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ABSTRACT

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EMPLOYER-SPONSORED CAREER DEVELOPMENT PROGRAMS

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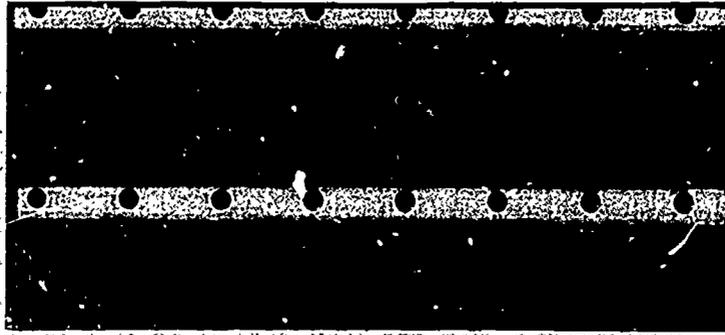
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FOREWORD

The Educational Resources Information Center Clearinghouse on Adult, Career, and Vocational Education (ERIC/ACVE) is one of sixteen clearinghouses in a nationwide information system that is funded by the National Institute of Education. One of the functions of the Clearinghouse is to interpret the literature that is entered into the ERIC data base. This paper should be of particular interest to adult educators, vocational educators, personnel directors, training directors, and career development specialists in business and industry.

The profession is indebted to Anita Sklare Lancaster and Richard R. Berne for their scholarship in the preparation of this paper. Recognition also is due Jane Goodman, Oakland University; Richard L. Knowdell, Career Research and Testing; and Robert D. Bhaerman, the National Center for Research in Vocational Education, for their critical review of the manuscript prior to its final revision and publication. Susan Imel, Assistant Director of the ERIC Clearinghouse on Adult, Career, and Vocational Education, coordinated the publication's development.

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EXECUTIVE SUMMARY

This monograph presents an overview of employer-sponsored career development programs. It is divided into four sections. The "Adult Development" and "Adult Career Development" sections review pertinent theories and research (basic concepts, task model, transition model, theme model, adult career stages, career anchors approach, career development and planning programs), particularly as they relate to the intended audience of this paper. The "Career Programs and Practices for Adult Workers" section discusses factors contributing to the development of employer-sponsored career programs; an analysis of the delegation of responsibility for the development and ongoing implementation of such programs; descriptive information on current practices and programs; and future perspectives. In the appendix, case studies are presented that include overviews of career development programs within specific settings (Anheuser-Busch; Bache Halsey Stuart and Shield, Inc.; Disneyland; General Electric; Goddard Space Flight Center; Lawrence Livermore National Laboratories; Virginia Polytechnic Institute and State University). References and a selected bibliography are included.

Literature on employer-sponsored career development may be found in ERIC under the following descriptors: *Adult Development; *Career Development; *Career Planning; Case Studies; Educational Research; Educational Theories; *Employers; Models; *Program Development; Program Design; Program Content; Program Evaluation; *Program Implementation. Asterisks indicate descriptors having particular relevance.

INTRODUCTION

A "Doonesbury" comic strip a few years back, showing Garry Trudeau's rendition of a class reunion, focused on a conversation between two alumni. The first asked his one-time classmate what he had been doing with his life since graduation. "I have seen," the other replied, "over nine thousand incredibly beautiful sunsets." Most of us probably would have been as bewildered as the old school chum by this response. But the scene, and the exchange, do supply us with a perspective from which to examine adult career development as a natural outgrowth of and contribution to the overall growth and change of the adult person.

For most of us, work is implicitly understood as a life cycle task of adulthood (Chickering and Havighurst 1981). For Freud, the ability to work, combined with the ability to love, are indispensable components of a healthy person. Human wisdom, however, has not yet found a way, within the context of the varieties of human experience, to develop a truly adequate training program or formal preparation for marriage, parenting, or careers as life projects. Indeed, simple, universal human experiences often remain the most elusive when we attempt to explain them either to ourselves or to others. This factor alone may explain the arduously slow and limited development and implementation of career development programs in business and industry.

What we do find, however, is that during the last few years we have witnessed a marked increase in attention to adults, their development, and analyses of their major life tasks. Moreover, theorists and researchers increasingly agree that our understanding of adult career development should be tied to our growing conceptualization of the process of adulthood itself, for it appears that career developmental life experiences both *express* and *direct* the total life development process.

The purpose of this monograph is to present a brief overview of employer-sponsored career development programs through a literature review. The paper has been organized into four subsections. The sections on "Models of Adult Development" and "Adult Career Development" review pertinent theories and research in those areas particularly as they relate to the work of persons responsible for employer-sponsored career development. The "Career Programs and Practices for Adult Workers" section—

- reviews factors contributing to the development of employer-sponsored career programs;
- presents an analysis of the delegation of responsibility for the development and ongoing implementation of such programs;
- provides descriptive information on current practices and programs;
- discusses future perspectives.

Case studies of career development programs in specific settings are included in the appendix. Organizations for these case studies were selected so as to provide a representative range of programs currently operating successfully in industrial, commercial, education, and government settings.

This monograph will address the topic of employer-assisted *career-development* programs. "Career" is defined as a sequence of positions occupied over a lifetime (Super 1957); "career" embraces and interfaces with all other life roles as a total expression of one's pattern of self-development (Super 1976). "Career development," therefore, embraces the total spectrum of sociological, psychological, educational, economic, physical, and life forces that interface to impact and shape the career of an individual; it also is a "process by which one develops and refines such characteristics as self and career identity, the ability to plan with foresight, and career maturity" (Herr and Cramer 1979).

Despite the authors' use of the terms "career" and "career development" as previously defined, other authors and practitioners in work settings use these terms and others in disparate ways. For the purpose of this paper, therefore, no attempt will be made to change cited authors' terminology.

MODELS OF ADULT DEVELOPMENT

Adult development, along with family development, almost has become representative of psychology during the seventies. Despite the tremendous interest in the topic, however, no significant agreement about adult development has emerged beyond the conviction that the adult years from eighteen on comprise, for most people, ongoing development and change. The process of development is only beginning to be unraveled as a result of a number of models that address adult change and development. While there are many ways of classifying and describing the available models, the use of task, transition, and theme concepts will be used to contrast these bodies of knowledge.

Virtually all current approaches can be understood as life-cycle or life-span models. Excellent descriptions of the life-cycle approach can be found in Chickering, Chickering, and Durchholz (1976); Chickering and Havighurst (1981); and Weathersby and Tarule (1980).

In all the major theories, the human life cycle advances according to stages. A life stage is an age-related period, but not necessarily or exclusively age caused, in which predictable issues and tasks exist (Weathersby and Tarule 1987). Furthermore, several theorists, notably Levinson, et al. (1978) and Gould (1975, 1978) use the concept of *life structure* to describe the way in which individuals relate to their social environment. The roles of work and intimacy are critical (Weathersby and Tarule 1980). The concept of *developmental task* is one used by several adult development theorists. Nowhere does it figure more largely than in the work of Havighurst (Chickering and Havighurst 1981; Havighurst 1972). Developmental tasks are the tasks of life required for health, and for satisfying and appropriate growth in society.

Finally, the overall term *development* needs further definition. Knox (1977), in his comprehensive handbook of adult development, refers to development as consisting of orderly and sequential changes in characteristics and attitudes that adults experience over the passage of time. Thus, development is distinguished from growth per se or simple change. In fact, Neugarten and Datan (1973) see the major task of developmental psychology to be the study of sequences of change so as to identify which ones are primarily developmental (maturational), and which are primarily situational.

All of these concepts are basic to any of the three aforementioned models: task, transition, or theme. The identification of specific developmental experiences is of great significance in the specific case of adult career development. Which types of career programs are developmental, and which are primarily situational, and for which individuals? This distinction, if indeed valid, runs parallel to Chickering, Chickering, and Durchholz's (1976) between education (developmental) and training (situational).

The Task Model

The notion of human development as a series of epigenetic tasks (each stage and task building on that one which *must* have immediately preceded it) is most closely associated with Erikson. Building beyond Freud's two-fold adult tasks of love and work, Erickson postulated the critical

issue of resolving a series of conflicts as the key adult development tasks (1963). Havighurst (1972), as already noted, and Bühler and Massarik (1968) also conceptualized a task approach to adult development.

The Transition Model

More recent theories of adult development can be categorized as transition models. These theories focus on the shifts in perspective, attitude, and behavior that mark development from one stage to another.

Sometime ago, Neugarten (1968) championed the idea of a continuum in adult activities and the importance of the timeliness of transitions through the life cycle. For Neugarten, the important issue was whether or not the functional events, such as reaching a peak of occupational achievement or involvement in a satisfying love/intimacy relationship occur "on time." If these events occur on time, they are not crises. If they do not so occur, if they are experienced too early or too late from the perspective of the individual, then they are crises (Knox 1977). In relation to the ongoing argument among developmental psychologists concerning the importance of time as it relates to development, Neugarten feels that it is not just the passage of time, but the biological and social events that occur with the passage of time that are crucial to the developing adult. This approach holds great promise for human resource specialists in justifying and planning career programs for employees. There is widespread myopic attention given to being "on time" or "fast track" among career-oriented workers and management, for example.

Probably the best known of the transition theorists are Levinson et al. (1978) and Gould (1978). Gould's work was popularized by Sheehy (1976) in her book, *Passages*. Levinson envisions the basic task of adulthood as building one's life structure or basic pattern or design of one's life. Levinson believes he and his associates have identified a schema of age-linked transitions that define the life stages and tasks. These include early adult transition, mid-life transition, and late adult transition.

The transition model has the advantage of bringing focus on movement through the life span and implies that an individual has some control over such movement. It would seem, however, that more attention should be paid to Neugarten's concept, that timely transitions in life role or structure preclude the inevitability of transition representing a predictable crisis.

The Theme Model

The theme approach to understanding adult development emerges from the work of Lowenthal, Thurnher, and Chiriboga (1975), Schlossberg (1978), Schlossberg, Troll, and Leibowitz (1978) and, in a related way, Klaus Riegel (1976).

The four stages of life, identified by Lowenthal, Thurnher, and Chiriboga (1975), center around themes of personal expressiveness and style as they relate to life tasks, social roles, and environments. Most importantly, and quite uniquely, Lowenthal shows a significant difference between men and women across the stages.

Schlossberg, Troll, and Leibowitz (1978) identify (1) stress and its management; (2) stock-taking; (3) shift in time perspective; and (4) locus of control as the progressive and recurrent themes of adulthood. While the theme theorists have a developmental, life-span approach, they do not subscribe to a specific task of transition progression as do stage theorists. This perspective can be

quite useful for career planners and counselors from the perspective of assisting adults to examine where they are and to assess and take charge of their futures.

Klaus Riegel is underrepresented in most reviews of adult development literature. Riegel was something of a renegade among developmentalists, for he tied adult development to a dialectic model. For him, the themes of thesis, antithesis, and synthesis mark adult progression. Like Neugarten, Riegel held that crises arise from asynchronies in the inner-biological, individual-psychological, cultural-sociological, and outer-physical dimensions of a person's life. Also, Riegel held that there is a drive within developing humans not to remain static nor to avoid crisis, but to set problems and paradoxes for themselves to solve. Riegel's is an intriguing theory as it supports a healthy, balanced response to life struggles and surprises (Riegel 1976).

What is termed here as the "Theme Approach" enjoys considerable popularity among theorists with a counseling or human resource development background. This is in no way surprising as the implication of possible change and self-mastery is present in this model. Task and transition theorists tend to encourage, or at least support, a certain inevitability of life events that is not in the theme approach.

Schlossberg (1977, 1978) is an apt example of a counseling-oriented theorist. Entine (1977) is yet another. Entine ties psychological and economic factors influencing life development and career change with counseling and teaching interventions. Moreland (1979) is another counseling-oriented theorist who extrapolated some of Riegel's ideas to counseling applications of adult developmental themes.

Summary and Limitations

It should be noted that not everyone is in agreement with the life cycle approach to adult development. Stein and Etzkowitz (1978), two sociologists, refute the hierarchical, sequential, and cumulative assumptions of the life-cycle approach. They propose, instead, a life-spiral approach, which is comprised of the ordering of roles in a variety of sequences, the multiplicity of institutionalized and emerging adult roles, and the varying durations that these roles are enacted by different persons. In general, Stein and Etzkowitz take an idiosyncratic approach similar to that of the theme theorists.

Still others are concerned with the limitations of the applicability of stage models to the life courses of adults. Kummerow and Hummel (1977) found the types of transitional stages described by Levinson and Gould to have only a limited degree of fit with the adults in their study, particularly with regard to the age thirty transition. Lacey and Hendricks (1980) found age to be only minimally related to attitudes toward self, while social class, race, and sex were predictors of attitude and perception.

The classification of adult developmental models as task, transitional, and theme has direct application to career programs in business and industry, because career development is an aspect of total adult development and neither concept, adult development nor career development, can be neatly extricated from the other. Experience with career development programs, for example, can help to explain, correct, and complete our understanding of adult development, for no matter how much emphasis adult development has received this past decade, ironically, it is a field of study still in its incipient stages of development.

ADULT CAREER DEVELOPMENT

While the subject of this monograph is employer-sponsored career development programs, it is important to review not only some of the recent literature on adult development, but also specifically that on adult *career* development. The interplay of both knowledge bases—adult development and adult career development—provides a framework for understanding and assessing the outcomes of practical attempts to aid programmatically adult career development in work settings.

We have already defined career as a sequence of positions occupied by an individual during the course of a lifetime and interfacing with other life roles as a total expression of one's pattern of self development. Nothing is more central to a person, nor more manifest of an inherent life-span perspective, than what one does over time. Both in its individual representations (as career) and in the complex interaction of work lives, such an understanding of career has to do with the filling of space, by action, over time. Career, so understood, is a playing out of the basic metaphysical and ecological issues throughout our rational lives. It is no wonder we have gained so little in new knowledge beyond halting and incomplete theories.

A career is the process of events in which choice and happenstance meet and do battle for the attention and loyalty of each of us. Holland, Magoon, and Spokane (1981) approvingly quote Tyler's (1978) description of an individual as a "sequence of selective acts." Tyler suggests that such horizontal differences between people, such as lifestyles, cognitive styles, and decision-making strategies, require our examination as well as the vertical, life history differences. In other words, as many organizational human resource planners and executives have already discovered, successful salespersons can be terrible sales managers. Their work style, values, detail orientation, and need for independence (horizontal qualities), for example, very well could prevent success in management. This readily understandable rationale for preselection consideration and developmental training is suggested as a needed and fundamental component of career development programs in which both the individual career planner and the organization have input and control.

Adult Career Stages

To illustrate the interrelationship of adult life stages and career development, Super and Hall (1978) formulated a composite model of adult career stages, conceptualized as an adaptation from Hall's (1976) earlier work.

The model is based primarily upon the work of Super (1957), Erikson (1963), and Levinson et al. (1978). This model is a stage theory, compartmentalizing career development into identity, intimacy, generativity, and integrity. The teens and early twenties are presented as a period of trial jobs and getting established, which is a concept borrowed from Super's work. The age twenty-five to forty-five time span is one both of settling down (a Levinson concept), and of intimacy or formulation of commitments (which is based upon Erikson's theory).

In this model, the mid-career transitional period occurs in the forties. BOOM (*Becoming One's Own Man*) is Levinson's concept for this time of breaking with mentors as well as experiencing a critical career directional stage of growth. This stage is depicted as a transition link to either growth, maintenance, or stagnation in the final integrity stage.

With regard to this paper, the mid-career stage of development is of importance since it has been neglected as a focal point for organizational career development and planning activities. This neglect, however, could be changing. Recently, Schein (1978) strongly advocated that human resource planning and activities at each stage of employee development not be considered simply a benefit given to the individual, but that such services be viewed as of benefit to the organization. Given the intertwining of the mid-career employee and the living history and direction of the organization, the point seems obvious.

With regard to early career development stages, Hall (1971) proposed a model depicting cyclical stages such as: early job challenge goals, career commitment, career motivation, and future goals. These essentially "preestablishment" to "early establishment" stage propositions remain, along with all adult career development theory, largely untested. No significant empirical evidence exists for this or any life-span formulation of career development theory concerning adults.

What do exist are some descriptive studies (Regan, Paltridge, and Terkla 1980; Ferrini and Parker 1978) and case studies such as those of Blackburn and Havighurst (1976). Interestingly, the Blackburn and Havighurst study did not corroborate psychological adult development theories. After studying career patterns of seventy-four eminent male social scientists, they found among their subjects distinct career events, but not distinct stages.

The problem remains a perplexing one. As Super and Hall (1978) conclude in their excellent review:

Perhaps the most troubling issue from both a theoretical and practical standpoint is, what is development in the work career? Is it occupational success? satisfaction? growth and development of skills? successful movement through various life stages? In many career programs development is defined as occupational advancement, which is clear and easy to measure. However, advancement opportunities are reduced as organizations experience slow growth, and alternative means of satisfying employee's career aspirations may be needed. Ultimately, the definition of development may be a *value issue* to be defined by each organization in creating its own career program. (p. 367)

A Promising Approach: Career Anchors

One approach to the understanding and facilitation of adult career development is that developed by Schein of Massachusetts Institute of Technology (MIT). In his book, *Career Dynamics* (1978), Schein describes career development in terms of career anchors. A career anchor is an "occupational self-concept" that develops within and is developed by a person through successive stages in various life roles.

Schein divides the work career into (1) Early career; (2) Midcareer; and (3) Late career stages. Each of these stages has its own issues. These issues represent the individual needs of the worker that require attention by organizations in planning career development programs.

Schein maintains that the issue of locating and building upon one's career anchor is largely the first midcareer issue. In fact, this event marks the onset of the midcareer stage. Basing his conclusions on findings from research he conducted at MIT, Schein describes this "occupational self-concept" as comprised of: (1) self-perceived *talents and abilities* based on actual success in a variety of work settings; (2) self-perceived *motives and needs* based on opportunities for self-tests and diagnosis in real situations and on feedback from others; and (3) self-perceived *attitudes and values*, based on actual encounters between self and the norms and values of the employing organization and work setting (Schein 1978).

Specifically, there are five career anchors that were identified by Schein: (1) Technical/Functional Competence; (2) Managerial Competence; (3) Security; (4) Autonomy; and (5) Creativity. Each of these has several functional characteristics that need not concern us here. But, even as they stand, we can see how the concept of career anchors shows promise as a model of career development for working adults. The concept combines both vertical (historical) and horizontal (additional roles) aspects; it attends to the impact of both the person and the environment; and more importantly, their integration.

A "horizontal" (to use Tyler's [1978] word) aspect of Schein's approach, for example, is the attention he gives to the effect of the established phenomenon of the dual-career family. The degree of work and family involvement on the part of each spouse has direct effect upon the work or family involvement of the other.

Unfortunately, the Schein model, along with every other model of adult career development, and indeed adult development itself, remains largely untested. The project for career planning and development programs is twofold. First, these programs need to be coordinated with current, although untested, theory. Secondly, they need to be designed so as to provide the means to test the theoretical formulations upon which they are based.

Career Development and Planning Programs

The process of career development and specific programs or interventions to facilitate career development have become a major preoccupation of human resource professionals in business and industry. Research and evaluation studies are lacking, however. Super and Hall (1978), after an exhaustive review, came to the conclusion that the research literature on the effects of career programs in work settings was sparse indeed.

There are occasional studies reported. For example, with regard to the hard-to-employ, or CETA-type program, one study by Salipante and Goodman (1976) had found that it was the content of training, rather than the availability of training, that was the critical variable. Job-skills training was positively related to retention, while attitudinal training was negatively related. Selection criteria are an important component in organizational career programs. One of the authors, for example, is familiar with a steel foundry operation that had a terrible retention problem with foundry laborers. After some inquiry, the personnel department indicated that they were interviewing for and selecting as laborers family men with aspirations for growth and advancement. The company, by the way, had promoted only one laborer to supervisor in the previous three years. Why use growth attitude as a selection criteria when you are only going to frustrate that attitude in a work setting?

In another study, Miller, Bass, and Mihai (1973) reported that research and development employees thought that career planning was useful in enhancing self-development among lower-level employees, while self-analysis and action planning were useful in the same regard at managerial levels.

Concerning career establishment and success, Hall and Schneider (1973) found the following: that the key condition for career success is a challenge in the work itself; that under failure conditions, the individual's self-image becomes detached from work experiences; and, somewhat surprisingly, that a person's first assignment appears to have a lasting impact on later career commitment and success. More recently, Wanous (1980) found that a realistic job preview as a part of recruitment and early career entry experiences resulted in lower turnover and fewer thoughts about leaving the company.

Summary

Regardless of how we conceptualize adulthood, adult career development, and programs designed to facilitate career development among adults, two sources of continuity exist. On the one hand, it appears certain that adult career development has to be continuous with the total development of the whole person. This is true whether we think about adult development as centered on tasks, transitions, or themes. Career planning and development is an application and, at the same time, a source of this more wholly conceived and unfolding growth of adults. Secondly, the career development of any and all adults has to be continuous with the physical, economic, cultural, and social environment in which the person's career growth is occurring. Career programs, therefore, in order to be successful, need to be consistent with these two continuities. Career programs have to be consistent with who a person is, in terms of total life-cycle experiences and involvements, as well as existing and potential competencies. Successful programs also must, according to the limited literature available, be consistent with *where* a person is contextually.

Regrettably, the growing body of literature on adult career development theory and practice, such as the excellent compilation of articles by Campbell and Shaltry (1978), focuses on the context of educational settings and public agencies. Adults are the same people in educational or business settings, but it appears that their demonstrable behavior and implied values and needs are subtly, but importantly, different in the work place. Research needs to be equally contextual and specific, especially regarding felt needs and manifest values. The existing literature (particularly in the area of theory), even though sparse and untested, can provide guidelines for the development and evaluation of career development programs in business and industry.

CAREER PROGRAMS AND PRACTICES FOR ADULT WORKERS

Capsulizing the state of the art on the topic of employer-sponsored career development programs has been a perplexing task because the related literature is fairly scarce, of a general nature, and lacking a research and evaluation base. That is not to say that there is a lack of interest in this topic; on the contrary, there currently are a number of related publications being developed and, from a review of the literature, the increasing attention given to this topic in the past five years is readily apparent.

Critical to developing an understanding of employer-sponsored career development programs, however, is access to descriptive and evaluative information about existing programs and practices. To date, only four substantive survey research projects have attempted to compile and analyze such data, and, unfortunately, results from three of those surveys are questionable because of blatant, nonsampling research errors and possibly sampling errors as well.

One survey was completed under the auspices of the Educational Testing Service (ETS) (Cohen 1977). The ETS data were collected using a written survey, interviews, and a review of the literature. Final information on twenty-four employee career programs was summarized; there was never any indication of when survey, interview, or literature data were being reported. In addition, there was never any indication that the survey instruments were field-tested or in any way scrutinized for validity purposes. Cohen (1977) admits that one serious limitation of the ETS survey was its lack of definitive terms. The opening question, "Does your company have a formal career development program?" produced a myriad of responses, for example. Cohen remarked that several companies that responded "No" to this initial query went on to list programs for "career counseling" and "employee development" on other parts of the questionnaire. In other cases, the author noted, the response to the initial question again was "No," but a literature review indicated that career development programs were, indeed, in operation.

Another survey, again on the topic of employer-sponsored career development programs, was conducted using telephone interviews with fifty-six companies in the Chicago Metropolitan Area (Morgan, Hall, and Martier 1979). Neither the interview format and questions nor any attempt at validating the survey was offered by the researchers. Finally, there was no disclosure of how the sample was selected.

In a research study designed to examine employer-sponsored career planning practices for women, Vetter et al. (1977) surveyed 602 employers and 1,197 postsecondary education settings. The employers were selected from the *Fortune 500* list as well as from higher education institutions with student populations of more than 15,000. The postsecondary education sample consisted of public institutions that were current members of the American Association of Community and Junior Colleges (AACJC). The Evaluation Division of the National Center for Research in Vocational Education conducted an internal and external review and pilot test of the survey instruments, the results of which were not reported. Results from the survey itself were based upon a usable return of 164 surveys for the employer group and 367 for the postsecondary education group.

Recently, a research project was completed by the American Management Associations (Walker and Gutteridge 1979). The project consisted of a study of employee career planning and development using a survey questionnaire. The survey was sent to 1,117 members of the Human Resources Division of American Management Associations and 225 companies responded to the questionnaire. Walker and Gutteridge indicated that companies were asked to report on career planning and development practices of salaried personnel, but neither a sample of the questionnaire used nor any indication of attempts to field test or analyze the instrument were included in the authors' document.

It is necessary to validate instruments in survey research (Babbie 1973), but it is important to point out that on this topic, in particular, it is critical to validate any written or verbal instrument because of the diverse use of terms that permeate both the literature and the practices in the field. What is *career planning*? What is *career development*? The indiscriminate use of terms on instruments leads to the gathering of indiscriminate responses.

Despite the limitations of the surveys cited, it is heartening to have some data available for analysis on this topic. Furthermore, it should be pointed out that of the previously mentioned surveys, only one provides specific, descriptive case studies of individual companies (Cohen 1977). Three surveys (Morgan, Hall, and Martier 1979; Vetter et al. 1977; and Walker and Gutteridge 1979) provide summative data regarding the state of the art on this topic.

Using information from these surveys as a basis, the following section of this paper will examine these subjects:

- The general state of the art on the topic of employer-sponsored career development programs
- The evolution of these programs, from a cultural and organizational perspective
- The responsibility, in employer settings, for the implementation of such programs and practices
- A summary of specific career practices and programs consistently mentioned in the literature
- Future forecasting on this topic

The State of the Art

Given the paucity of research and descriptive data available on the topic of employer-sponsored career development, the following state of the art is tentatively offered, much of it gleaned from a review of the literature of organizational psychology, management, training and development, and personnel.

- The career development of most individuals in work settings is informal and unsystematic, but most organizations are involved in some form of career development activity.
- To a great extent, research has not preceded the development of career programs and practices for work settings.
- To a great extent, top management in companies feels positive about supporting career development programs and activities for their employees and rationales for such support reveal that it is essentially tied to management needs. Career planning as a corporate interest is receiving increased attention.

- Despite widespread support of management for employee career development, there is little agreement as to how to operationalize such programs.
- Assisting employees with career concerns and planning is not a novel idea. Career development pioneering efforts by such companies as Western Electric and General Electric date back to the twenties. From a historical perspective, however, career development has been linked to or is the equivalent of management development. The career development of subprofessional workers, historically, was not considered career development at all; it was considered job training.
- Much of what is reported in the literature is of a conceptual nature; there is considerable reporting of what should be happening, rather than descriptions of what is happening. For example:

The firm entering into career planning programs for the first time must have in place personnel support activities that assist employees to analyze "pull" characteristics of their career plans. For example, the firm should have a human resources planning data base (short and longer term); high-grade career information related to actual requirements of jobs; career pathing and job-family data (what leads to what); and open-posting. Without these "pulls" or demand inputs, employees may prepare the most insightful career plans, but they may be at variance with the goals and intentions of the organization (Leach 1981, p. 287).

A major task of the career development practitioner in initiating a comprehensive process is to conceptualize the career development program as a logical, step-by-step framework and to determine how human resource development efforts can be supported by and be supportive of each step. A complete career development process is a cycle that moves sequentially through these six stages: Preparation . . . Profiling . . . Targeting . . . Strategizing, Execution . . . Integration (Kaye 1981, pp. 36-37).

- From a systems perspective, career development programs for employees will affect and be affected by other human resource development practices in a given organization; therefore, regardless of whether career development is a separate program, a series of related programs or an overarching, unifying force in an organization, its impact will be felt in related areas such as succession planning, performance appraisal, personnel, training and development, and so forth. In effect, even if career development efforts are neatly compartmentalized as separate programs, these efforts will have an impact on the organization as a whole. Because there is a lack of research with which to substantiate the effects of such programs, the literature is mostly speculative.

Although career development of employees is not a new concept and even though it often subsumes or is a relabeling of practices that have been in existence for some time, there is evidence that there are a growing number of new programs and practices that have been developed and implemented (Morgan, Hall, and Martier 1979; Vetter et al. 1977; Walker and Gutteridge 1979). With regard to why these programs and activities are receiving so much attention, a number of explanations are offered.

Evolution of Career Programs: A Cultural Perspective

In any local bookstore, shelves are stocked with career-oriented, self-help books. A growing interest in the career development of individuals within their work settings may be indicative of the overall, increasing interest of our society in career development. Hall, Hall, and Hinton (1978) and Leider (1973) cite several societally based reasons for the increased interest in this topic. Summarized, they are as follows:

1. A resurgence of traditional values such as marriage, family, and careers in our society.
2. A growing awareness on the part of workers that career is a key factor affecting overall quality of life.
3. Because mobility is no longer frowned upon by most large organizations, people can opt to accept or reject transfers and promotions; an acceptance of alternatives has led to an increased feeling of personal freedom and mobility in our society.
4. Education and employment are two viable vehicles for social equality, and women and minorities are more interested in careers than they have been in the past.
5. Because the average education of the American worker has risen, workers are developing increased aspirations.
6. Finally, in the past, the economic climate was one of rapid growth, and individuals typically did not plan careers because so many opportunities were available. Since there were relatively few qualified individuals to fill available positions, options for next jobs and promotions were always available to those desiring to move up. In today's slowed economy and with development opportunities more limited, some people are viewing career planning as a necessity if career fulfillment is to be achieved.

Another reason for growing interest in career development may be related to the fact that the social ethics of individuality and personal satisfaction, as an end in themselves, are more accepted nowadays. Work is viewed increasingly as more than a source of income. There is a growing trend among younger workers away from postponement of self-gratification and toward a psychology of entitlement. There are, for example, increasing cases of fast-track managerial candidates deciding to get off the career track to the top, which does not necessarily always mean leaving the company. Thomas H. Schumann, director of Selection and Placement for Mead Corporation in Dayton, Ohio says, "Managers are weighing personal considerations much more heavily than they did years ago" (McClenahan 1979, p. 96).

Walter Storey, manager of the Career Planning and Organization Development operation at General Electric Company's management center in Croton-on-Hudson, New York says,

"In 1968, when I came here, very rarely would you hear anyone in a middle-management-development course express any reservations about moving up. Now, you can hear that among 25% to 35% of the managers, and they're discussing it very openly—sometimes in the presence of fairly high-level people . . . But it's primarily society. In the last ten years our society has witnessed—perhaps for the first time—the potential for values to change several times within a lifetime. They could change every five years." (McClenahan 1979, p. 96)

Finally, the individual and the organization have a mutual interest in the development of personnel within the organization, and career development programs can serve the coexisting needs of both individuals and the organizations in which their careers are pursued. In the most traditional

view, an organization wants people operating, from a profit perspective, at an optimum level; in addition, optimally functioning people tend to accrue the obvious symbols of success: income, status or position, and the feeling of contribution to self, organization, and society.

Evolution of Career Programs: An Organizational Perspective

Aside from societally induced rationales for the increase in such programs, why would companies support career development activities for their employees? Specifically, six factors are referred to repeatedly as contributing to the development of career programs and practices. They are:

- Pressures of affirmative action and equal employment opportunity (EEO) legislation
- The need for forecasting and identifying personnel needs in organizations
- Strong interest in such programs on the part of employees
- An interest in reducing attrition
- An interest in increasing worker productivity
- An aid in employee evaluation or appraisal programs

A brief understanding of each of these six areas highlights the diverse motivation for support of current and future programs, as well as the potential impact on content development for such programs.

Affirmative Action and EEO Pressures

Francine Hall (1977) points out that personnel departments need career development programs to reduce EEO and affirmative action compliance barriers. Women often reduce their own mobility in a company, for example, by imposing self-chosen barriers on themselves and career development programs can assist women to examine self-induced and other barriers to their growth. In response to EEO and affirmative action pressures, some companies are developing specific career programs with explicit career paths, job requirements, and mechanisms for linking candidates with jobs (Walker 1976).

New York Telephone, for example, has developed "Ultimate Goals Opportunities" (UGO), a program aimed at encouraging women employees interested in advancement to consider technical job areas since these typically are overlooked by women. Today, one can find women repairers, truck drivers, mechanics, managers, and installers at New York Telephone (St. John 1979).

Legislating equality, of course, is no easy task, and many authors point out that EEO and affirmative action pressures will not solve the inequities and sexual and racial segregation that exist in the work place today (Bennett 1980; Cannon 1980; Hooyman and Kaplan 1976; Lepper 1976; Paddison 1979; Rankin 1978; Wells 1973).

Women not only have problems escaping from the "pink ghetto" or lower, subprofessional jobs, but those who do make it to mid-management also have a great deal of trouble rising in the ranks, and rarely does a woman make it to the chief executive position (Dibben 1979; Paddison 1979; Rankin 1978).

There is increasing evidence that women need more formal career and educational programs geared specifically to meet their work place needs (Vetter et al. 1977). In addition to formalized programs, women need sponsorship, often taking the form of several mentors during their lifetime (Edson 1980; Halcomb 1980; Kahnweiler and Johnson 1980; McCloy 1976; Shapiro, Haseltine, and Rowe 1978).

Interestingly, although many sources are supportive of career development programs for women in the work place (Anundsen 1979; Bolton and Humphreys 1977; Heiner et al. 1975; Higgins and Quick 1975; "Is Career Development the Answer?" 1981; Kay 1975; Norgaard 1980; Pilla 1977; Rader 1979; Walker 1977; Walker and Gutteridge 1979), a national study of this topic concluded that, "Although the data indicate that a variety of career planning activities are provided for employed persons by employers . . . activities specifically designed to respond to the concerns of working women are not widely offered" (Vetter et al. 1977, p. vi).

Forecasting Personnel Needs and Developing Talent

Career development programs also can serve as an aid in forecasting personnel needs within an organization (Hill 1976; Mardon and Hopkins 1969; Palmer 1972). Morgan, Hall, and Martier (1979) maintain that most formal career development programs have been initiated by top management as an effort to ensure the company of a future supply of talented personnel. Others agree and maintain that the continuing shortage of competent talent is a driving force behind the development of career programs in work settings and various forms of succession planning are used by most firms today (LaBelle, Shaw, and Hellenack 1980; "Career Planning at McGraw-Hill" n.d.; Walker 1976; Walker and Gutteridge 1979; Zepke 1979).

As one author states, "Retention of employees, not recruitment and selection, is where the emphasis is being placed. And this means greater attention to long range career development, individual counseling, work structure, and other nonpay aspects of employment" (Walker 1976, p. 55). Zepke (1979), in "Molding Tomorrow's Executives," points out that one reason management development recently has received such a surge of attention is because of the "serious shortage of management talent, particularly in middle management—30 to 44 age group from which middle managers are recruited—will not grow in proportion to the rest of the population. During the next 10 years as many as 60% of today's executives will be replaced" (p. 22). Hall and Lerner (1980) concur and state, "With all the children of the postwar baby boom becoming firmly ensconced in middle age and with organizational funding resources becoming increasingly scarce, the need to effectively develop and utilize the talents of employees is urgent" (pp. 433-434). As a result of such an impetus, for example, Marriott Corporation has initiated an eight program "rescue" operation for the purpose of retaining and developing young talent in the company; one of the eight programs is entitled "Career Progression" (Hostage 1975).

Career development programs also can aid recruitment efforts by organizations (Mardon and Hopkins 1969). First, satisfied employees tend to attract others to a company, for as Peter Drucker states in *The Practice of Management*, "The power of a company to attract good people is directly proportionate to its reputation as a developer of successful people for itself as well as other companies" (Winterscheid 1980). Secondly, career development programs can aid in recruitment as an enticement to prospective employees via the leverage, "We have planned approaches for helping you to advance systematically in our company." B.F. Goodrich is an example of a company which, in the early seventies, made a commitment to linking MBA recruitment efforts to fast-track career development programs. Such individuals were recruited via Goodrich's "Financial Career Development Program" (Woolredge 1979).

Employee Interest

There appears to be a growing awareness on the part of workers that their quality of life is significantly affected by their job or career and that a desire for upward mobility must be accompanied by planning, goal setting, and initiating actions. Leider (1973) suggests that with rapidly changing work environments and increasing job mobility, career planning is an individual responsibility and results in considerable payoffs for a person: an opportunity for more meaningful and satisfying work; an opportunity to develop an increased loyalty to a professional field of specialization; and increased opportunities for involvement in decision making regarding one's future. Morgan, Hall, and Martier (1979) point out, "Employee attitudes are strongly affected by career processes, and formalized programs in organizations can do much to increase employee commitment, involvement, and satisfaction."

Employee interest seems to be of a twofold nature. On the one hand, employees want career development programs because they wish to plan for specific growth opportunities in their careers (Hanson 1977); on the other hand, many employees desire such programs because they are confused and uncertain and use such programs as a means of clarifying work values. For these individuals, what Yaeger and Leider (1975) maintain makes sense, "meaning is the focus rather than hierarchical pursuits *per se*. The current search is for relevance, impact, meaning, change, etc. as opposed to pursuing money, position, and power as ends in themselves and indices of success" (p. 31).

In addition, a freeing force for such "meaning-oriented" employees might be the fact that the majority of married people now have the protection of a second paycheck. Because of this security and other aspects related to dual-career families, some individuals are seeking a better balance between work and home, rather than the traditional pursuit of status, position, and income (Bird 1980). For some workers who have realized that they are seeking alternatives to traditional indices of success, lateral job enrichment opportunities are important, and, in some instances, workers are beginning to expect such job enrichment ("Is Career Development the Answer?" 1981). Essentially, then, this work values issue has a quality of life focus.

Increasing Worker Productivity

Morgan, Hall, and Martier (1979), in their telephone survey of fifty-six companies, report that many firms feel that career development programs will increase individual and organizational efficiency and that many firms encourage career programs in the hopes of improving performance and profitability.

In a study conducted with engineers at IBM in San Jose, California (Miller 1977), the major conclusion was that "improvement in engineering productivity and improvement in the quality of working life for engineers are positively correlated" (p. 61). According to Miller, one answer might be to create a work environment that is supportive and flexible and allows individuals to assess regularly the match of their individual goals versus the organizational goals.

Reducing Attrition

Frank Felberbaum ("Is Career Development the Answer?" 1981) indicated that in a typical savings and loan bank, the cost range of bringing in a new employee is \$12,000 to \$14,000 and that reducing turnover via career development program interventions would be an asset to any organization. Although there has been no research to support the notion that employer-sponsored career

development programs may reduce turnover or even absenteeism, there is speculation that such programs might do so (Mardon and Hopkins 1969; Morgan, Hall, and Martier 1979; Van Dam 1977).

As an Aid to Employee Evaluation or Appraisal

As Knowdell (1980) has pointed out, "Supervisors who have long been responsible for *assessing and evaluating* the performance of employees are currently moving in the direction of *motivating and developing* their subordinates. In many organizations the 'performance appraisal' is coming to be viewed as a career development tool. The 1970's saw the emergence of dozens of supervisor's handbooks and training seminars focused directly on advising and counseling the employee" (p. 1).

It seems logical that if a supervisor or manager is aware of an individual's career plans, evaluation might be geared to the individual's own goals and standards rather than to those imposed by the supervisor. Apparently, a discussion of career plans in conjunction with the employee appraisal is not now uncommon. At Nystrom Corporation, for example, a career development fact sheet is used in conjunction with performance evaluation. Some companies, however, prefer to keep the two activities separate and distinct processes. Heublein, Inc., for example, involves supervisors and subordinates in both processes, but career development and performance appraisal are separate processes, with different forms and meetings involved (Cohen 1977).

Summary

From an organizational perspective, six rationales for support of career development programs have been presented. It certainly would seem that the motivating forces behind any organization's initiation and development of career programs would affect such critical factors as staffing and position on organizational charts, budget, program content focus, and evaluation focus, to name a few.

Walker and Gutteridge (1979), in the previously cited AMA Survey, analyzed why companies were offering career planning programs. The five factors cited as having the most influence on the development of career planning programs are: desire to develop and promote employees from within (87.8 percent); shortage of promotable talent (63.1 percent); desire to aid career planning (56 percent); desire to improve worker productivity (39.2 percent); and affirmative action program commitments (37.5 percent). Interestingly, the companies in this survey (N=225) indicated that systematic research by personnel staff and survey findings were not major reasons for the development of career programs. Of the top five reasons cited, only one—desire to aid career planning—really is individual-oriented; the other four reasons totally relate to organizational and managerial needs.

As a part of the same survey, Walker and Gutteridge found the following:

1. Ninety-one percent of the responding companies believed that career planning enhances job performance.
2. Ninety-two percent of the responding companies believed that career planning equips employees to use personnel systems more effectively.
3. Ninety-seven percent believed that career planning improves the utilization of employee talents.
4. Ninety-four percent believed that career planning would *not* disrupt the organization.

Although both employers and employees apparently have quite positive attitudes toward the development of career programs in work settings, some employers feel that such programs also might have some negative consequences. Walker (1978), for example, in "Does Career Planning Rock the Boat?," maintains that if career planning programs result in raised employee expectations, this could, in turn, create personal anxiety for the individual and place an additional burden on the supervisor level. He further points out that this personal anxiety and supervisory burden could lead to disappointment and reduced commitment, organizational disruption, diminished performance, and turnover. There are occasional references to possible negative effects of career programs, but none have been documented through research and evaluation efforts.

Responsibility for Career Programs

Only three surveys have gathered data on the topic of responsibility for career programs and practices. In one telephone survey to fifty-six companies (Morgan, Hali, and Martier 1979), the researchers found that one-third of the companies budgeted career development activities as a personnel item, one-third budgeted the activities as a part of an individual department's operating budget, and one-third indicated that the cost of career development activities was shared by the individual department and the personnel department. In this same study the researchers concluded:

When asked about the responsibility for career development in general, the results suggest shared responsibility between the personnel department and the manager. In most of these cases, the importance of the individual manager assuming responsibility for the development of subordinates was stressed while the role of the personnel department was to facilitate this managerial practice. It is interesting to note that in only a few cases was the individual's responsibility mentioned. This lack of recognition of the individual's role in his career development raises an interesting question about selection. In more than 80 percent of the cases, we found that participants in the career programs were nominated by the manager, the personnel department, or by someone in top management. Self-nomination was encouraged in only a few cases. (p. 20)

In another study (Walker and Gutteridge 1979), it was reported that 62.4 percent of the respondents (N=225) indicated that career planning is primarily the responsibility of the personnel staff. Nearly 23 percent indicated that it was the responsibility of line managers and supervisors; 11.4 percent indicated that the responsibility for such programs had not been determined as yet; and 3.3 percent of the respondents reported that a separate staff unit had been created and assigned responsibility for this function.

In a third survey of twenty-seven corporations (Cohen 1977), the researcher concluded that:

Many of the corporations placed responsibility for career development of employees upon the manager. It was considered the supervisor's responsibility to provide the job experience, the challenge and the counseling necessary for an employee's career growth. It was believed, in these companies, that career development worked from the top down and that if managers were aware of their needs and had their career goals defined, they could help their subordinates. Training given to managers for this important responsibility varied greatly. (p. 16)

Of the three surveys cited, only one correlates perceived effectiveness of career programs with delegated responsibility. Walker and Gutteridge (1979) report:

While most companies express the general belief that career planning is a management process merely assisted by personnel staff actions, our survey results indicate that staff support is essential. The companies that rated their programs very effective are those that have made administration of career planning a full-time responsibility of the personnel/human resource staff. When responsibility is left solely to supervisors or to staff on a part-time basis, the rated effectiveness is not as high. By far the greatest factor associated with effective career planning is its integration with existing personnel systems. When such systems as performance appraisal, training and development programs, rotational programs, information systems and skills inventories, and management succession planning are in place and linked to career planning practices, the overall effectiveness is considered high. (p. 4)

In practice, then, supervisors often carry the major responsibility for providing assistance to individuals with career development needs; however, scant attention seems to be given to assisting managers with this function and, indeed, Walker and Gutteridge's (1979) findings suggest that sole reliance on supervisors to fulfill this role may result in less effective programs.

Career Practices and Programs

An initial assessment of current practices and programs in this field produced a potpourri of results. Some conclusions that can be drawn are as follows:

1. This field lacks an accepted, commonly held body of nomenclature. Terms that are rarely defined and used in quite disparate fashion are the following:
 - Career
 - Career Development
 - Career Counseling
 - Career Planning
 - Career Guidance
 - Career Management
 - Career Exploration
 - Career Ladders
 - Career Pathing
 - Management Development
 - Vocational Counseling
2. Besides the indiscriminate use of terminology, what is reported in one setting as a career *program* is reported in another as an *intervention, practice, or method*. As mentioned previously, to some extent the scope of employer-sponsored career programs or interventions are dependent upon how and where those services are organized within the company. Career development, therefore, may be an extensive program in one company with concomitant methodologies such as self-assessment, exploration of job information and pathing, and development of a career profile. In another company, career development is a singular methodology; it is when a supervisor meets with a subordinate once a year to review that person's performance and plans for the future.
3. While a number of authors feel that effective career programs must be linked to other,

ngoing personnel or human resource development programs (Cohen 1977; "Is Career Development the Answer?" 1981; Kaye 1981; Walker and Gutteridge 1979; Winterschied 1980; Yeager and Leider 1975), other authors maintain that career practices have evolved to meet specific needs in an organization and that these practices need not become full blown formal career programs (Morgan, Hall, and Martier 1979; Leibowitz and Schlossberg 1979).

With these three points made, the following figure is offered as an attempt to summarize the scope of programs and practices in the field. The summary has been grouped under general headings that reflect the nature of the reported practices and programs. The six headings are: Individual Career Planning and Counseling; Assessment; Career Information Services; Organizational Career Planning; Training and Development; and Special Populations Programs and Practices. In most organizations, the six areas in figure 1 overlap in practice. For example, some companies use assessment as a means of collecting data for personnel and succession planning. Within different organizations, therefore, there also are different systems of interplay between the areas listed.

The purpose of the figure, however, is to provide a basis for examining the diverse programs and practices reported in the literature. The remainder of this paper will, therefore, highlight each of the six areas listed with illustrative examples. No attempt has been made to represent systematically different industries or groups in this section, with one exception. To avoid repetition, the organizational case studies presented in the appendix (Anheuser-Busch; Bache Halsey Stuart and Shields, Inc.; Disneyland; General Electric; Goddard Space Flight Center; Lawrence Livermore National Laboratories; and Virginia Polytechnic Institute and State University) will not be used as illustrations in this section.

Individual Career Planning and Counseling

In the literature there is no consensus about the definition or meaning of career planning or career counseling, but typically the terms are used interchangeably and in relation to programs and practices describing both formal and informal counseling of employees. The counseling, whether formal or informal, may be conducted by personnel staff, managers, peers, and/or specialized counselors. Another type of individual career planning and counseling service is downward or transfer counseling, which is an attempt to help individuals who are making a lateral or downward job move within the organization. Outplacement counseling (also called outreach placement, termination counseling, and career continuation), is another career counseling activity; although it once was relatively rare, it has now become a routine activity for over 75 percent of the Fortune 500 corporations (Buchanan 1980). In essence, outplacement counseling is offered to an organization's key employees when they are terminated; and the cost, length of time, and services delivered vary. Finally, organizations may assist individuals with self-career planning by providing them with self-help workbooks and assessment guides such as interest inventories. Examples of individual career planning and counseling practices reported in the field are described below.

John Hancock Insurance Company. At the John Hancock Insurance Company, career counseling is accomplished through two sources, staff career counselors and department managers. Career counseling is a relatively new program at John Hancock, and employees must request it. The program helps employees assess their needs and interests through testing inventories and goal setting (Cohen 1977).

McGraw-Hill. In describing career counseling, McGraw-Hill's literature ("Career Planning at McGraw-Hill" n.d.) instructs employees to go first to their supervisor for assistance. If, however,

FIGURE 1
EMPLOYER-ASSISTED CAREER DEVELOPMENT
PROGRAMS AND PRACTICES

Individual Career Planning and Counseling

Career Counseling by Personnel Staff

Informal: Career and Educational Information and Advising

Formal: Matching People with Job Service

Career Counseling by Managers/Supervisors

Informal: Day-to-Day; Mentors

Formal: Career Development Reviews/Appraisal; Performance Reviews

Career Counseling by Peers

Career Counseling by Specialized Staff Counselor

Referral to External Career Counselor

Downward, Transfer, or "Dual Ladder" Counseling

Outplacement Counseling (Outreach Placement)

Individual Career Planning by Self

Assessment

Battery Testing for Aptitude, Intelligence, Personality, Situational Factors

Individual Career and Self Analysis

Performance Appraisal Processes

Interest Inventory Testing

Career Information Services

Job Posting

Communication of EEO and Affirmative Action Programs and Policies

Communication on Career Paths or Ladders

Communication of Educational Assistance; Continuing Education Options

Communication on Training and Development Options

Career Information (Resource) Center Programs

Organizational Career Planning

Personnel Succession Planning

Fast-Track Management Planning

Personnel Profile Planning

Internal Recruitment and Development Planning

Training and Development

Training of Supervisors/Managers in Career Counseling

Life and Career Planning Workshops

Job Performance and Development

Technical Skills Training

Sponsorship of Outside Training Options for Employees

Managers' On-the-job Training of Subordinates

Special Populations Programs and Practices

Minorities

Women: Subprofessional/Reentry/Managerial

Preretirees

Midcareer Trainees

Management Trainees

Outplacement of Terminated Employees

Subprofessionals

Disadvantaged

Handicapped

Dual Career Families

employees' career plans go beyond the immediate department, they can write or call the personnel relations' Career Planning Unit in either New York City or Hightstown, N.J. This unit can provide career path information to employees. One interesting intervention at McGraw-Hill is entitled "Career Resource Interviews," a process that helps company employees with career exploration opportunities. If, for example, an employee is interested in investigating a particular position or career path, one of the career opportunities coordinators will arrange for that employee to interview someone in the area so that the employee personally can gather data about the job.

Heublein, Inc. Heublein, Inc.'s Career Development Planning Program relies heavily upon the employee-supervisor model. Exempt employees' skills, abilities, and interests are assessed by their immediate supervisor and by a management representative from the Division of Human Resources. Through conversations with the supervisor, a personal career program is developed for the employees. The Development Review Process is used to assess these personal career programs. Interestingly, the section of this form labeled "Action" attempts to relate individual aspirations and developmental needs to Heublein's personnel (human resource) needs (Cohen 1977).

Citicorp. Citicorp, a corporation with 45,000 employees, has a centralized personnel relations department that offers a number of career development and planning related services for employees, depending upon the employee level within the organization. Professional employees, for example, have access to Citicorp's Official Placement and Transfer Service (OPT). OPT's function is to match job-seeking people with openings in the organization. In essence, it handles intergroup transfers. To use OPT, professional employees must have had a satisfactory performance appraisal within the past year, must not have used the service within the past six months, and must have their supervisor's approval. Citicorp has a separate career development program for nonofficial or nonprofessional staff members who have college degrees and wish to be promoted. Career planning workshops help such employees with self-awareness and skills assessment. Nonprofessional employees who do not have a college degree can participate in the Nonprofessional Opportunity and Transfer System. Citicorp also provides counseling services to professional staff and nonprofessional employees with college degrees. These structured counseling services are on three topics: self-assessment, how to market oneself, and how to search for a new job. Counseling typically averages fifteen hours, in one- or two-hour sessions, individually or in small groups. Counseling services for nonprofessional staff employees without college degrees currently are being considered (Cohen 1977).

Norton Company. The Norton Company in Worcester, Massachusetts has a peer counseling program that focuses on having a coworker function as a counselor to fellow employees. Peer counselors receive special training, function in the counseling role for one year, and then return to their regular jobs, although the one-year peer counseling assignment is thought to be a training opportunity for those aspiring to be supervisors (Cohen 1977).

Assessment

Organizational assessment programs have existed for some time and such programs initially were linked to personnel (human resource) planning and succession planning. Although some think that the success of career development programs in work settings is linked to formal testing methodologies (Palmer 1972), others do not concur. Bowen and Hall (1977) point out that, "since most assessment centers provide for giving feedback to candidates (if they want it) at the end of the assessment, it would appear that the assessment center would facilitate career planning. . . . We suspect, however, that the assessment center, as frequently used, can be a poor medium for career planning" (p. 29). Bowen and Hall (1977) offer an analysis of the assessment center as an intervention for career development of employees (see figure 2).

FIGURE 2
ASSESSMENT CENTER AS A
CAREER DEVELOPMENT INTERVENTION

Assessment Center: usually conducted by or sponsored by employer. Employee is tested by a number of pencil and paper tests and is presented with situational tests and interviews where performance is observed and evaluated. Evaluators are often other managers trained in the technique. Psychologists design Center and interpret test results.

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> a. Substantial amounts of data can be developed quickly. b. Multiple judges on panel and results of several tests provide variety of perspectives for candidate. c. Moderate cost—usually borne by employer. d. Some evidence for more valid predictions than available through Counselor-Client Approach. | <ul style="list-style-type: none"> a. High threat situation: <ul style="list-style-type: none"> 1. Employee likely to feel "on the spot" and anxious about results—not an optimal situation for feedback. 2. Center serves interests of employer first, which may be compatible with interests of employee. b. Primary emphasis is not on setting of personal goals. c. Data generated primarily applicable to career with employing organization, only. d. Interpersonal feedback frequently not a prime or major objective. e. Does not provide information on other job possibilities, especially outside of employing organization. | <ul style="list-style-type: none"> a. Likely to be minimized to the extent that employee: <ul style="list-style-type: none"> —cannot really choose not to attend. —is not involved in design of activities. —is threatened by long-term career implications of evaluation. —receives minimal or threatening feedback. b. No explicit provision for goal-setting. c. No support group for planning or dealing with career crises. |
|---|---|--|

SOURCE: (Bowen and Hall 1977, p. 23-35).

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In general, the use of formal assessment techniques is not expanding. A McGraw-Hill speaker said, "There used to be many different forms in use. Now, minimum corporate assessment requirements have been established for all McGraw-Hill units" ("Is Career Development the Answer?" 1981). Also, in a recent AMA Survey (Walker and Gutteridge 1979), only 35.1 percent of the respondents indicated that they engaged in psychological testing and assessment, and 19 percent of those surveyed indicated that they had discontinued the use of psychological testing and assessment. Another reason for the seeming decline in the use of traditional assessment techniques relates to the fact that new assessment procedures need to be developed so as to ensure the objective evaluation of special populations such as women and minorities (Bray 1971; O'Leary 1974).

Although the use of formal psychological batteries of tests may not be expanding, the use of other forms of assessment is increasing. For example, more and more companies are adopting some form of performance appraisal for evaluating and developing employees. In addition, and specifically related to career development, many companies are providing employees with self-assessment and career assessment materials for use individually and in workshop settings. Finally, a number of companies have made interest inventory tests available to employees.

The following are examples of what some companies report regarding the use of assessment with employees.

Hoffman-LaRoche, Inc. Hoffman-LaRoche, Inc. in Nutley, New Jersey has a Career Guidance Information Service (CGIS) center that provides employees with appraisal opportunities (vocational interest inventory testing), and career information. The Job Information Network is a part of CGIS, and, following self-appraisal activities, the network assists individuals with career exploration ("Are You Playing Games With Your Career?" n.d.).

Eli Lilly Pharmaceutical Corporation. Eli Lilly Pharmaceutical Corporation has a Systematic Career Development Program that is available to all sales personnel. Individuals in sales may receive a test battery during the first six months of employment, which is a training period; subsequently, results of the tests are discussed with individuals and plans for growth and performance are developed. The plans are followed up at eleven to thirteen and twenty-four month intervals using a report developed jointly by the employee and the supervisor (Cohen 1977).

Fluor Mining and Metals. A career planning program developed by Gary Bridges of Fluor Mining and Metals, Redwood City, California uses two assessment instruments, the Strong-Campbell Interest Inventory and the Temperament and Values Inventory. Although helping individuals to generate self awareness through testing is one element in this program, the Fluor Mining and Metals program also includes interviews with supervisors and development of an individual Fluor career plan, entitled the Fluor Career Interest and Self Development Plan. When completed, an individual's plan is reviewed by three levels of supervision. Plans are confidential information and are utilized only when a vacancy exists for which the individual has expressed an interest. Under these circumstances the Career Interest and Self-Development Plan is routed to the appropriate person responsible for hiring or reassignment ("Program Summary, Fluor Mining and Metals, Inc., Career Planning Program" n.d.).

IBM. IBM uses an AT&T Assessment Center Model. Individuals are given paper and pencil tests and situational exercises and are observed and evaluated by trained line managers regarding their capacity for growth in management. The assessment techniques are considered to be part of IBM's overall career development program. Line managers' identification of candidates is necessary for entry into the assessment procedure. IBM also has a Test Identified Potential (TIP) program, the focus of which is to battery-test individuals during the initial basic training period of employment

and to subsequently use the data to track and follow up on individuals who, as a result of testing, show talent and potential (Palmer 1972).

Career Information Services

Critical to any career development effort with employees is access to specific and up-to-date career information. Typically, in work structures, such career information services involve job posting systems; communication of EEO and affirmative action policies and programs; development and communication of career paths or ladders in the organization; communication about continuing education and educational assistance programs; communication about training and development opportunities within and outside the organization. In addition, some organizations have developed Career Information (or Resource) Centers, which house many of the previously mentioned services and are staffed with personnel knowledgeable about such services.

Each division of Xerox Corporation, for example, has a Career Information Center. Although materials at each center may vary, all include videotapes developed for transmission of organizational information and information about job categories. Career information, college brochures, training catalogues, and job postings also are housed in the centers (Cohen 1977).

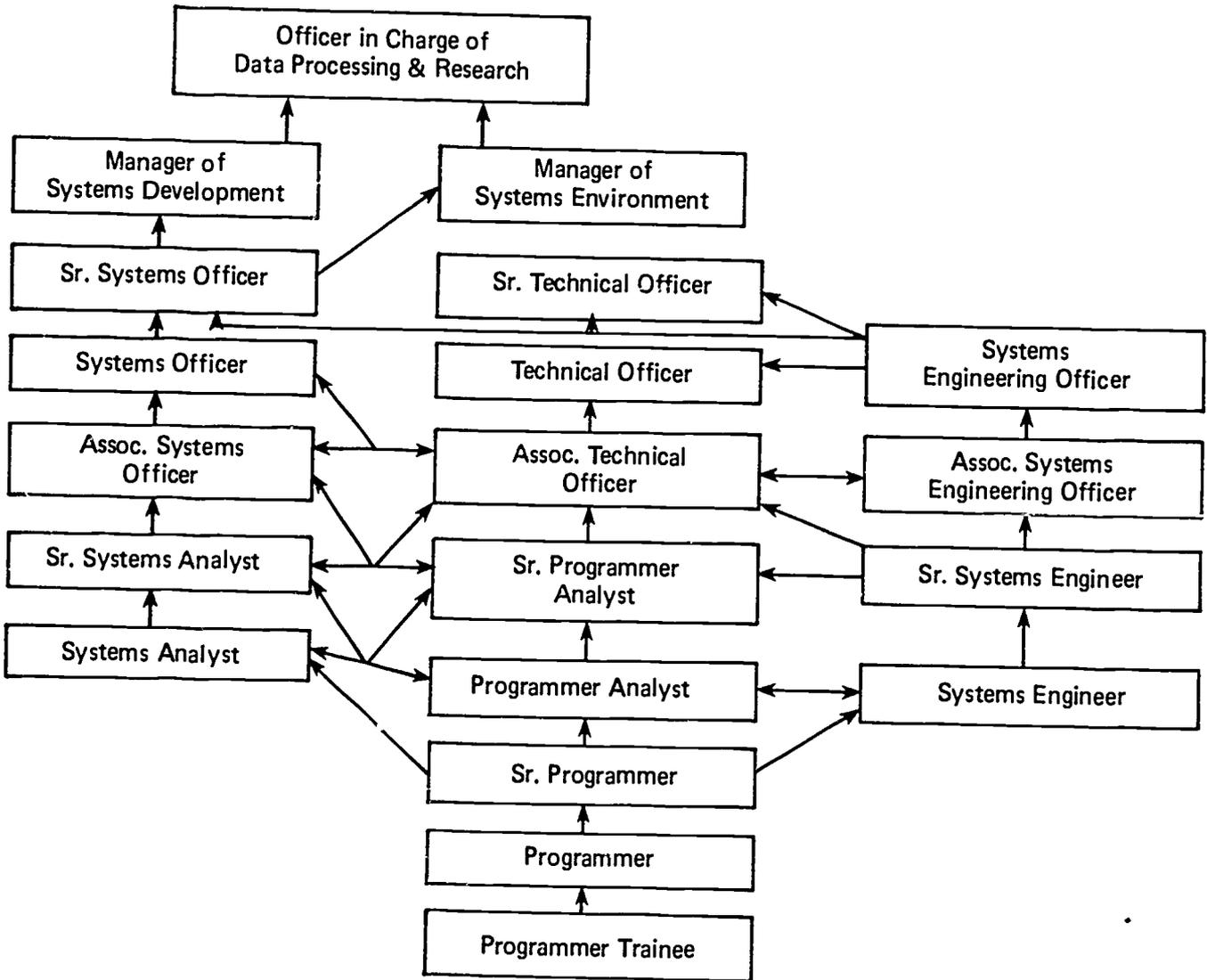
Many companies appear to have internal job posting systems (Walker and Guttridge 1979). McGraw-Hill has a "Career Opportunities Program" that is a process of weekly posting of job openings, levels 6 through 22, on bulletin boards throughout the company. Openings for office positions are posted in locations where they occur, whereas management openings are listed in all United States locations. Each listing includes skills, experience, and education needed and the hiring salary range. On each posting, a McGraw-Hill career opportunities coordinator or specialist's name is listed as a contact person; inquiries to that person are kept confidential and if individuals have been in their current job for at least ten months, a supervisor's approval is not needed to apply for a transfer or promotion ("Career Planning at McGraw-Hill" n.d.).

Companies are compiling data about job functions within the company and using such information to assist employees in their career development. Considerable emphasis is being placed upon compiling thorough analyses of actual job behavior and related qualification requirements so as to formulate career paths and progression possibilities in an explicit way. This information is often grouped into family clusters so that paths among families may be developed and so that incremental skill and knowledge requirements are apparent.

At Manufacturer's Hanover Trust, for example, a structured management system has been developed over the past years for the systems and programming personnel. As a part of this human resource development model, a skills glossary or skills inventory for jobs has been compiled and levels of proficiency outlined. Individuals in any given job know not only what skills are required, but also what skills can be acquired as a result of having that job. Employees have a Current Position Skills Profile which delineates how skilled they are at that job and the recommended education, if needed. All of this planning feeds into an internal mobility system with goals to reduce turnover and promote individuals from within. Figure 3 is an example of a Manufacturer's Hanover Trust (MHT) career ladder and figure 4 is an example of an MHT Systems and Planning Current Position Skills Profile for an employee (LaBelle, Shaw, and Hellenack 1980).

Some companies have information programs that use written dissemination of information as the major intervention. General Motors Corporation recently began a Career Development Program. One aspect of this program is a Career Development Guide, which has been developed to inform

FIGURE 3
MHT CAREER LADDER



SOURCE: (LaBelle, Shaw, and Hellenack, 1980, p. 146).
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FIGURE 4
SYSTEMS AND PLANNING
CURRENT POSITION SKILLS PROFILE

NAME: George Washington

SOCIAL SECURITY NO.	CURRENT POSITION TITLE	MANAGER'S NAME	LAST UPDATE DATE	RUN DATE
987-65-4321	Systems Analyst	Ben Franklin		07/13/76

GROUP NAME: Languages

CORE SKILLS	INDIVIDUAL SKILL LEVEL	RECOMMENDED SKILL LEVEL	SKILL DEFICIENCY	RECOMMENDED EDUCATION
COBOL	1	3	2	3-11111
IBM ASSEMBLER	0	3	3	3-XYZLS

SOURCE: (Labelle, Shaw, and Hellenack 1980, p. 147).
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employees about the types of work available in the company. It also provides information on how to establish career goals (Cohen 1977).

Organizational Career Planning

Organizational career planning is often referred to as human resource or personnel planning. Similar to general corporate planning, it can be thought of not so much as forecasting for the future, but as a vehicle for influencing the future (Rossiter 1979). Programs and practices for organizational career planning include succession or replacement planning; development of talented employees or fast-track management planning; personnel profile planning; and internal recruitment and development planning. Internal recruitment and development planning are programs and practices that are geared toward retention and growth of employees such as rotational programs, intern programs, and job enrichment programs.

From 1964-1970, over 400 individuals in IBM were assessed and monitored for managerial potential. IBM's Integrated Program for Career Development now is the succession planning activity whereby managers semiannually identify one or more replacement candidates for all those managers reporting directly to them. Once the choices are approved by the next two levels of management, an Individual Development Plan for each identified employee is required (Palmer 1972).

Although succession planning or backup charting has been criticized for a variety of reasons (Walker 1977), the identification and development of talented individuals in an organization is an often cited reason for support of career development programs and practices (Walker and Gutteridge 1979). The Bank of New York, for example, maintains that their Career Development Program is based upon a five-year personnel planning chart and a commitment to a promote-from-within policy. In essence, their career development program is a management appraisal and tracking system ("Is Career Development the Answer?" 1981).

Career succession and planning models are commonly used (Roberts 1975). Eli Lilly has a Personal Investment Program, Citicorp has a Senior Manpower Planning Review, and Southern Railway System and Sharon Steel Corporation have programs for backup charting (Cohen 1977).

A method for assisting with planning for organizational career needs is the personnel profile planning approach. McGraw-Hill, for example, has a Career Planning Survey, which is designed both to help the individual advance within the organization and to provide personnel with employee profile data. The Career Planning Survey is a process whereby employees can keep the company regularly informed about changes in their education, experience, skills, or career interests. This information can be assessed by placement specialists and managers when searching for candidates for job openings. This is a completely voluntary program and update questionnaires are routinely sent to all employees, but it can be updated by an individual at any time. In addition, the Career Planning Survey data and additional information from performance reviews and other sources are computerized in the Career Development Data System. At McGraw-Hill, then, there is a computerized personnel profile on employees interested in career planning ("Career Planning at McGraw-Hill" n.d.).

Fast-track programs for talented personnel are yet another way in which organizations attend to their own corporate career planning. Greenberg (1978), in "Picking the Fastest Route to the Top," reports:

In a recent survey, personnel directors in some 40 companies . . . were asked if their company had a fast track, which was defined for the survey as quick route up. Nearly all said no. But their descriptions of actual personnel practices and the comments of top business school placement officers and deans suggest that the majority of companies in fast-growth industries have programs designed to identify and quickly develop managerial talent. These career-planning systems select the exceptionally qualified, chart their individual career paths, and move them up as rapidly as they can learn and the company can advance them. (p. 58)

B.F. Goodrich is an example of a company that has openly publicized the existence of such a practice. Their fast-track program for MBAs is entitled "Financial Career Development Program" (Woolredge 1979).

In addition to succession planning, developing personnel profiling, and targeting talented employees, companies also develop plans for retaining and developing other populations. This can be referred to as internal recruitment and development planning, and many programs and practices could be grouped here including job enrichment programs, intern programs, rotational programs, and downward transfer or dual ladder programs.

The planning and implementation of job enrichment, job redesign, or quality-of-life programs seem to be increasing. Volkswagen is an example of a company trying to influence its dealers to adopt a job enrichment approach to automotive service. Based upon survey data from a number of sources, Volkswagen identified the high turnover of skilled mechanics as the prime factor for customer complaints about poor service and high price. Volkswagen also concluded that younger, skilled mechanics were continually leaving the company because of poor pay prospects and the routine nature of work in large repair shops. Volkswagen eventually developed a blueprint for reorganization of the service function via a job enrichment approach, which used teams to repair cars instead of individuals. This approach has been implemented in a number of dealerships and has resulted in improved profits and increased customer satisfaction in those settings (Clutterbuck 1976).

R. Hal Dean, president of Ralston Purina, has instituted an Operations Improvement Program which, he feels, is a continuous program of job enrichment. Small groups of employees at all levels meet regularly to discuss management and operating methods and learn how to apply them more effectively to their own jobs ("The Value of Making Each Employee Feel He Counts" 1975).

Finally, although mention has been made of a number of programs and practices implemented for the purpose of corporate career planning, one informal and yet highly regarded process that applies to all programs and levels in an organization is mentoring, and more specific attention is being paid to formalizing and educating people about this process (Boling 1980; Edson 1980; "Everyone Who Makes It Has a Mentor" 1978; Halcomb 1980; Johnson 1980; Roche 1979; Shapiro, Haseltine, and Rowe 1978).

Training and Development

Training and development generally is thought to be a growing professional field (Smith 1980). Typical training and development programs help move hourly employees into management; assist existing managers in developing and honing their knowledge and skills; assist employees in developing better communication skills, both written and verbal; and assist employees with retirement planning and with career development, to name a few examples. Training and development programs seem to be geared toward improving the knowledge and performance of employees with regard to their

present jobs and training them for upcoming jobs, although there are some specific training and development programs that focus on helping individuals examine career development per se (Lusterman 1977; Winterscheid 1980).

Fairfield Camera and Instrument Corporation, in its separate training facility, the Management and Career Development Center in Mountain View, California, offers career and life planning workshops. Apparently, this is one of the few such programs which involve spouses as participants (Salmans 1978).

Specialized career planning and development workshops are offered in many work settings today; for example, Naval Weapons Center, Ortho Diagnostics, Inc., and Smith-Kline Corporation report having such workshops (Cohen 1977), as do Union Carbide (Trammell 1980) and many others.

Although career development and planning processes are typically covered in the kinds of career workshops described above, training and development, in general, is thought to be a critical link with career programs in work settings. Training and development functions often offer employees vehicles for putting career plans and goals into action for it is typically the human resource function that assists individuals in identifying both in-house and external education and training options. W.W. (Foot) Clements, chairman of the Dr. Pepper Company, for example, maintains that continuing education is the cutting edge in career development of individuals. He says, "Today a rising executive doesn't debate about whether to continue his formal education. He zeros in on *how* and *when* and *where*" (Broderick 1980, p. 22).

Special Population Programs and Practices

in existence today are a myriad of career development programs and practices that have been developed for targeted populations such as minorities, women, preretirees, midcareer employees, management trainees, outplacement or terminated employees, subprofessionals, disadvantaged, handicapped, and dual-career families.

Although a review of the literature reveals that such programs have been developed, except for the population of women, there has been no attempt to ascertain the extent to which they have been developed or put into operation. The conclusion of one survey of employer-sponsored career development programs for women, however, revealed that there were many career programs offered in work settings, but few were specifically geared to the concerns of working women (Vetter et al. 1977). It currently is impossible, therefore, to assess either the extent or the quality of such programs for special population groups in the work setting. The following, however, are offered as sample cases of employer-sponsored programs and practices developed for special populations.

Marriott Corporation. Marriott Corporation has a job advancement program designed to provide hourly employees with career ladders that outline positions of increasing skill, responsibility, and pay and that can lead into managerial positions (Hostage 1975). Originally, it was designed for the underprivileged, minority group employee, but it is now available to hourly employees. It is a self-referral program so a person need not wait to be "spotted" for a recommendation into the program. Mr. Hostage, President of Restaurant Operations for Marriott, provides an illustration:

I recall one restaurant employee who was ambitious and appeared to have real growth potential. She talked with her boss, and after being accepted in the program, started learning various new job skills. She spent 40 hours in training for promotion at the rate of one hour per day beyond her regular employment time. When a vacancy in a higher-paid job turned up, she was promoted for a

trial performance. . . . Without the career progression program, it is hard to imagine how she would have been able to advance as she did from kitchen worker (eventually) to unit manager. (Hostage 1975, p. 104)

Hartford Hospital. Hartford Hospital is an example of a health organization that places an emphasis not only on employing and training people from the inner city, but also on training their potential supervisors in working with culturally different people. As an example, the Health Care Worker Program's focus is on training inner-city employees in the functioning of the outpatient clinic and hospital jobs as patient advocates (Morris 1974).

Rockwell International Corporation. Rockwell International Corporation has a specific, three-year-old program that is aimed at increasing the number of minority engineers with Ph.D.s in solid state electronics to work at Rockwell's corporate research laboratory, the Science Center (Cannon 1980).

Other programs and suggestions for employing disadvantaged workers are reported in the literature (Johnson 1969; Quinn, Levitin, and Eden 1971; Slusher and Veglahn 1972; Weaver 1974).

Career development for women. A plethora of literature exists on the topic of female career development. Because this section primarily is limited to listing some sample career development programs for special populations, that focus will be maintained with regard to this population also. An important distinction should be made, however, with regard to the diverse needs of reentry, sub-professional, and managerial women. The three programs which will be described all relate to the needs of the sub-professional, "aspiring to be a manager" woman.

The state of California has approximately 40,000 female employees and has designed a program to assist women to move into managerial positions. Although the program does focus on special problems of women and minorities, men can elect to take the program and some do. The program is one year long, and requires participants to commit approximately 145 hours of their personal time and 110-120 hours of the organization's time to the experience. One element of this program, which is emphasized, is attention paid to helping women develop teamwork attitudes and skills (Anundsen 1979).

Prudential Life Insurance Company has developed a number of programs to assist women with their career development. One program is a satellite office, The Governmental Health Programs Office (GHPO), which attempts to help participants with personal skills building, problem solving, decision making, conflict management, understanding one's scope of authority in a managerial position, life and career planning, and support systems development (Pilla 1977).

In a business-higher education liaison effort, Gulf Oil Corporation and Chatham College developed the Career Development Program for Women; this is now also available to men. The program orientation provides three areas of career planning support for participants: assessment, individual advising, and a career planning workshop. The goal is to assist employees who have at least one year of college course work to plan a personal career path, whereby academic completion of a degree will interface with career opportunities at Gulf Oil (Fort and Cordisco 1981).

Summary and Future Perspectives

The six areas of individual career planning and counseling, assessment, career information services, organizational career planning, training and development, and special populations programs and practices (figure 1) have been offered as a means of grouping and examining diverse career programs and practices reported in the literature. The six areas also provide a framework for the extrapolation of future-oriented issues for employer-assisted career development programs.

1. Research and evaluation of current and yet-to-be-developed employer-sponsored career development programs are critical for a variety of reasons. First, there is great need for more theory-based research regarding adult development and adult career development. In addition, specific career interventions need to be studied and evaluated. Impact evaluation studies, for example, might focus on specific populations such as women and minorities, on stage-related groups such as mid-life, or on various level needs of employees such as subprofessional, managerial, and so forth. Although there currently is considerable support for the development of career programs in work settings, a review of the literature has indicated that such support essentially is not altruistically based; rather, it is linked to existing management or organizational needs. Therefore, from an accountability and cost-effectiveness perspective, in the future such programs also may well have to justify their impact, for example, on such areas as employee turnover, absenteeism, and development and retention of talented personnel. Although the development of career programs in work settings seems to be increasing now, a research and evaluation base is critical to justify their future existence and potential.
2. From a long-range perspective, there is a critical need to interface career development programs and practices with other human resource development activities such as educational assistance, training and development, and human resource planning. Not to do so would be to ignore the contextual setting of the organization, and, in practice, this could lead to the greatest possible divergence between individual and organizational goals. Some divergence will always exist, but isolated career development programs may accentuate and accelerate such differences. From a short-range perspective, the advice of some to "think small" is realistic, for it typically focuses upon the needs of a newly hired person or staff who has responsibility for planning and implementing career development programs and activities within the organization. Eventually, however, it would seem that if short-range approaches were linked to long-range, contextually based perspectives and resources, more effective career programs and practices would result.
3. New models of individual's career development in organizational settings need to be developed, for current models tend to be linear and inadequately attend to the dynamics of the career process of individuals within a given setting. The Career Path Model, for example, depicts the individual within the organizational pyramid structure, working hard to chart and follow a systematic linkage of hierarchical jobs. Is career development contingent upon successfully moving up the pyramid as rapidly as possible? If the answer is "No," even for some people, what other model(s) of career development can be offered? Furthermore, since career planning and development is an application and, at the same time, a source of the more wholly conceived and unfolding growth of adults, should we not rely on more dynamic, holistic models? Should not career development be in sync with the environment, *Where* are we, in addition to *Who* we are? Should we not be differentiating between maturational (developmental) and situational (growth) factors of individuals in work settings?

4. There have been many attempts to link the worlds of work with those of education. It would seem that linkages between higher education and career development programs in work settings could be increased. Some exist and are successful but this arena currently appears to be underutilized.
5. It is most likely that downward transfer and outplacement counseling options will increase in the future.
6. The use of formal assessment and traditional assessment centers apparently is declining, but the use of informal assessment methods such as performance appraisal and the use of interest inventories is increasing.
7. Regardless of whether individuals receive career development assistance from personnel, peers, specialized staff, or managers, to what extent are these helpers trained to deliver such services effectively? There is some indication, for example, that managers feel overburdened and inadequately trained to perform such duties (Cohen 1977; Walker and Gutteridge 1979). If managers or supervisors are a critical link in an organization's overall career development program, then training programs should be offered to develop and hone their career development skills. Interestingly, it appears that many settings rely heavily upon the manager to work with subordinates on career development issues, and yet few training efforts are targeted at this group.
8. To assist individuals with their career development, there is a pressing need to develop organizational information bases and a means for retrieval and updating of such information. Many organizations currently seem to be in various stages of organizing technical information of this nature.
9. Because of the shift in age distribution, midlife populations seemingly will become a focus for organizational career development efforts. Midlife traditionally has been a time when many abandon a career identity associated with individual competition and invest themselves in the development of other people. Given a midlife population whose values have repeatedly changed over the years and given their quality of life and entitlement perspective, this population may well be demanding future work roles that will not necessarily "fit" with existing career development theories.
10. Finally, there is a need to interface career development bodies of knowledge from such fields as organizational psychology, personnel, training and development, and educational career guidance and counseling. A first step might be to develop a commonly accepted body of nomenclature that could be used in future theory, research, and practice applications.

APPENDIX

CASE STUDIES

CASE STUDY

ANHEUSER-BUSCH COMPANIES, INC.

I. Overview of Company

Anheuser-Busch Companies, Inc., is a holding company for a variety of beverage and family entertainment businesses. These include the Anheuser-Busch beer products, soft drinks, aluminum can production, aluminum can recycling, industrial products, malting operations, yeast production, and creative services. There are approximately eighteen thousand employees: seven thousand salaried and eleven thousand hourly. For most of its history the company's primary product has been beer. Recently the company entered into an aggressive diversification period and vertical integration strategy.

II. Origins and Evolution of Career Development Effort

There is a department of Selection and Career Development, the head of which reports to the director of Staffing and Organization Development. The department is part of the corporate employee relations function. The career development function is designed to serve all salaried employees at all grade levels and has been in existence for approximately two years. The original purpose of the new department was to bring methods of personnel and management development to Anheuser-Busch to aid the company in its diversification and expansion efforts. Currently the program is aimed primarily at the design and initial installation of career development programs.

III. Description of Current Program

Current programs are designed to encompass all salaried individuals and to provide for the individual employee's satisfaction and development as well as the company's management of its human resources. Programs currently in operation focus on issues of identification and performance. Identification programs consist of: selection processes, job posting, performance appraisal, and skills inventory. Programs dealing with performance include counseling, seminars and workshops, a career development network, a women in business program, and executive development.

IV. Future Perspectives

The current effort has been to assist individual departments in the design of an overall career development system. This approach is in contrast to the "program" approach that has been pursued up to this point. A career development system for a particular group will involve several individual programs. The emphasis, however, is upon an integrated approach that addresses the immediate needs of the department. When designing career development systems, the practice has been to tailor these systems to unique departmental needs. Therefore the career development program is not identical across departments. Eventually the goal is to have in place a number of corporate-wide programs and services, for example, computerized skills inventory data and structured workshops, that departments can draw upon for use in the design of their own unique career development systems. Additional programs slated for future implementation include retirement counseling, design of a career development center, succession planning, internal search mechanisms, and outplacement services.

In summary, the goal is to provide a core career development program common to many departments without insisting that every group structure its career development activities identically.

V. Contact Person

For more information on this program contact:

Edmund Gaydos
Manager of Selection and Career Development
Anheuser-Busch, Inc.
One Busch Place
St. Louis, MO 63118
(314) 577-2712

CASE STUDY

BACHE HALSEY STUART SHIELDS, INC. PROFESSIONAL WOMEN'S GROUP

I. Overview of Company

Bache Halsey Stuart Shields, Incorporated, founded in 1879, is a diversified financial services organization, a subsidiary of the Bache Group, Inc., employing approximately eight thousand persons worldwide. Products and services consist of various investment related activities. On June 11, 1981, the Bache Group, Inc., became a wholly owned subsidiary of the Prudential Insurance Company of America.

II. Origins and Evolution of Career Development Effort

The Professional Women's Group (PWG) originated in November 1978, at the suggestion of a male divisional executive. The original goal was to develop a better intradivisional relationship among professional women in the Personnel and Training Division. The idea was enthusiastically received by most of the women in this division, although a few did feel some pressure to participate because of the origin of the idea. This has created some indifferent group members, although the majority are enthusiastic.

III. Description of Current Program

The PWG is not a program with a formal structure. Membership is limited to exempt-status female employees in the Personnel and Training Division who schedule, develop, and administer all meetings. Funding for the PWG consists of a specific allocation in the Personnel and Training Division budget. There is a rotating chairperson who reports to the personnel and training director for consultation on unique or unusual matters.

The PWG holds monthly breakfast meetings, each lasting approximately one and a half hours, with a different person volunteering to be chairperson for each meeting. These meetings are held on company time and are an accepted part of each member's monthly schedule. This time allocation is fully supported and encouraged by management. Although all members were previously acquainted there has been much excitement in learning more specific information about each member's background and professional function within the organization. Members hold varied positions within the division (supervisors, managers, corporate officers), and almost all are college educated.

Matters discussed at these early meetings were never on a personal basis but on a professional one—e.g., how to communicate, listen, and deal effectively as a "professional woman." After these initial meetings, members began to feel a need to meet for other reasons besides discussing professional lives and work or career problems. The group decided to provide services, and initiated procedures or policies that would affect the quality of work life at Bache. Some of the projects included developing new job posting, transfer, and employee orientation policies. These projects were effectively developed and approved by management and have been officially implemented. Other projects included movies at lunch time, and guest speakers on crime prevention and health-related topics. These latter activities were not heavily attended and the group decided to change its focus. Activities then were directed to learning more about the organization and the industry

by inviting guest speakers from within Bache as well as from outside industries to discuss their jobs and how they fit in with the company or industry.

Members also participated in five half-day sessions over a five-month period to discuss the role of the professional woman with a female psychologist. The experience was a valuable one and focused on professional effectiveness as a function of being comfortable with oneself.

IV. Future Perspectives

The group has grown in size with an approximate present membership of twenty. It has all the original members except for one who left the organization. As the membership has grown and as the members advance professionally within the organization they have found it satisfying to meet regularly to discuss their jobs and the difficulties of coping as a professional woman.

The emphasis of the group will continue to be on the enhancement of personal growth through discussions of problems that a woman in a professional position is likely to encounter, such as the dilemma of the two-career family. The group continues to be comfortable with its limited membership and finds the unpressured structure conducive to maximal communication among its members.

V. Contact Person

For more information on this program contact:

Eileen F. McCormick
Bache Halsey Stuart Shields, Inc.
100 Gold Street
New York, NY 10038
(212) 791-4444

CASE STUDY

DISNEYLAND

I. Overview of Company

Disneyland is a multifaceted recreational facility located in Anaheim, California. Employment during their peak summer season is approximately eight thousand. Off-season employment averages around five thousand. Individuals are employed in many capacities: as entertainers, sales clerks, food and beverage hosts and hostesses, and ride operators. Additionally, Disneyland employs engineers, artists, designers, craftspeople such as carpenters and plumbers, and administrative and clerical personnel.

II. Origins and Evolution of Career Development Effort

The Career Planning Program began at Disneyland in 1976 and is a personnel function administratively located in the Employee Relations Division. Funding for the program consists of a specific allocation in the division budget. The Program is staffed by a manager who reports directly to the division director who in turn reports to the Disneyland vice president. Additional Program staff includes a counselor, two career development representatives, and two clerical personnel.

In establishing the career planning program, the objectives were: to develop a reservoir of skills that would be useful in human resource planning decisions; to help reduce mismatches between what the employee wants and what the company needs and offers; to assist individuals in future career development; and to help the employees develop and increase an understanding of their own personal abilities, interests, and limitations.

III. Description of Current Program

Employees are encouraged to sign up for the orientation to career planning and Disneyland's career services and then to meet with the career counselor. The first meeting with the counselor is for one hour, during which time employees are encouraged to discuss educational objectives, desired career directions, and possible career changes. The employee can come back for additional career counseling as often as desired. Career counseling is usually voluntary, although there are some supervisory referrals. The only restriction on career counseling is that employees must have been employed at least three full-time equivalent months to participate.

Career workshops and classes have been designed to assist employees in determining their career objectives through the development of an individual career plan. Workshops deal with goal setting, decision making, job satisfaction, and worker effectiveness and are regularly offered each month by the department. Classes in resume preparation and job interviewing techniques cover suggestions that are useful in preparing for the job interview. These classes last about one and a half hours, and the class attendance is limited to fifteen. Videotaped simulation of interviews is available for those currently involved in a job search. Career orientation is a bimonthly program designed to provide a group experience in understanding the many aspects of the career planning process. It also offers an overview of the services available through the Career Planning Department.

The department also has a career planning resource library. Established in 1976, the library includes functional organization charts, job descriptions for all salaried positions, descriptions of

training programs, college catalogs, the *Occupational Outlook Handbook*, as well as books on occupational trends, career planning, and retirement planning.

IV. Future Perspectives

In the immediate future, Disneyland will provide a career development workshop in counseling skills for supervisors, provide more intensive career counseling, and implement a preretirement planning program. The career planning process has become a part of the management training program and has been incorporated into its weekly class curriculum. Other Disney corporate subsidiaries and divisions are currently establishing career planning activities using the Disneyland Career Planning Department as their model.

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CASE STUDY

GENERAL ELECTRIC

I. Overview of Company

General Electric is a large, complex company whose businesses encompass over 120 industries. These industries fall into eight basic categories: Consumer Products, Industrial Products, Technical Systems, Power Systems, International, Services and Materials, Aircraft Engines, and Utah International. Total worldwide employment at General Electric is approximately four hundred thousand.

II. Origins and Evolution of Career Development Effort

Planning for the Career Development Program began in late 1969 by staff in General Electric's Management Development Institute, and this program was implemented in 1972. Management at General Electric had several concerns at that time. Among them were a desire to get more educational leverage from limited budgets; to increase productivity in a stabilizing work force while at the same time maximizing job satisfaction; to facilitate realistic affirmative action; and to contribute to more effective relations with the technical and professional work force.

The number and quality of career planning programs vary widely throughout the company to provide for the diverse needs of its employees and industries. One such program, Career Dimensions, evolved out of the 1972 effort which had been a workbook entitled *Career Action Planning (CAP)*. CAP was a self-directed career planning approach.

The Career Dimensions program is managed through the Employee Relations office of each of General Electric's many departments. The manager of each Employee Relations office reports directly to the general manager of that particular department. Career Dimensions is funded through either local employee relations or training budgets or other local business components.

III. Description of Current Program

Career Dimensions I-IV is a family of individualized self-study workbooks and guidebooks that are used to assist the individual in selecting meaningful career goals, and to provide managers and staff specialists with additional tools for managing human resources.

Career Dimensions I helps individuals to identify the controllable elements of their work environment, to use on-the-job skills to manage these elements, and to reduce anxiety by developing an awareness of what they want to do.

Career Dimensions II is a more in-depth self-examination and is most beneficial to those with two or more years work experience. The goal of this process is to aid the individual in planning for future career growth. This is accomplished by determining a logical progression of career actions to take in order to improve the quality of one's career life. This may or may not involve a change of jobs.

Career Dimensions III is for use by managers and supervisors to educate them in the development of a productive work environment by allowing employees to grow to their full potential. The

workbook for this aspect of the program consists of guides for candid discussions with employees aimed at coaching them in career and personal development actions.

Career Dimensions IV is for employee relations personnel and is designed to equip them with additional tools, concepts, and processes for encouraging and helping managers achieve the objectives of Career Dimensions III; helping employees influence the controllable aspects of their careers; and making personal contributions to the effective management of human resources in their respective businesses. Additional topics in the guidebooks for this segment include the presentation of a design for a career workshop and of approaches designed to understand the career discussion process.

Recently, based on the principles of Career Dimensions III, another program has been implemented, consisting of a workshop entitled Managing Career Conversations (MCC). MCC is designed to train managers to have constructive and effective career conversations with their employees.

IV. Future Perspectives

General Electric plans to expand its programs as appropriate and deal with additional career development issues as they evolve.

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CASE STUDY
NASA
GODDARD SPACE FLIGHT CENTER

I. Overview of Agency

The NASA Goddard Space Flight Center in Greenbelt, Maryland, is a federal agency the focus of which is scientific research in space and which is primarily concerned with research and development of meteorological, communication, and environmental satellites as well as solar observation. Additionally, Goddard provides the day-to-day communication and data acquisition support for near earth manned and unmanned satellites including the space shuttle mission.

The staff is comprised of scientific, engineering, administrative, and clerical personnel. Total employment at Goddard is approximately six thousand persons, half of whom are federal employees, and half of whom are contract service employees.

II. Origins and Evolution of Career Development Effort

The Career Development Center was begun in 1976 when management at Goddard was faced with a changing focus, a decline in the growth of the organization, rapid changes in technology, and an aging work force.

The program and its services were devised and operated by faculty at the University of Maryland Counseling Department. In a reciprocal agreement the Center has served as a training site for graduate students. Management is committed to the program and has been actively involved in its development.

The program has been designed as a balanced career development effort with career development programs offered at all levels. This balance has been achieved by including both career management activities (those programs which are primarily organizational in focus), and career planning activities (those programs which focus on individual employee career plans and actions). This balance is an attempt to enhance the organization's effectiveness by promoting a congruence between individual and organizational goals. What has resulted is a "mutual plotting" effort: the organization has determined its needs, individuals are given the opportunity to plot their careers, and then attempts are made to match or align these two data points.

III. Description of Current Program

The activities offered that deal with career management include the following:

Performance Appraisal—this is based on the Civil Service Reform Act to help supervisors establish employee development plans.

Supervisors Training Program—this is designed to help supervisors identify the strengths and resources of their employees and to use them productively.

Individual Training Plan—this is designed to help employees obtain the experiences needed to achieve personal goals.

Career planning activities consist of the following:

Individual Counseling—career counseling available by appointment.

Career Resource Center—a self-instructional career planning process involving four learning stations: orientation, self-assessment, environmental assessment, and taking action.

Career Development Information—material developed in-house about Goddard's organizational policies, alternative career systems, and career paths.

Career Planning Workshops—this activity is centered around career transition points, with the underlying philosophy that employees at different junctures are facing different issues and need different kinds of assistance. Examples of workshops include: new professionals, transition from technical roles to management, preretirement, and transition from clerical support to professional.

Career Development Work Experience Program—Midlevel employees are given the opportunity to try out alternative career options by working on short-term assignments outside their regular job area.

Approximately three hundred fifty employees utilize the Career Development Center services each year.

IV. Future Perspectives

In light of the new administration's emphasis on budget cuts and reduced spending, the focus of the career development program will be on increasing staff productivity and on operational accountability.

V. Contact Person

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CASE STUDY

LAWRENCE LIVERMORE NATIONAL LABORATORY

I. Overview of Company

The Lawrence Livermore National Laboratory is a large research and development laboratory operated by the University of California for the U.S. Department of Energy. The laboratory employs approximately seventy-five hundred people. The staff is comprised of scientists and engineers, technologists and technicians, administrative, clerical, crafts, machinists, and other support personnel. The mission of the laboratory is twofold: to support national security through nuclear weapons research and to find innovative but practical solutions to the nation's energy needs. Programs include theoretical and applied research in nuclear explosives, magnetic fusion energy and laser energy research, nonnuclear energy research, and biomedical and environmental research.

II. Origins and Evolution of Career Development Effort

Career/Life Planning was first introduced in late 1973 in the form of a two-day assessment workshop, sponsored by the Employee Development Division, for employees who were terminating employment at the Laboratory. These individuals found the program valuable in easing them through significant life transitions and recommended that it be offered to other employees at the Laboratory.

Because of the growing popularity of the workshop, the manager of the Employee Development Division proposed to the management that the Laboratory implement a comprehensive Career/Life Planning Program. The program would include workshops, individual career counseling, and a career resource center.

This program was approved by the Laboratory director and implemented in 1975. It evolved through a successful two-year pilot period, during which time several different formats were attempted. At the end of the pilot period it was evident that Career/Life Planning should become a regular ongoing program available to all employees.

Career/Life Planning has evolved even further. Today it is part of a larger Employee Assistance Program, which includes the career resource center, personal crisis counseling, alcohol and rehabilitation counseling, educational programs including counseling, and other counseling dealing with job-related concerns. Various program components have also become part of the regular supervisory training and management development programs.

Initially, counseling and workshop facilitation were performed only by members of the Employee Development Division, who were experienced counselors and trainers. Later, adjunct counselors were added. These are scientists, engineers, and other laboratory staff, usually with degrees in counseling or psychology and appropriate counseling experience. Their primary jobs are elsewhere in the organization, and they counsel up to 10 percent of their work time.

During the past two years the program has also used an increasing number of individuals, who have participated in the workshops, to assist in facilitating the Livermore Achievement Motivation Process (LAMP) skills assessment. Often these are supervisors and others who are able to transfer these skills to their work setting and to other parts of their lives. LAMP consists of a nine-hour module the focus of which is on targeting areas of achievement throughout an individual's life

history and arriving at motivational determinants of these achievements. Motivational determinants are regarded as transferable skills, preferred environment, the nature of the activity where successful achievement has been realized, personal interaction style, and a common payoff.

Funding for the program is derived from the overall allocation for the Employee Assistance Program which is administratively contained within the Employee Development Division. The administrator of Career/Life Planning reports to the employee assistance program manager, who reports to the Employee Development Division manager, who in turn reports to the director of Human Resources.

III. Description of Current Program

Career Planning serves a variety of individual employee needs and meets a number of organization objectives. The program is designed as a process whereby individuals can examine and evaluate their present situation: a job, a relationship, an outside activity, or any combination of these. Participants determine some viable alternatives, evaluate the consequences, and arrive at some appropriate career decisions in a relatively short period of time.

Often participants, perhaps for the first time, realize that they are in charge of their lives and are their own best career managers. This leads to increased overall self-awareness and a more focused employee. The organization benefits because its employees have a higher morale, are more motivated and productive, and make career changes to become more effective.

Career Workshops

The workshops that have always been the heart of the Career/Life Planning Program require thirty-two hours of participation over a five-week period. The series begins with an orientation and concludes with participants presenting a career plan or strategy for what they will do following the end of the workshop. The five-week cycle is as follows:

<i>Week</i>	<i>Hours</i>	<i>Activity</i>
1	3½	Orientation Module
2	14	Assessment Module
3	1	Video Taped Interview
4	9	Motivated Skills Module (LAMP)
5	1	Individual Counseling Session
5	3½	Career Strategy Module

Features of the series include personal assessment using techniques of values clarification and prioritizing, goal setting and decision making, and identifying and patterning motivated abilities using LAMP. A wide range of communication techniques is used, including small group interactions, audiovisual presentations, role playing, videotaping, and some standardized tests. Employees are encouraged to discuss the results of this process with their supervisors and with them to redesign the current structure of their jobs, change jobs within their particular area, or change jobs within the organization. Some employees have subsequently chosen to leave the organization, but overall turnover at Livermore is minimal.

Supervisors are pleased with the Career/Life Planning program and report that its participants yield higher quality work as well as demonstrate increased productivity. Initially a traditional linear model was used to present visually the flow of the workshop process. Recently a holistic model was introduced, incorporating concepts of the whole person with alternative learning styles. Both linear and holistic exercises are included to provide a balance and to accommodate individual learning styles. Over nine hundred employees have utilized the Career/Life Planning program since its inception.

Individual career counseling is available for those who request it. The service includes education and occupation information, individual career guidance, outplacement assistance (including community referrals), and other personal counseling. Over 500 employees make use of this service each year.

IV. Future Perspectives

This year staff are evaluating the eight-year-old program to target long range effectiveness.

The program has been popular and there are more applicants for the workshop than slots to accommodate them. The staff will devote future efforts to devising plans to accommodate more employees than has been possible in the past.

V. Contact Person

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CASE STUDY

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY EMPLOYEE CAREER DEVELOPMENT PROGRAM

I. Overview of Institution

Virginia Polytechnic Institute and State University (Virginia Tech) is a land grant university located in Blacksburg, Virginia with an enrollment of twenty-one thousand. The university employs eight thousand: twenty-five hundred faculty and fifty-five hundred nonfaculty.

II. Origins and Evolution of Career Development Effort

The goal of the Virginia Tech Employee Career Development Program (ECDP) is to serve those fifty-five hundred nonfaculty members and assist them in optimizing their vocational development. The ECDP is a joint endeavor of the Counselor Education program area and the university's personnel department. Its co-directors are a Counselor Education professor and the assistant vice president for Employee Relations. The project manager is a doctoral candidate in counseling who serves both as a counselor and administrator of the program's day-to-day operations. This position is funded through a half-time position. Additional staff are two part-time counselors (one male, one female) and a clerical assistant.

The present effort is a pilot program funded by a grant from the Commonwealth of Virginia Vocational Guidance Program and the University itself, and has been in operation since July 1980. It has been funded for a second year through June 1982. The program offers a self-managed career center, individual career counseling, workshops, seminars, and community referrals. The program objectives have been to assist employees in developing an awareness of career objectives and educational/occupational information; in establishing career goals; in organizing career information in relation to personal traits and goals; and in career decision making.

III. Current Program

The ECDP self-managed program is organized into four stations that reflect the basic principles thought to underlie optimal career satisfaction: understanding of self (Station I); understanding of the work environment (Station II); learning methods for taking reasonable action (Station III); and life management (Station IV).

Upon arrival, employees are given a list of questions to determine which station they should visit. These questions concern interests, abilities, issues of job changes or advancement, and concerns about skills training. Once employees identify areas in which they have questions, they are directed to those stations pertinent to their concerns. Here they engage in additional activities and exercises aimed at further exploration and delineation of interests and abilities, or they obtain suggestions or courses of action to take. Information of an educational nature is also provided to encourage development of job-seeking or job-advancement skills, as well as to indicate where specific training programs exist. Titles of books or articles are provided so that employees can further educate themselves as to available career options or training.

After completion of these exercises, the individual is given an opportunity to see a counselor for further guidance or is encouraged to participate in career development workshops or seminars. If areas of life management are a concern rather than vocational issues, a counselor is available to assist in these also.

Approximately one hundred fifty people have utilized the center's services this year.

IV. Future Perspectives

During its pilot year, the program has been limited as to the number of departments in the university it could serve. For example, its seminars have been limited to two or three areas of the university where employees have been educated as to opportunities in their own areas. ECDP has an extension of its grant to expand the program through 1982 and hopes to be able to serve all departments in the university. They are developing videotaped demonstrations to add to the contents of each station and will engage in promoting the ECDP concept more widely throughout the university. Additionally, they are planning to expand the project manager's position from a part-time to a full-time permanent position.

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REFERENCES

- Anundsen, K. "Building Teamwork and Avoiding Backlash: Keys to Developing Managerial Women." *Management Review* 68 (February 1979):55-58.
- "Are You Playing Games with Your Career?" An in-house publication. Nutley, NJ: Hoffman-LaRoche, Inc., n.d.
- Babbie, E. *Survey Research Methods*. Belmont, CA: Wadsworth Publishing Company, 1973.
- Bennett, S. "The Re-Entry Woman." *Vital Speeches* 46 (1980):502-505.
- Bird, C. "Two Paycheck Power." *Vital Speeches* 46 (1980):202-205.
- Blackburn, R., and Havighurst, R. *Career Patterns of Distinguished Male Social Scientists*. 1976 (ERIC Document Reproduction Service No. ED 159 982).
- Boling, R. "Starting Out in the Trust Business." *Trusts and Estates* 119 (March 1980):20-22.
- Bolton, E., and Humphreys, L. "A Training Model for Women—An Androgynous Approach." *Personnel Journal* 56 (May 1977):230-233. (ERIC No. EJ 160 061).
- Bowen, D., and Hall, D. "Career Planning for Employer Development: A Primer for Managers." *California Management Review* 20 (February 1977):23-25.
- Bray, D. "The Assessment Center Opportunities for Women." *Personnel* 48 (1971):30-34.
- Broderick, M. "Continuing Education: Cutting Edge in Climbing Career Ladder." *Marketing Times* 27 (June 1980): 21-24.
- Buchanan, W. "Outplacement Counseling." *Career Planning and Adult Development Newsletter* 2 (November 1980): 1-2.
- Bühler, C., and Massarik, F. *The Course of Human Life*. New York, NY: Springer, 1968.
- Campbell, R., and Shaltry, P., eds. *Perspectives on Adult Career Development and Guidance*. Research and Development No. 181. Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University, 1978. (ERIC Document Reproduction Service No. 189 290).
- Cannon, P. "A Model for Industry-University Minority Doctoral Engineering Program." *Research Management* 23 (July 1980):21-23.
- "Career Planning at McGraw-Hill." An in-house publication. New York, NY: McGraw-Hill, n.d.
- Chickering, A.; Chickering, J.; and Durchholz, A. "Problems in the Post Secondary Education of Adults." Paper presented at the Latin-American meeting on New Forms of Postsecondary Education, Caracas, Venezuela, 1976. Memphis, TN: Memphis State University Center for the Study of Higher Education, 1976. (ERIC Document Reproduction Service No. ED 183 075).
- Chickering, A., and Havighurst, R. "The Life Cycle." In *The Modern American College*. Edited by A. Chickering. San Francisco, CA: Jossey-Bass, 1981.
- Clutterbuck, D. "Volkswagen Steers Its Dealers towards Job Enrichment." *International Management* 31 (1976): 54-56.
- Cohen, B. *Career Development in Industry. A Study of Selected Programs and Recommendations for Program Planning*. Princeton, NJ: Educational Testing Service, 1977. (ERIC Document Reproduction Service No. ED 153 069).

- Dibben, M. "The Next Ten Years." *The Accountant* 180 (January 25, 1979): 103-104.
- Edson, A. "Do They Work in PR?" *Public Relations Journal* 36 (1980): 18-19.
- Entine, A. "Counseling for Mid-life and Beyond." *Vocational Guidance Quarterly* 25 (June 1977): 332-336. (ERIC No. EJ 160 273).
- Erikson, E. *Childhood and Society*. New York: Norton, 1963.
- "Everyone Who Makes It Has a Mentor. Interviews with J. F. Lunding, G. L. Clements, and D. S. Perkins." *Harvard Business Review* 56 (1978): 89-101.
- Ferrini, P., and Parker, L. *Career Change: A Handbook of Exemplary Programs in Business and Industrial Firms, Educational Institutions, Government Agencies, Professional Associations*. Cambridge, MA: Technical Education Research Center, 1978. (ERIC Document Reproduction Service No. ED 172 032).
- Fort, M., and Cordisco, J. "Career Development for Women in Industry." *Training and Development Journal* 35 (February 1981): 62-64. (ERIC No. EJ 238 183).
- Gould, R. "Adult Life Stages: Growth towards Self-Tolerance." *Psychology Today* 8 (1975): 74-78.
- Gould, R. *Transformations: Growth and Change in Adult Life*. New York: Simon and Schuster, 1978.
- Greenburg, K. "Picking the Fastest Route to the Top." *Advanced Management Journal* 43 (Spring 1978): 58-64.
- Halcomb, R. "Mentors and the Successful Woman." *Across the Board* 17 (1980): 13-18.
- Hall, D. "A Theoretical Model of Career Subidentity Development in Organizational Settings." *Organizational Behavior and Human Performance* 6 (1971): 50-76.
- Hall, D. *Careers in Organizations*. Santa Monica, CA: Goodyear, 1976.
- Hall, D.; Hall, F.; and Hinton, R. "Research on Organizational Career Development. Where Are We and Where Do We Go from Here?" *Human Resource Planning* 1 (1978): 203-233.
- Hall, D., and Lerner, P. "Career Development in Work Organizations: Research and Practice." *Professional Psychology* 11 (1980): 428-435.
- Hall, D., and Schneider, B. *Organizational Climate and Careers: The Work Lives of Priests*. New York: Academic Press, 1973.
- Hall, F. "Gaining EEO Compliance with a Stable Work Force." *Personnel Journal* 56 (September 1977): 454-457.
- Hanson, M. "Career Development Responsibilities of Managers." *Personnel Journal* 56 (September 1977): 443-445, 465. (ERIC No. EJ 165 436).
- Havighurst, R. *Development Tasks and Education*. New York, NY: McKay, 1972.
- Heiner, J.; McGlaughlin, D.; Legeros, C.; and Freeman, J. "Developing the Woman Manager." *Personnel Journal* 54 (May 1975): 282-286, 297. (ERIC No. EJ 118 927).
- Herr, E., and Cramer, S. *Career Guidance through the Life Span: Systematic Approaches*. Boston, MA: Little, Brown and Company, 1979.
- Higgenson, M.; and Quick, T. "Needed: Career Counseling for Women Subordinates." *Supervisory Management* 20 (August 1975): 2-10.

- Hill, R. "Enriching the Chore of Feeding People." *International Management* 31 (1976):45-48.
- Holland, J.; Magoon, T.; and Spokane, A. "Counseling Psychology: Career Interventions, Research and Theory." In *Annual Review of Psychology*, edited by M. Rosensweig and L. Porter. Palo Alto, CA: Annual Reviews, 1981.
- Hooymann, N., and Kaplan, J. "New Roles for Professional Women: Skills for Change." *Public Administration Review* 36 (July-August 1976):374-378.
- Hostage, G. "Quality Control in a Service Business." *Harvard Business Review* 53 (1975):98-106.
- "Is Career Development the Answer?" *Training and Development Journal* 35 (March 1981):81-83. (ERIC No. EJ 239 938).
- Johnson, L. *Employing the Hard-Core Unemployed*. New York, NY: American Management Association, 1969.
- Johnson, M. "Mentors—the Key to Development and Growth." *Training and Development Journal* 34 (July 1980): 55, 57.
- Kahnweiler, J., and Johnson, P. "A Midlife Development Profile of the Returning Woman Student." *Journal of College Student Personnel* 21 (September 1980):414-419. (ERIC No. EJ 231 734).
- Kay, M. "A Positive Approach to Promoting Women." *The Personnel Administrator* 20 (April 1975):36-38, 59-60.
- Kaye, B. "Career Development: The Integrating Force." *Training and Development Journal* 35 (May 1981):36-40.
- Knowdell, R. "Employee Counseling in Industry." *Career Planning and Adult Development Newsletter* 2 (1980):1-2.
- Knox, A. *Adult Development and Learning*. San Francisco, CA: Jossey-Bass, 1977.
- Kummerow, J., and Hummel, T. *The Fit of Life-stages to Adults Ages 23-38*. Paper presented at the Adult Education Research Conference, Minneapolis, MN, April 1977. (ERIC Document Reproduction Service No. ED 138 788).
- LaBelle, C.; Shaw, K.; and Hellenack, J. "Solving the Turnover Problem." *Datamation* 26 (1980):144-148, 150, 152.
- Lacy, W., and Hendricks, J. "Developmental Models of Adult Life: Myth or Reality." *International Journal of Aging and Human Development* 11 (1980):89-107. (ERIC No. EJ 229 817).
- Leach, J. "The Career Planning Process." *Personnel Journal* 60 (April 1981):283-297. (ERIC No. EJ 241 936).
- Leibowitz, Z., and Schlossberg, N. *Designing Career Development Programs for Business and Industry*. Module 41. Palo Alto, CA: National Consortium Project, American Institutes for Research, 1979. (ERIC Document Reproduction Service No. ED 182 675).
- Leider, R. "Emphasizing Career Planning in Human Resource Management." *The Personnel Administrator* 18 (February 1973):35-38.
- Lepper, M. "The Status of Women in the U.S., 1976: Still Looking for Justice and Equity." *Public Administration Review* 36 (July-August 1976):366.
- Levinson, D.; Darrow, C.; Klein, E.; Levinson, M.; and McKee, B. *The Seasons of a Man's Life*. New York: Alfred B. Knopf, 1978.
- Lowenthal, M.; Thurnher, M.; and Chiriboga, D. *Four Stages of Life: A Comparative Study of Women and Men Facing Transitions*. San Francisco, CA: Jossey-Bass, 1975.
- Lusterman, S. *Education in Industry. A Research Report*. New York: Conference Board, 1977. (ERIC Document Reproduction Service No. ED 195 636).

- Mardon, J., and Hopkins, R. "The Eight-Year Career Development Plan." *Training and Development Journal* 23 (November 1969):10-15. (ERIC No. EJ 010 328).
- McClenahan, J. "Hazards of Pausing on the Road to the Top." *Industry Week* 203 (1979):94-100.
- McLoy, R. "Developing Women in Business." *Industrial Management* 18 (1976):1-3.
- Miller, D. "How to Improve the Performance and Productivity of the Knowledge Worker." *Organizational Dynamics* 5 (Winter 1977):62-69.
- Miller, J.; Bass, B.; and Mihai, W. *An Experiment to Test Methods of Increasing Self-development Activities Among Research and Development Personnel*. Publication TR-43. Rochester, NY: Management Research Center, University of Rochester, 1973. (ERIC Document Reproduction Service No. ED 078 279).
- Moreland, J. "Some Implications of Life-span Development for Counseling Psychology." *Personnel and Guidance Journal* 57 (February 1979):299-303. (ERIC No. EJ 197 502).
- Morgan, M.; Hall, D.; and Martier, A. "Career Development Strategies in Industry: Where Are We and Where Should We Be?" *Personnel* 56 (March-April):13-30.
- Morris, T. "Effective Employee Development in Hospitals." *Training and Development Journal* 28 (August 1974): 26-30. (ERIC No. EJ 102 224).
- Neugarten, B. *Middle Age and Aging: A Reader in Social Psychology*. Chicago, IL: University of Chicago Press, 1968.
- Neugarten, B., and Datan, N. "Sociological Perspectives on the Life Cycle." In *Life Span Developmental Psychology: Personality and Socialization*. Edited by P. Baltes and K. Schaie. New York: Academic Press, 1973.
- Norgaard, C. "Problems and Perspectives of Female Managers." *MSU Business Topics* 21 (1980):23-28.
- O'Leary, V. "Some Attitudinal Barriers to Occupational Aspirations in Women." *Psychological Bulletin* 81 (1974): 809-826.
- Paddison, L. "Why So Few?" *The Accountant* 180, No. 5426 (1979):98-99.
- Palmer, W. "An Integrated Program for Career Development." *Personnel Journal* 51 (June 1972):398-406.
- Pilla, B. "Women in Business." *Training and Development Journal* 31 (November 1977):22-25.
- "Program Summary: Fluor Mining and Metals, Inc., Career Planning Program." Unpublished Paper. Redwood City, CA: Fluor Mining and Metals, Inc., n.d.
- Quinn, F.; Levitin, T.; and Eden, D. *The Multimillion Dollar Misunderstanding: An Attempt to Reduce Turnover Among Disadvantaged Workers*. Ann Arbor, MI: University of Michigan, Survey Research Center, 1971.
- Rader, M. "Evaluating a Management Development Program for Women." *Public Personnel Management* 8 (May-June 1979):138-145. (ERIC No. EJ 206 357).
- Rankin, D. "Women Accountants Are Scarcely Adding Up." *Business and Society Review* 25 (1978):59-61.
- Regan, M.; Paltridge, J.; and Terkla, D. *Mid-career Change: Life and Work Transitions and Re-entry into Education*. Berkeley: University of California; Davis: University of California, 1980. (ERIC Document Reproduction Service No. ED 187 874).
- Riegel, K. "The Dialectics of Human Development." *American Psychologist* 31 (October 1976):689-700. (ERIC No. EJ 147 398).

- Roberts, R. "Dynamic Programming for Executive Manpower Management." *Journal of Business Research* 3 (1975):79-94.
- Roche, G. "Much Ado about Mentors." *Harvard Business Review* 57 (January-February 1979):14-24.
- Rossiter, P. "Career Planning at Dunlop." *Long Range Planning* 12 (1979):17-21.
- St. John, R. "A New Approach to Affirmative Action." *Personnel* 56 (May-June 1979):25-30.
- Salipante, P., and Goodman, P. "Training, Counseling, and Retention of the Hard-core Unemployed." *Journal of Applied Psychology* 61 (1976):1-11.
- Salmans, S. "Fairchild's Formula Mixes Office and Classroom." *International Management*, 33, No. 12 (1978):42-43.
- Schein, E. *Career Dynamics: Matching Individual and Organizational Needs*. Reading, MA: Addison-Wesley, 1978.
- Schlossberg, N. "Breaking Out of the Box: Organizational Options for Adults." *Vocational Guidance Quarterly* 25 (June 1977):313-318. (ERIC No. EJ 160 270).
- Schlossberg, N. "Five Propositions about Adult Development." *Journal of College Student Personnel* 19 (September 1978):418-423. (ERIC No. EJ 190 062).
- Schlossberg, N.; Troll, L.; and Leibowitz, Z. *Counseling Adults*. Monterey, CA: Brooks/Cole, 1978.
- Shapiro, E.; Haseltine, F.; and Rowe, M. "Moving Up: Role Models, Mentors and the 'Patron System'." *Sloan Management Review* 19 (1978):51-58.
- Sheehy, G. *Passages: Predictable Crises of Adult Life*. New York: Dalton, 1976.
- Slusher, E., and Veglahn, P. "Retraining Minority Group Employees." *Personnel Journal* 51 (1972):753-756.
- Smith, A. "Whither T & D and You?" *Training and Development Journal* 34 (May 1980):88-94.
- Stein, P., and Etzkowitz, H. *The Adult Life Spiral: A Critique of the Life Cycle Model*. Paper presented at the annual meeting of the American Sociological Association. San Francisco, CA, 1978. (ERIC Document Reproduction Service No. ED 163 245).
- Super, D. *Career Education and the Meanings of Work. Monographs on Career Education*. Washington, DC: United States Department of Health, Education, and Welfare, 1976. (ERIC Document Reproduction Service No. ED 128 593).
- Super, D. *The Psychology of Careers*. New York: Harper and Row, 1957.
- Super, D., and Hall, D. "Career Development: Exploration and Planning." In *Annual Review of Psychology*. Edited by M. Rosensweig and L. Porter. Palo Alto, CA: Annual Reviews, 1978.
- Trammel, C. "Career Planning in Union Carbide's Nuclear Division." *Career Planning and Adult Developmental Newsletter* 2 (1980):1-2.
- Tyler, L. *Individuality*. San Francisco, CA: Jossey-Bass, 1978.
- "The Value of Making Each Employee Feel He Counts." *Nation's Business* 63 (1975):47-52.
- Van Dam, A. "The Future Role of Man in Enterprise." *Personnel Journal* 56 (January 1977):32-33, 42-43.
- Vetter, L.; Winkfield, P.; Lowry, C.; and Ranson, R. *Career Planning Programs for Women Employees: A National Survey*. Research and Development Series No. 13E. Columbus, OH: The National Center for Research in

Vocational Education, The Ohio State University, 1977. (ERIC Document Reproduction Service No. ED 170 600).

Walker, J. "Does Career Planning Rock the Boat?" *Human Resource Management* 17 (Spring 1978):2-7.

Walker, J. "Human Resource Planning in Banking: Emerging Concerns and Practices." *The Magazine of Bank Administration* 53 (1977):20-23.

Walker, J. "Human Resource Planning: Managerial Plans and Practice." *Business Horizons* 19 (1976):55-59.

Walker, J., and Gutteridge, T. *Career Planning Practices. An AMA Survey Report*. New York: AMACOM, a division of American Management Associations, 1979.

Wanous, J. *Organizational Entry*. Reading, MA: Addison-Wesley, 1980.

Weathersby, R., and Tarule, J. *Adult Development: Implications for Higher Education*. AAHE-ERIC / Higher Education Research Report No. 4. 1980. Washington, DC: American Association for Higher Education, 1980. (ERIC Document Reproduction Service No. ED 191 382).

Weaver, C. "Organizational Reaction to the Disadvantaged Worker." *Personnel Journal* 53 (June 1974):435-438. (ERIC No. EJ 097 576).

Wells, T. "Equalizing Advancement between Women and Men." *Training and Development Journal* 27 (August 1973): 20-24. (ERIC No. EJ 081 250).

Winterscheid, B. "A Career Development System Coordinates Training Efforts." *Personnel Administrator* 25 (August 1980):28-32, 44.

Woolledge, W. "Fast-track Programs for MBAs: Do They Really Work?" *Management Review* 68 (April 1979):8-13.

Yeager, J., and Leider, R. "Career Planning: Personnel in the Third Party Role." *Human Resource Management* 14 (1975):31-35.

Zepke, B. "Molding Tomorrow's Executives." *Industrial Engineering* 11 (1979):22-25.

SELECTED BIBLIOGRAPHY

- Ackerman, L. "Career Development: Preparing Round Pegs for Square Holes." *Training and Development Journal* 30 (February 1976):12-14. (ERIC No. EJ 134 074).
- Alber, A. "How and How Not to Approach Job Enrichment." *Personnel Journal* 58 (December 1979):837-841.
- Aplander, G., and Gutmann, J. "Contents and Techniques of Management Development Programs for Women." *Personnel Journal* 55 (February 1976):76-79. (ERIC No. EJ 130 678).
- Anundsen, K. "An Assessment Center at Work." *Personnel* 52 (March-April 1975):29-36.
- Ashton, D.; Braidon, E.; and Easterby-Smith, M. "Auditing Management Development." *Management Decision* 16 (1978):275-298.
- Badawy, M. "How Women Managers View Their Role in the Organization." *Personnel Administrator* 23 (February 1978):60, 62, 64-68. (ERIC No. EJ 179 228).
- Bailyn, L. "Career and Family Orientations of Husbands and Wives in Relation to Marital Happiness." *Human Relations* 23 (1970):97-113.
- Balog, J. "Pyramids, Mesas and Mid-Career Crises." *Financial Analysts Journal* 35 (1979):25-27.
- Benson, C. "The Question of Mobility in Career Development for Black Professionals." *Personnel Journal* 54 (May 1975):272-274.
- Berne, P.; Dubin, J.; and Muchnich, S. *You've Got a Great Past Ahead of You*, Indianapolis, IN: Bobbs-Merrill, 1980.
- Biersteiner, I. "Current Personnel Practices in Department Stores." *Journal of Retailing* 50 (1976):3-14, 86.
- Bjerregaard, W., and Gold, M. "Effective Utilization of Search Consultants." *Personnel Administrator* 25 (December 1980):35-39.
- Brewer, J. "A New Dimension in Employee Development: A System for Career Planning and Guidance." *Personnel Journal* 54 (April 1975):228-231. (ERIC No. EJ 113 842).
- Burack, E. "Career Ladders: An Individualized Look." *Career Planning and Adult Development Newsletter* 3 (1981): 1-2.
- Burton, J. "Employment Opportunities for Consumer Affairs Professionals." *Journal of Consumer Affairs* 10 (1976): 72-85.
- "The CEO/HRD Team at Prudential." *The Career Development Bulletin* 2 (1981):2-3.
- Cleveland, H., and Orr, W. "The Young Manager: Is Career Planning a Useless Exercise?" *Advanced Management Journal* 40 (Summer 1975):52-62.
- Costello, J. "The Managerial Job Market: Quality Counts." *Nation's Business* 62 (1974):58-80.
- Crotty, P. "Continuing Education and the Experienced Manager." *California Management Review* 17 (1974):108-123.
- Crotty, P. "Development Programs for Managers." *Business Horizons* 17 (1974):8086.
- Culbertson, K., and Thompson, M. "An Analysis of Supervisory Training Needs." *Training and Development Journal* 34 (February 1980):58-60. (ERIC No. EJ 219 319).

- Dahl, D., and Pinto, P. "Job Posting: An Industry Survey." *Personnel Journal* 56 (January 1977):40-42. (ERIC No. EJ 153 184).
- Dalton, G.; Thompson, P.; and Price, R. "The Four Stages of Professional Careers: A New Look at Performance by Professionals." *Organizational Dynamics* (Summer 1977):19-42.
- Davis, S., and Gould, R. "Three Vice Presidents in Mid-Life." *The Career Development Bulletin* 2 (1981):12-14.
- Delaney, J. "How and When to Make Career Moves." *Trusts and Estates* 119 (March 1980):26-28.
- DeLong, S. T. "Two Career Development Models: Strategies in Matching Individual and Organizational Needs." *Career Planning and Adult Development Newsletter* 3 (1981):1-2.
- Edney, P. "Grouping Skills for Greater Job Mobility." *Personnel Management* 11 (1979):53-57.
- "Federal Nurturing for Female Entrepreneurs." *Nation's Business* 67 (1979):77-78.
- Frey, D. "Stress Theory for Career Counselors: Models and Methods for Intervention." *Career Planning and Adult Development Newsletter* 2 (1981):1-3.
- Foy, N. "Action Learning Comes to Industry." *Harvard Business Review* 55 (1977):158-168.
- "The Game's Played That Way, Lady." *Forbes* 120 (1977):56, 60.
- Gunton, M. "Congratulations: You Have Passed the Course." *International Management* 30 (1975):71-74.
- Hall, F. *Goal Characteristics, Organizational Support, and EEO Efforts*. Kalamazoo, MI: Office of Research Services, Western Michigan University, 1974.
- Hall, F., and Hall, D. "Dual Careers—How Do Couples and Companies Cope with the Problems?" *Organizational Dynamics* 6 (1978):57-77.
- Hanson, M., and Allen, L. "Career Planning for Adults." *Training and Development Journal* 30 (March 1976):12-14. (ERIC No. EJ 135 631).
- Hohenshil, T., and Horton, B. *Business/Industry/Guidance Exchange Bibliography*. Blacksburg, Virginia Polytechnic Institute and State University, 1978. (ERIC Document Reproduction Service No. ED 173 733).
- Holland, J. *Making Vocational Choices: A Theory of Careers*. Englewood Cliffs, NJ: Prentice-Hall, 1973.
- Kaye, B. "How You Can Help Employees Formulate Their Career Goals." *Personnel Journal* 59 (May 1980).368-372. (ERIC No. EJ 224 814).
- Kernan, S. "Theories of Adult Development." In *Perspectives on Adult Career Development and Guidance. Research and Development No. 181*, edited by R. Campbell and P. Shaltry. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1979. (ERIC Document Reproduction Service No. ED 189 290).
- Kessler, C. "How to Succeed in the Business of Finding a Job." *Advanced Management Journal* 41 (Fall 1976).53-60.
- Knowdell, R. "Career Planning in Industry. A Model Program that Works." *Career Planning and Adult Development Newsletter* 3 (1981):1-2.
- Koehn, H. "Attitude—The Success Element for Women in Business." *Journal of Systems Management* 27, No. 3 (1976):12-15.
- Kram, K. "Mentoring Processes at Work. Developmental Relationships in Managerial Careers." *The Career Development Bulletin* 2, No. 3 (1981):10-11.

- Lehman, G. "Methods for Evaluating Career Development Programs." *Career Planning and Adult Development Newsletter* 2 (1980):1-2.
- Leibowitz, Z. "Career Development at All Levels at Goddard Space Flight Center." *Career Planning and Adult Development Newsletter* 2 (1980):1-2.
- Levine, A. "Educational and Occupational Choice. A Synthesis of Literature from Sociology and Psychology." *Journal of Consumer Research* 2 (1976):276-289.
- Levinson, H. "How Adult Growth Stages Affect Management Development." *Training* 14 (May 1977):42-47. (ERIC No. EJ 160 112).
- Likert, R. "Human Resource Accounting: Building and Assessing Productive Organizations." *Personnel* 50 (May-June 1973):8-24.
- Little, C. "Counseling the Public Employee." *Supervisory Management* 26 (June 1981):16-18.
- Luxenberg, S. "Education at AT&T." *Change* 10 (December-January 1978-79):26-35. (ERIC No. EJ 192 712).
- Machiaverna, A. "Better Company Communication, Career Guidance Achieved through Red Owl Stores' Women's Council." *Supermarketing* 32 (1977):10, 30.
- Meyer, R., and O'Sullivan, K. "Maximizing Individual Career Development—ASTD Can Help." *Training and Development Journal* 32 (August 1978):59-61.
- Mithers, J. "Turn Your Employee Career Guidance Program into an Effective Pre-Retirement Vehicle." *Personnel Administrator* 25 (October 1980):49-51.
- Moir, E. "Career Resource Centers in Business and Industry." *Training and Development Journal* 35 (February 1981):54-57. (ERIC No. EJ 238 182).
- Morano, R. "A New Concept in Personnel Development and Employee Relations." *Personnel Journal* 53 (August 1974):606-611. (ERIC No. EJ 102 178).
- Morrison, R. "Career Adaptivity: The Effective Adaptation of Managers to Changing Role Demands." *Journal of Applied Psychology* 62 (October 1977):549-558.
- Nadler, L. "Implications of the HRD Concept." *Training and Development Journal* 28 (May 1974):3-13. (ERIC No. EJ 097 401).
- Nekvasil, C. "Do Sales Careers Still Turn on the Youth?" *Marketing Times* 24 (1977):25-28.
- Newburg, A. *A Directory of Training and Employment Programs in the Private Sector. Emphasis: Disadvantaged Youth*. Philadelphia, PA: Corporation for Public/Private Ventures, 1979. (ERIC Document Reproduction Service No. ED 183 918).
- Oliver, R. "The Age 35 Turning Point for Male Managers and Professionals." *Career Planning and Adult Development Newsletter* 2 (1980):1-2.
- "A Path up for Women Bankers." *Business Week* No. 2487 (June 13, 1977): 105.
- Petrovic, N. "A Game Plan for Career Success." *Credit World* 67 (1979):3-4, 8-9.
- Reed, D. "Human Resource Planning: A Tool for People Development." *Personnel* 54 (March-April 1977):15-25.
- Reha, R. "Preparing Women for Management Roles." *Business Horizons* 22, No. 2 (1979):68-71.

- Rosenberg, D. "Clearing the Way for the Growth of Women Subordinates." *Supervisory Management* 21 (January 1976):9-12.
- Ruberts, R. "Dynamic Programming for Executive Manpower Management." *Journal of Business Research* 3 (1975):79-94.
- Schein, E. "How 'Career Anchors' Hold Executives to Their Career Paths." *Personnel* 52 (May-June 1975).11-24.
- Schlossberg, N. "The Case for Counseling Adults." *Counseling Psychologist* 6 (1976):33-36, 76. (ERIC No. EJ 146 010).
- "Self-Awareness at Honeywell, Inc." *The Career Development Bulletin* 2 (1981):4.
- Sepander, G. "Planning Management Training Programs for Organizational Development." *Personnel Journal* 55 (January 1979):15-16.
- Simerly, C. "On Becoming Adults: A Review of Sheehy's Passages." *Illinois Teacher of Home Economics* 21 (March-April 1978):212-216. (ERIC No. EJ 178 864).
- Snyder, J. "Trainer Actualization through Accountability." *Training and Development Journal* 29 (June 1975).34-37. (ERIC No. EJ 118 900).
- Stanger, J. "Easing the Transition to Retirement." *Career Planning and Adult Development Newsletter* 3 (1981). 1-2.
- Storey, W. *Anatomy of a Happening*. Paper presented at ASTD National Conference, Boston, MA, May 18, 1981.
- Storey, W. "Which Way: Manager-Director or Person-Centered Career Pathing?" *Training and Development Journal* 32 (January 1978):10-14. (ERIC No. EJ 173 070).
- Storey, W. "Managing Your Future." *Chemical Engineering Progress* (October 1978).
- Storey, W. *Self-directed Career Planning at the General Electric Company*. Paper presented at Thirty-sixth Annual Academy of Management Meeting, Kansas City, MO, 1976. Buffalo, NY: Human Resources Institute, 1976.
- Strobach, S. "Business and Postsecondary Education Linkages." *Training and Development Journal* 30 (December 1976):8-11. (ERIC No. EJ 149 854).
- Super, D., and Kidd, J. "Vocational Maturity in Adulthood: Toward Turning a Model into a Measure." *Journal of Vocational Behavior* 14 (June 1979):255-270. (ERIC No. EJ 200 895).
- "Teaching Women How to Manage Their Careers." *Business Week* No. 2587 (May 28, 1979):148, 150.
- Van Egmond, E. "Faculty Career Development at Illinois State University." *Career Planning and Adult Development Newsletter* 31 (1981):1-2.
- Vosburgh, R. "The Annual Human Resource Review (A Career Planning System). *Personnel Journal* 59 (October 1980):830-837. (ERIC No. EJ 233 678).
- Wallace, E., Jr. "Time to Take a New Look at Your Affirmative Action Program. Is It Foolproof?" *Banking* 70 (1978):11, 12.
- Walter, V. "Self Motivated Personal Career Planning. A Breakthrough in Human Resource Management. Part One." *Personnel Journal* 55 (March 1976):112-115, 136. (ERIC No. EJ 134 076).
- Walter, V. "Self Motivated Personal Career Planning. A Breakthrough in Human Resource Management." *Personnel Journal* 55 (April 1976):162-167, 185-186. (ERIC No. EJ 137 384).

- Weerts, M. *Development of an Instrument to Assess Employer Sponsored Career Development Programs for Sub-Professional Employees. Final Report.* Greeley, CO: University of Northern Colorado, College of Education, 1977. (ERIC Document Reproduction Service No. ED 151 571).
- "What's New in Career Development." *The Career Development Bulletin* 2 (1981):1-2.
- "When Mothers Are Also Managers." *Business Week* No. 2479 (April 18, 1977):155-158.
- Wiant, A., and Hutchinson, R. *Self-Assessment for Career Change: Does It Really Work? Information Series No. 191.* Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1978. (ERIC Document Reproduction Service No. ED 183 946).
- Winkfield, P.; Lowry, C.; and Vetter, L. *Career Planning Programs for Women Employees: Annotated Bibliography. Research and Development Series No. 136.* Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1977. (ERIC Document Reproduction Service No. ED 171 951).
- Work in America: Report of a Special Task Force to the Secretary of Health Education, and Welfare.* Prepared under the auspices of the W. E. Upjohn Institute for Employment Research. Cambridge, MA: MIT Press, 1973. (ERIC Document Reproduction Service No. ED 070 738).
- York, L. "What Mother Never Told You about Life in the Corporation." *Management Review* 65 (1976):13-19.

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Bowen, D., and Hall, D. "Career Planning for Employee Development: A Primer for Managers." *California Management Review* 20 (February 1977):20-25. Cohen, B.S. *Career Development in Industry*. Princeton, NJ: Educational Testing Service, 1977. Greenberg, K. "Picking the Fastest Route to the Top." *Advanced Management Journal* 43 (Spring 1978):58-64. Hostage, G. "Quality Control in a Service Business." *Harvard Business Review* 53 (1975):98-106. Kaye, B. "Career Development: The Integrating Force." *Training and Development Journal* 35 (May 1981):36-40. LaBelle, C.; Shaw, K.; and Hellenaek, J. "Solving the Turnover Problem." *Datamation* 26 (1980): 144-148, 150, 152. Morgan, M.; Hall, D.; and Martier, A. "Career Development Strategies in Industry." *Personnel* 56 (March-April):13-20. Super, D., and Hell, D. "Career Development: Exploration and Planning." *Annual Review of Psychology*, edited by M. Rosenweig and L. Porter. Palo Alto, CA: Annual Reviews, 1978. Walker, J., and Gutteridge, T. *Career Planning Practices. An AMA Survey Report*. New York: AMACOM, a division of American Management Associations, 1979.