, respect; (4) unspecified interpersonal skills; (5) administrative/management knowledge and skills; and (6) broader perspective about the organization.
5. The experience of working with a supervisor was most frequently related to the improved leader qualities of (1) sensitivity, respect; and (2) appropriate use of leadership styles.

Table 13
Qualities Improved by Type of Experience

Item No.	Quality	Type of Experience																																		
		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35							
73	Energetic	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
74	Insightful	0	0	3	0	0	0	1	3	0	0	4	2	1	3	0	2	0	2	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	31
75	Adjustable	1	0	1	0	1	1	2	0	0	2	0	0	1	3	0	2	3	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	22	
76	Visionary	0	0	1	0	0	0	3	0	0	8	1	2	0	0	0	2	3	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	25	
77	Ambiguity	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
78	Achieve. oriented	0	0	3	0	0	0	0	0	0	1	1	0	0	0	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	9	
79	Accountable	0	0	0	0	0	0	4	0	0	2	0	1	0	0	2	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	12	
80	Initiating	0	0	1	0	0	1	2	0	1	5	1	0	0	0	2	1	2	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	21	
81	Confident self	1	0	5	1	1	0	4	0	1	7	1	1	1	1	7	1	1	5	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	44	
82	Accept resp.	0	0	1	0	0	1	2	0	0	2	1	2	0	1	5	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	
83	Persistent	0	0	0	0	0	0	1	0	1	3	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7	
84	Enthusiastic	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	5	
85	Frustration	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	
86	Dependable	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
87	Courageous	1	0	1	0	0	0	0	0	0	1	1	0	1	0	1	1	2	1	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	13	
88	Even disposition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
89	Common good	1	1	0	0	1	2	3	0	1	5	1	1	1	2	4	1	0	1	1	3	1	1	0	0	0	0	0	0	0	0	0	0	0	31	
90	Personal integ.	1	0	0	0	0	0	2	0	1	3	0	0	0	0	1	0	0	1	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	13	
91	Intelligent	0	0	2	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
92	Ethical	2	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
93	Communication	0	0	3	0	2	3	8	0	0	9	2	5	2	1	10	2	4	5	4	3	1	2	0	0	0	0	0	0	0	0	0	0	0	70	
94	Sensitivity	0	1	3	0	1	2	6	0	0	5	3	1	4	2	10	3	1	5	5	1	1	0	0	1	0	0	0	0	0	0	0	0	0	57	
95	Motivating	0	1	1	0	0	1	2	0	0	6	0	0	0	0	3	1	1	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	25	
96	Networking	1	0	1	1	1	1	3	0	0	5	0	2	0	1	0	1	2	4	0	2	2	5	0	0	0	0	0	0	0	0	0	0	0	0	33

Types of Experiences CVAs Recommend for Preparing Future Leaders

To determine the feasibility of utilizing on-the-job experiences for the development of future leaders, interviewees were asked to recommend activities that might be used for such purposes:

1. Recommended experiences for the development of future leaders are presented in Table 14. Of the 156 recommendations for experiences that should be provided for future leaders, 58% were recommended to occur on-the-job within a position. This is somewhat less than the 64% of the actual experiences that respondents reported occurred on the job and as being most helpful to them. Mentoring, counseling and advocate support, together with a variety of special assignments and internships were other popular recommendations for on-the-job experiences. Mentoring, counseling and advocate support was one of the types of actual experience that respondents had considered most helpful to them.

"I think it would be very beneficial to develop some kind of a mentor system, where up-and-coming leaders spend a certain amount of time with somebody who has already demonstrated the traits and abilities that you're looking for."

* * * * *

"I think a good intern program would be excellent—to identify key administrators throughout our state or system or whatever. Put that person with that individual for a certain period of time and allow them to function in that role along with that person."

2. Of the 156 recommendations for activities that should be provided for future leaders, only 1% were recommended to occur as the result of moving to a new position, while 31% of the recommendations were for non-job, education-related experiences, such as formal training programs (e.g., leadership academies) and simulations/case studies. This is in contrast to the actual on-the-job experiences reported by respondents of moving to a new position and non-job, education-related experiences such as formal training programs and simulations/case studies, 13% and 9% respectively. The responding CVAs did not perceive planning for position changes to be a very practical means of leadership development, but did believe in the potential benefits of formal leadership development programs and simulations/case studies.

Table 14
Types of Recommended Experiences by All Respondents

Item No.	Experience	Total	
		#	% of 156
Job Experiences			
<i>Varied Positions</i>			
116	Across educational inst./org.	3	
117	Across educational functions	3	
118	Work in business/industry	4	
119	Work in government	0	
120	Other	0	
	<i>Subtotal</i>	10	6
<i>New Positions</i>			
121	Change in context	0	
122	New/increased responsibility	2	
	<i>Subtotal</i>	2	1
<i>Within a Position</i>			
123	Internship	11	
124	Spec. assignment: start-up	10	
125	Spec. assignment: fix-its	3	
126	Spec. assignment: other	12	
127	Teaching/counseling	4	
128	Personnel: hiring	1	
129	Personnel: conflict/firing	1	
130	Personnel: developing	5	
131	Work on teams/committees	4	
132	Mentors/counseling/advocate support	27	
133	Work with supervisor	4	
134	Other	9	
	<i>Subtotal</i>	91	58
Non-Job Activities			
<i>Education Related</i>			
135	Professional association/union	3	
136	Formal training	22	
137	Simulation/case study	14	
138	Shadow/observation	3	
139	Networking	6	
140	Other	1	
	<i>Subtotal</i>	49	31
<i>Noneducation-Related</i>			
141	Community service	4	
142	Other	0	
	<i>Subtotal</i>	4	3
Total		156	99%

“As a matter of fact, the State Department is getting ready to do another one of these programs and I think that one would be relatively simple to replicate to continue to develop leadership programs for up-and-coming leaders in the state.”

* * * * *

“You could create false scenarios and allow people to come in and say how would you do this? How would you handle this? What is the first step you’d take? And then guide them through it.”

3. Only 6% of CVAs recommended holding a variety of positions, and just 3% recommended non-job, noneducation-related experiences. These percentages may be compared with 10% and 4% of the effective actual experiences reported by respondents.
4. As can be seen in Table 15, there were differences in the types of experiences recommended by men and women. For the experiences that were to occur on-the-job within a position, a higher proportion of women than men favored mentoring, counseling and advocate support and a variety of special assignments, while a higher proportion of men than women favored internships. For non-job, education-related types of experiences, a higher percentage of women than men recommended formal training programs and simulations/case studies. A higher proportion of men than women recommended networking.

Table 15
Types of Recommended Experiences by Gender

Item No.	Experience	Gender			
		Female		Male	
		#	% of 26	#	% of 43
Job Experiences					
<i>Varied Positions</i>					
116	Across educational inst./org.	1	4	2	5
117	Across educational functions	0	0	3	7
118	Work in business/industry	0	0	4	9
119	Work in government	0	0	0	0
120	Other	0	0	0	0
<i>New Positions</i>					
121	Change in context	0	0	0	0
122	New/increased responsibility	0	0	2	5
<i>Within a Position</i>					
123	Internship	2	8	9	21
124	Spec. assignment: start-up	3	12	7	16
125	Spec. assignment: fix-its	2	8	1	2
126	Spec. assignment: other	6	23	6	14
127	Teaching/counseling	1	4	3	7
128	Personnel: hiring	1	4	0	0
129	Personnel: conflict/firing	0	0	1	2
130	Personnel: developing	2	8	3	7
131	Work on teams/committees	2	8	2	5
132	Mentors/counseling/advocate support	12	46	15	35
133	Work with supervisor	1	4	3	7
134	Other	3	12	6	14
Non-Job Activities					
<i>Education Related</i>					
135	Professional association/union	1	4	2	5
136	Formal training	10	38	12	28
137	Simulation/case study	7	27	7	16
138	Shadow/observation	2	8	1	2
139	Networking	1	4	5	12
140	Other	0	0	1	2
<i>Noneducation-Related</i>					
141	Community service	1	4	3	7
142	Other	0	0	0	0

**Perceived Developmental Aspects of Experiences
Recommended for Future Leaders**

Interviewees were asked to identify what they perceived to be the potential developmental aspects of the experiences they had recommended for preparing future leaders. That is, what did they believe would make the experience effective in developing leader qualities. Table 16 provides a summary of the responses to this question.

1. One hundred forty-two perceived developmental aspects of the recommended experiences were reported. Fourteen percent were categorized as motivational while 86% were considered facilitating.

**Table 16
Important Aspects of Recommended Experiences**

Item No.	Aspect	Total	
		#	% of 122
	<i>Motivating Aspects</i>		
143	Interest/enjoy	2	
144	Risk of failure	2	
145	New/complex	13	
146	Overload/stress	2	
147	Barriers	1	
148	Other	0	
	<i>Subtotal</i>	20	14
	<i>Facilitating Aspects</i>		
149	Negative experience/failure	0	
150	Plan/reflect	13	
151	Assess personal	5	
152	Learn new ideas/practices	28	
153	Apply/prac. knowledge	13	
154	Confidence building	7	
155	Positive role model	19	
156	Negative role model	2	
157	Freedom	19	
158	Other cultures	4	
159	Other	12	
	<i>Subtotal</i>	122	86
	Total	142	100%

2. Of the 20 perceived motivating aspects of the recommended experiences, by far the greatest number (65%) was the challenge of new and/or complex tasks or problems. This aspect was also the principal motivating force of the effective actual experiences reported by the respondents.

"Give them an assignment—something to work on in a particular school that is difficult."

3. There were 122 perceived facilitating aspects of the recommended experiences. When combined, the opportunity to learn new ideas and skills and to apply and practice skills and knowledge were the dominant perceived facilitating aspects (34%) of the recommended experiences. These same two aspects (learn new ideas and skills and apply and practice knowledge and skills) were the most frequently reported (39%) of the actual experiences of respondents. Other perceived developmental facilitating aspects of the recommended experiences were (1) exposure to positive role models (16%), (2) freedom to make decisions and mistakes (16%), and (3) the opportunity to plan and reflect based upon feedback (11%).

"The only way you can truly develop people is to put them into a situation where they really have try to use their skills."

* * * * *

"I think it would have to be a nonthreatening environment, where it was alright to fail and alright to learn. But, it should be understood that it is through failures and experiences that people make changes and that a person's performance should improve through the experiences."

4. There were gender differences in the perceived developmental aspects of the recommended experiences. (See Table 17.) A higher proportion of women than men expected new and/or complex tasks or problems to be a motivating aspect. To facilitate development, a greater percent of men than women expected the chance to learn new ideas and skills to be an important aspect, while a higher proportion of

women than men anticipated freedom to make decisions and mistakes to be important.

Table 17
Important Aspects of Recommended Experiences by Gender

Item No.	Aspect	Gender			
		Female		Male	
		#	% of 26	#	% of 43
	<i>Motivating Aspects</i>				
143	Interest/enjoy	2	8	7	16
144	Risk of failure	0	0	2	5
145	New/complex	9	35	4	9
146	Overload/stress	2	8	0	0
147	Barriers	0	0	1	2
148	Other	0	0	0	0
	<i>Facilitating Aspects</i>				
149	Negative experience/failure	0	0	0	0
150	Plan/reflect	6	23	7	16
151	Assess person	2	8	3	7
152	Learn new ideas/practices	5	19	23	53
153	Apply/prac. knowledge	6	23	7	16
154	Confidence building	3	12	4	9
155	Positive role model	8	31	11	26
156	Negative role model	0	0	2	5
157	Freedom	9	35	10	23
158	Other cultures	1	4	3	7
159	Other	7	27	5	12

Summary of Results

Within the limitations of the sample and procedures, it seems reasonable to summarize the results of the study as follows:

1. Five types of experiences were identified by successful CVAs as most helpful to their development as leaders: (1) new positions that offer new and/or increased responsibilities; (2) special start-up work assignments; (3) handling personnel problems like conflicts and firings; (4) being mentored, counseled, supported; and

- (5) working with a supervisor. When these experiences came during their careers was considered significant by just 30% of the respondents.
2. These experiences were perceived to provide five major kinds of opportunities for leadership development: (1) the challenge of new and/or complex tasks or problems; (2) the chance to learn new ideas, practices, insights; (3) the opportunity to apply and practice skills and knowledge; (4) encouragement and confidence building; and (5) exposure to positive role models.
 3. The five major kinds of leadership development opportunities identified were most frequently perceived to result in the development of the following eight leadership qualities: (1) communication (listening, oral, written) skills; (2) administrative/management knowledge and skills; (3) unspecified interpersonal skills; (4) team building skills; (5) sensitivity, respect; (6) confidence, self-acceptance; (7) a broader perspective about the organization; and (8) the appropriate use of leadership styles.
 4. Men tended more than women to initiate their challenging experiences, and were more frequently motivated by the risk of failure and/or by the interest and excitement generated by the experience. On the other hand, challenging experiences for women came more often from new and complex tasks, where they had the support of superiors and/or other positive role models, or from job stress and barriers they perceived to accomplishing the tasks. Further, more men than women used their on-the-job experiences to improve their team building, motivational, and use of leadership styles qualities, while more women than men felt they improved their insightful, networking, and organizational skills.
 5. With two exceptions, men and women agreed upon the qualities most frequently perceived to have been improved by on-the-job experiences. Women included networking and organizing rather than team building and using appropriate leadership styles among the seven most frequently perceived improved qualities. It is also noteworthy that a higher proportion of women than men reported gains in insightful, while a higher proportion of men than women indicated the quality of motivating others to have been developed.

6. The five most frequently recommended types of experience for future leaders were (1) mentoring, counseling and advocate support; (2) formal training programs (e.g., leadership academy); (3) internships; (4) various special assignments (while on-the-job); and (5) simulations/case studies. Missing from this list were three of the most frequently mentioned types of on-the-job experiences that respondents had reported were effective in developing their own leadership abilities: (1) providing new and/or increased responsibilities, (2) special start-up assignments, and (3) handling personnel problems like conflicts and firing.
7. Men and women differed somewhat in their recommendations for the types of experiences that future leaders should have. A higher proportion of women than men favored mentoring, counseling and advocate support as well as formal training programs and simulations/case studies. A greater proportion of men than women favored internships.
8. Six perceived developmental aspects were identified most frequently as emanating from the recommended types of experience: (1) chance to learn new ideas, practices, insights; (2) freedom to make decisions and mistakes; (3) opportunity to apply and practice skills and knowledge; (4) challenge of new and/or complex tasks or problems; (5) exposure to positive role models; and (6) opportunity to plan and/or reflect (feedback provided). Four of these six perceived developmental aspects emanating from the recommended experiences were among the five most frequently mentioned developmental aspects respondents reported as having been effective in their own leadership development experiences.
9. Men and women differed on three of the six most frequently perceived developmental aspects of the recommended types of leadership development experiences. A higher proportion of women than men anticipated new and/or complex tasks or problems to be a motivating aspect. A greater proportion of men than women anticipated the opportunity to learn new ideas and skills to be a facilitating aspect, while a greater proportion of women than men anticipated that the freedom to make decisions and mistakes would be a facilitating aspect.

DISCUSSION

It has been the implicit assumption of this study that the development of effective vocational education administrator-leaders depends not just upon raw talent and formal education, but also upon on-the-job experiences. The study has shown, moreover, that all on-the-job experiences are not perceived to be equal in their potential for developing leadership qualities. Further, it is apparent that the type of experience is related to the nature of the leadership quality improved.

It is instructive, therefore, to compare the results of this study with the outcomes of a major investigation conducted in business and industry by McCall, Lombardo, and Morrison (1988). Nearly 200 senior business executives were interviewed about the experiences that had the greatest impact upon their careers.

The essence of the conclusions drawn in the McCall et al. study was summarized by Ohlott et al. (1993):

. . . on-the-job learning is most likely to occur when managers are faced with challenging situations. Challenging situations place the manager in dynamic settings full of problems to solve and choices to make under conditions of risk and uncertainty. These situations are developmental for two reasons. First, they provide a motivation for learning. . . . Second, challenging situations provide the opportunity to take action and to learn from the effectiveness of the action. (p. 1)

These findings are completely consistent with the results of this study, which concludes that job changes and special start-up assignments are effective experiences when (and because) they present (1) the challenge of new and/or complex tasks or problems; (2) the chance to learn new ideas, practices, insights; and (3) the opportunity to apply and practice skills and knowledge. McCall et al. (1988) also recognize the impact of working with supervisors who can provide role models. They also reported a lasting effect of job challenge early in the manager's career. That was not the case in this study where it was revealed that only a minority of vocational education administrator-leaders felt the timing of their effective experiences was significant.

Finally, the qualities found to be developed by challenging experiences and a supportive supervisor were all among those reported by McCall et al. (1988). What stands

out as relatively unique, however, is the great importance vocational education administrator-leaders placed upon improvement in their communication abilities as a result of the experiences.

Other current research also reports results similar to those presented in this study.

Kouzes and Posner (1995) submitted a Personal-Best Leadership Experience Questionnaire to over 2,500 persons in mid- to upper-level management positions in a variety of organizations. From asking the question, "How did you learn to lead?" Kouzes and Posner have summarized three opportunities for learning to lead: (1) trial and error, (2) observation of others, and (3) education. With regard to trial and error, Kouzes and Posner concluded, as did this study, that the benefits of trying are gained primarily when attempting challenging activities, not routine ones. Observations of others include negative role models as well as effective ones—another finding of the current project. These persons are generally mentors, immediate supervisors/managers, or peers. Education can be formal or informal, self-initiated or initiated by the employing organization. Its benefits are not only personal insights into how to practice the leadership role, but also the contacts that are made with other aspiring leaders and managers. The interviews in this project support similar important outcomes.

A previous study (Moss & Jensrud, 1995) has shown that male and female administrative-leaders need the same qualities to be maximally effective, but that, as department heads, women actually possessed slightly more team building skills and were significantly better at motivating others and using appropriate leadership styles than men. The present study revealed that more men than women thought they had improved these same qualities as the result of their on-the-job experiences. It might be hypothesized that the on-the-job experiences were perceived by men who were (now) chief vocational administrators to have strengthened some of their earlier deficiencies. By the same token, women may have used on-the-job experiences to further develop their networking and organizing skills and to improve their ability to be insightful.

When the vocational education administrator-leaders sampled by this study recommended experiences they believed would develop future leaders, they tended to place greater emphasis upon formal education programs such as leadership academies, than they themselves had experienced. This seems reasonable since formal leadership training

programs have not been offered for very long. But the recommendations also appear to have underemphasized somewhat the opportunities for the same kinds of on-the-job experiences that respondents felt were most effective for them, that is, providing new or increased responsibilities, special start-up assignments, and handling personnel problems. Yet, when asked to indicate the most developmental aspects of their recommended experiences, the responding vocational education administrator-leaders reiterated those aspects that they had found most useful in their own experiences and which were consistent with on-the-job experiences. Perhaps respondents did not fully appreciate the many opportunities they controlled within their own institutions for developing future leaders, and need to be reminded about how they can provide those opportunities.

IMPLICATIONS FOR PRACTICE

The need for high quality leadership in vocational education is as critical today as it has ever been. Some would argue that with the major education reform initiatives currently underway, quality leadership is even more important than at any time in the past. The importance and utilization of on-the-job experiences in the development of such leadership was the focus of this research. Based on the results of this study, on-the-job experiences can certainly be promoted as one effective, and perhaps indispensable, means for developing future leaders. Successful leaders participating in this study all had vivid positive memories of experiences which they said significantly effected their development as leaders. Further, the successful leaders advocated on-the-job activities that they believed could be used effectively in developing future leaders for vocational education. The findings of this study are consistent with studies in business and industry which also report that certain kinds of on-the-job experiences are effective for developing leaders.

It is important that current vocational education administrator-leaders take advantage of the opportunities they have for using on-the-job experiences to develop and improve the leadership capabilities of persons on their staffs who are preparing to assume new and more advanced leadership roles.

Nature of Desirable On-the-Job Experiences

While recognizing the potential benefits that may accrue through on-the-job experiences, it is important to recognize also that not all on-the-job experiences are equal in their potential effectiveness for leadership development. Two characteristics of effective experiences have been consistently revealed by this and other research. On-the-job learning is most likely to occur for both men and women when

1. Individuals are placed in a variety of challenging situations with problems to solve and choices to make under conditions of risk. These situations motivate individuals to learn, provide opportunities to gain new ideas and knowledge and to practice skills and apply knowledge, and encourage new insights through reflection on prior actions.
2. Individuals gain their experiences in a supportive environment with supervisors who provide positive role models and constructive support and mentors who provide counsel.

Some examples of challenging situations include the provision of new or increased responsibilities; special start-up assignments such as initiating a new program or project; and handling personnel problems such as hiring and firing.

Given that men were more likely than women to be the initiators of their developmental experiences, vocational education administrator-leaders may need to be more aggressive in identifying and providing appropriate on-the-job developmental opportunities for women preparing for leadership roles.

Timing of On-the-Job Experiences

Most studies have found that experiences occurring early in one's career were among the key influencers in leadership development. In this study, only about 30% of the sample of successful vocational education administrator leaders placed emphasis on when the experiences should occur. In our view, there should be no restrictions on when the on-the-job experiences are provided. We do recognize, however, that it certainly might be helpful to provide these experiences as early in a person's administrative career as possible.

Leadership Qualities That Will Be Developed

Just as we recognize that not all on-the-job experiences are equal in their potential for leadership development, we acknowledge that not all leadership qualities are developed equally well through on-the-job experiences. The most important kinds of outcomes from on-the-job experiences for both men and women appear to be growth in personal and interpersonal leadership skills, knowledge, and values. These outcomes most typically include improvement in communication skills (listening, speaking, writing), sensitivity to and respect for others, team building skills, appropriate use of leadership styles, self-confidence, networking, planning, organizing, and decisionmaking. In addition, it was frequently reported that on-the-job experiences further developed administrative/management knowledge and skills specific to the context, as well as broadened one's perspective about the organization.

A Word About Non-Job Education-Related Experiences

Vocational education administrator-leaders participating in this study were not asked to identify examples of education program-related experiences through which they developed their leadership qualities. Thus, relatively few (9%) reported formal training programs (e.g., leadership academies) and the use of simulations/case studies as significant leadership development experiences in their own development. Yet, about 30% of them recommended the use of formal training programs for future leaders. Perhaps this was because formal leadership preparation programs have only recently become available to vocational educators, and their value is only now beginning to be appreciated. In any event, formal preparation programs should *not* be considered as a substitute for appropriately challenging on-the-job experiences, but only as a very useful supplement to them.

It is safe to conclude that when using on-the-job assignments for leader development purposes, the key is to provide multiple opportunities to assume responsibility for challenging assignments and opportunities to reflect on the meaning of these events for accomplishing important common purposes within given communities of practice.

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APPENDIX A
INTERVIEW WRITE-UP

1. I had a lot of opportunity to be a team leader on various nursing units, where I was responsible for multiple staff. In this case, it was the opportunity to be a team leader on a hospital ward where I had to work with some difficult staff.
2. I think the fact that I was trying different things. I think that was a big part of getting me to where I am today and that's trying new things. And that position, team leader on a hospital ward, provided me that opportunity to work with some difficult staff. So there was a lot of development going on because I was trying new and different things, and I had an opportunity to sit down with the head nurse on a regular basis to say this is what I tried, this is what worked, this is what I found worked for me and get ideas, so there was a lot of, you know, collaboration going on with my top supervisor, but also a lot of freedom for trial and error.
3. It was early in my career as a nurse.
4. I was asked to apply for it. In fact, as I thought back over my life in the leadership role, every position up until the dean position, I was asked to apply for the position.
5. Nobody, as I recall, came to me and said this is the way you need to handle this person. I am not a good one, a good person to handle other people. One of the things that over the years I have learned, and a lot of it was observing my parents in working with a variety of people, is to get right in there and work right alongside them and get to know those people and, you know, lead by doing, right alongside of them. So you became more of a peer than them looking upon you as a supervisor, even though you were many times evaluating those individuals.
6. This experience gave me the opportunity to try different things and to try new things that I hadn't done before. It gave me an opportunity to work with a variety of people; an opportunity to lead by doing rather than just by telling. It provided an opportunity to build my self-confidence. I think another one that stands out really strongly is that I had a lot of opportunity to get people to work together: team building skills. You know, we (nurses on duty) would sit down and talk about our

particular wing and patients on that wing and what might work, what might not work. Getting a variety of people working together was a real feat, but also a real satisfaction when it did happen. I think I mentioned the leading by doing, which I think is a big thing. You can't, I don't think, read it out of a book and then go out and do it. I think there has to be, for most people, some trial and error. Being willing to take those risks I think is important. It helped me develop a risk-taking ability. I was not a risk-taker when I first got out of college. I was very much into a safe environment.

I think, probably indirectly, I talked about the growth that I feel I had in listening to others. Certainly I had a lot of opportunity to do that or not do that depending upon how well I did with it. But on a team, because of the variety of people that I worked with, you know, some (nurse members of the team) were very dominating and wanted to talk all the time and others, you know, were in their shell and not willing to share. But I think listening was a big thing that I grew in during that time.

A lot of teaching. Because as a team leader I was looked upon as one to make sure that the correct nursing procedures were being followed and you know follow up on patient complaints and so, yes I did a lot of teaching of the aides and nurses under me. I frequently had student nurses on the team also and the aides were also modeling after the way I did things and saw that things needed to be done. I think I mentioned getting people to work together.

7. [Was the timing of this activity kind of critical in terms of your leadership development?] That's kind of hard for me to say. I think if I were to answer that very quickly, I would say yes that it (experience early in career) was important for me. I am probably a better leader because it came to me early in my life, before I had developed a lot of set patterns and modes of operation. I was probably easier to bend, you know, I wasn't as staid in my ideas. I was probably more willing to listen and change.
8. [If we wanted to try to provide similar on-the-job developmental experiences for someone else, what would we need to know? What would we need to do?] I think there needs to be an environment whereby the person who is developing the leadership has some authority. In other words, I don't think it can be a shadowing. I think it needs to be where you can lead—actually do the work of leading and

experience these successes and failures—but have somebody there behind you to be a sounding board. It needs to be a real experience with real responsibility, but with a person there that one could go to for advice and counsel as he or she needed.

INTERVIEW CODING SYSTEM

APPENDIX B

I. Identification Number Enter the five digit ID number (i.e. 0000134)

II. Gender (Choose one)

1. GE-M001 Male
2. GE-F002 Female

III. Type of Employer (Choose one)

3. EMP-003 Secondary
4. EMP-004 Technical Institute
5. EMP-005 Community College

IV. Experience Number (Choose one)

6. EXP-006 First experience
7. EXP-007 Second experience

V. Type of experience (Choose all that apply)

8. E-0-V008-X Across education organizations/institutions
9. E-0-V009-X Across education functions
10. E-0-V010-X Work in business and industry
11. E-0-V011-X Work in government
12. E-0-V012-X Other

13. E-0-W013-X Change in context and/or personnel
14. E-0-W014-X New and/or increased responsibilities
15. E-0-W015-X Other

16. E-0-W016-X Internship
17. E-0-W017-X Special work assignment/project: Start-ups
18. E-0-W018-X Special work assignment/project: Fix-it
19. E-0-W019-X Special work assignment/project: Other
20. E-0-W020-X Teaching/counseling
21. E-0-W021-X Handling personnel: Hiring
22. E-0-W022-X Handling personnel: Conflict/resolving
23. E-0-W023-X Handling personnel: Developing
24. E-0-W024-X Work on teams/committees
25. E-0-W025-X Mentoring/coaching/directive support
26. E-0-W026-X Working with a supervisor
27. E-0-W027-X Other

B. Non-Job Activities

28. E-M-E028-X Professional association/unions activities
29. E-M-E029-X (Formal) training activity/program, e.g. leadership academy
30. E-M-E030-X Simulation/Case studies
31. E-M-E031-X Shadowing/observation
32. E-M-E032-X Mentoring
33. E-M-E033-X Other

34. E-M-N034-X Community service
35. E-M-N035-X Other

VI. Developmental Aspects of the Experience (Choose all that apply)

36. DEV-M036-X Interesting, enjoyable, exciting
37. DEV-M037-X Challenge: Risk of failure
38. DEV-M038-X Challenge: New and/or complex tasks or problems
39. DEV-M039-X Challenge: Job overload, stress
40. DEV-M040-X Challenge: Barriers (lack of higher level support and/or resources; resistant or incompetent subordinates, etc.)

41. DEV-M041-X Other

42. DEV-F042-X Negative experience/feedback
43. DEV-F043-X Opportunity to plan and/or reflect: feedback provided
44. DEV-F044-X Assessment of personal strengths or weaknesses
45. DEV-F045-X Chance to learn new ideas, practices, insights
46. DEV-F046-X Opportunity to apply and practice skills and knowledge
47. DEV-F047-X Encouraging/confidence building
48. DEV-F048-X Exposure to role models: Positive
49. DEV-F049-X Exposure to role models: Negative
50. DEV-F050-X Freedom to make decisions and mistakes
51. DEV-F051-X Exposure to other cultures
52. DEV-F052-X Other

53. DEV-N053 No relevant response

VII. Training Received as a Significant Factor

54. TR-MT054-X Before becoming a teacher
55. TR-MT055-X As a teacher
56. TR-MT056-X As a department-level administrator/coordinator
57. TR-MT057-X As an assistant school-level administrator
58. TR-MT058-X As a chief regional administrator
59. TR-MT059-X Other

60. TR-M060-X Before becoming a teacher
61. TR-M061-X As a teacher
62. TR-M062-X As a department-level administrator/coordinator
63. TR-M063-X As an assistant school-level administrator
64. TR-M064-X As a chief regional administrator
65. TR-M065-X Other

66. TR-N066 No relevant response

VIII. Indicator of the Experience (Choose one)

67. IN-SE067-X Interview

68. IN-OT068-X Superior
69. IN-OT069-X Peer
70. IN-OT070-X Subordinate
71. IN-OT071-X Other

72. IN-N072-X No relevant response

IX. Qualities Impaired/Developed (Choose all that apply)

73. Q-LA073-X Empathy with students
74. Q-LA074-X Insightful
75. Q-LA075-X Adaptable, open to change
76. Q-LA076-X Visionary
77. Q-LA077-X Tolerant of ambiguity and complexity
78. Q-LA078-X Achievement oriented
79. Q-LA079-X Accurate
80. Q-LA080-X Inquiring
81. Q-LA081-X Confident, accepting of self
82. Q-LA082-X Willing to accept responsibility
83. Q-LA083-X Persistent
84. Q-LA084-X Enthusiastic, optimistic
85. Q-LA085-X Tolerant of frustration
86. Q-LA086-X Dependable, reliable
87. Q-LA087-X Careless, risk-taker
88. Q-LA088-X Even disposition
89. Q-LA089-X Committed to the common good
90. Q-LA090-X Personal integrity
91. Q-LA091-X Intelligent with practical judgment
92. Q-LA092-X Ethical
93. Q-LA093-X Communicative (listening, oral, written)
94. Q-LA094-X Sensitive, respectful
95. Q-LA095-X Networking
96. Q-LA096-X Networking
97. Q-LA097-X Planning
98. Q-LA098-X Delegating
99. Q-LA099-X Organizing
100. Q-LA100-X Team building
101. Q-LA101-X Coaching
102. Q-LA102-X Conflict management
103. Q-LA103-X Time management
104. Q-LA104-X Stress management
105. Q-LA105-X Appropriate use of leadership styles
106. Q-LA106-X Ideological beliefs are appropriate to the group
107. Q-LA107-X Problem solving
108. Q-LA108-X Decision making
109. Q-LA109-X Information management

110. Q-OTH110-X Administrative/management knowledge and skills
111. Q-OTH111-X Broader perspective about the organization
112. Q-OTH112-X Status in the organization
113. Q-OTH113-X Unspecified "interpersonal" skills: orientation to people
114. Q-OTH114-X Other

115. Q-NR115-X No relevant response

X. Important Aspect(s) of Planned Experience (Choose all that apply)

116. ASP-M116-X Interacting, enjoyable, exciting
117. ASP-M117-X Challenge: Risk of failure
118. ASP-M118-X Challenge: New and/or complex tasks or problems
119. ASP-M119-X Challenge: Job overload, stress
120. ASP-M120-X Challenge: Barriers (lack of higher level support and/or resources; resistant or incompetent subordinates, etc.)

121. ASP-M121-X Change in context and/or personnel
122. ASP-M122-X New and/or increased responsibilities
123. ASP-M123-X Internship
124. ASP-M124-X Special assignment: Start-ups
125. ASP-M125-X Special assignment: Fix-it
126. ASP-M126-X Special assignment: Other
127. ASP-M127-X Teaching/counseling
128. ASP-M128-X Handling personnel: Hiring
129. ASP-M129-X Handling personnel: Conflict/resolving
130. ASP-M130-X Handling personnel: Developing
131. ASP-M131-X Work on teams/committees
132. ASP-M132-X Mentoring/coaching/directive support
133. ASP-M133-X Working with a supervisor
134. ASP-M134-X Other

135. ASP-E135-X Professional association/unions activities
136. ASP-E136-X (Formal) training activity/program, e.g. leadership academy
137. ASP-E137-X Simulation/Case studies
138. ASP-E138-X Shadowing/observation
139. ASP-E139-X Mentoring
140. ASP-E140-X Other

141. ASP-N141-X Community service
142. ASP-N142-X Other

XI. Relevant to this Interview

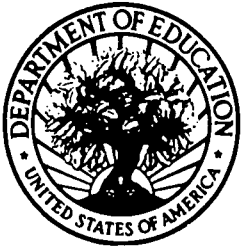
143. ASP-M143-X No relevant response
144. ASP-M144-X Challenge: Risk of failure
145. ASP-M145-X Challenge: New and/or complex tasks or problems
146. ASP-M146-X Challenge: Job overload, stress
147. ASP-M147-X Challenge: Barriers (lack of higher level support and/or resources; resistant or incompetent subordinates, etc.)
148. ASP-M148-X Other

149. ASP-F149-X Negative experience/feedback
150. ASP-F150-X Opportunity to plan and/or reflect: feedback provided
151. ASP-F151-X Assessment of personal strengths or weaknesses
152. ASP-F152-X Chance to learn new ideas, practices, insights
153. ASP-F153-X Opportunity to apply and practice skills and knowledge
154. ASP-F154-X Encouraging/confidence building
155. ASP-F155-X Exposure to role models: Positive
156. ASP-F156-X Exposure to role models: Negative
157. ASP-F157-X Freedom to make decisions and mistakes
158. ASP-F158-X Exposure to other cultures
159. ASP-F159-X Other

160. ASP-N160 No relevant response

XII. Macro (overarching) insights

161. MAC-T161 Add text to bottom of write-up
162. MAC-N162 Add text to bottom of write-up



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