
Identifying and Encouraging Leadership Potential: Assessment Technology and the Library Profession

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ABSTRACT

THE FIRST EXPERIMENTAL APPLICATION of assessment technology to individual professional career development was in the field of librarianship. Entitled "Career Development and Assessment Center for Librarians" (CDAFL), it took place from 1979-83 in the Pacific Northwest. The CDAFL experiment also marked the first use of assessment centers in a predominantly female profession.

The purpose of this article is to explain how assessment technology identifies and improves leadership and management skills, and, based on the experience with the Career Development and Assessment Center for Librarians in the Pacific Northwest, especially how assessment centers identify and nurture leadership in the profession of library and information science.

BACKGROUND FOR ASSESSMENT TECHNOLOGY

Assessment technology was developed in the United States during World War II for the specific purpose of identifying military personnel with leadership skills. Created by the OSS (Office of Strategic Services, now the CIA), this approach to assessment combined performance testing developed early in the century with post-World War I German methods of leadership management, German observational and behavioral testing undertaken in the 1930s, and British group testing procedures devised early in World War II (Thornton & Byham, 1982). This OSS model, delivered by way of "assessment centers," remains

the most accurate and unbiased method yet created to objectively evaluate management skills.

In 1956, American Telephone and Telegraph (AT&T) adapted assessment technology to select, hire, and promote its personnel. After ten years of evaluation, assessment centers earned credibility as the most accurate method available to predict management success in a corporate environment. International Business Machines, Inc. also used assessment technology and conducted longitudinal studies over a decade which showed assessment centers to be the best way to predict success in the hiring and promotion process.

A comparison of commonly used evaluation methods showed the following percentages of accuracy in predicting success on the job as measured at the end of a decade (see Thornton & Byham, 1982, pp. 153-64, 263-320):

Paper and pencil test	10-12%
Combination of traditional methods (intelligence tests, personality tests, projective tests, interview)	35%
Assessment centers	80-85%

Of special interest is the fact that the Equal Employment Opportunities Commission (EEOC) endorses and accepts assessment technology as a valid, racially blind method for selecting personnel. Further, in 1973 a consent agreement between American Telephone and Telegraph and the U.S. Department of Labor accepted assessment centers as the method by which women would be evaluated for placement in AT&T's accelerated management development program (Thornton & Byham, 1982, p. 16).

DEFINING ASSESSMENT CENTERS

An assessment center is a process rather than a place. It is a comprehensive standardized procedure in which multiple assessment techniques, such as situational exercises and job simulations (e.g., games, discussion groups, in-basket exercises, reports, and presentations), are used to evaluate individual employees. Trained management evaluators are selected from a group who have not had, nor expect to have, direct supervisory experience with the participants. They conduct the assessment and make recommendations about the employee's management potential and developmental needs. Results are communicated to higher management for use in personnel decisions regarding promotions, transfers, and career planning. Communicated to the participants, the results become the basis for insight and development (Thornton & Byham, 1982, p. 1).

First used by U.S. corporations in the hiring and promotion processes, assessment centers are now often used to select personnel for higher level management positions in city government—and have been used in several libraries for similar purposes. (Both recent directors of the El Paso, Texas, Public Library were selected entirely through the use of assessment centers. The city of Spokane, Washington, as do many cities in California and several other states, uses an assessment center in the selection of such offices as police chief and fire chief. An assessment center was used there in the selection of the current Spokane City Librarian [1990]. The CDACL team consulted with the Washington State Library in setting up an assessment center for the selection of its former Deputy State Librarian [1986].) The CDACL evaluated librarians who volunteered for the express purpose of guidance in their career development. Whereas the typical assessment in a corporate or municipal setting ends in a win-lose situation—one candidate is hired from several vying for a position—the CDACL provided positive feedback of behavior on an entirely confidential basis. Candidates were evaluated, received profiles of their management skills, and were individually counseled regarding career planning. Naturally, few businesses go beyond “you lose” with candidates rejected for a position, but in some settings it may make sense to develop those skills identified by the assessment center as being weak or deficient thereby providing a “win” situation for the candidate.

Assessment centers can be used for a variety of purposes in the library field:

- in the hiring and promoting selection processes;
- for individual career development;
- to aid personal professional growth and development;
- to learn to supervise staff more effectively;
- to build confidence;
- to lower barriers to administrative advancement which are the result of a lack of geographic mobility, dead-end jobs or burnout;
- to develop focused continuing education programs for professionals at all levels;
- to develop masters and doctoral curricula which incorporate the findings of assessment technology research as well as of the clusters of weaknesses identified in local assessments;
- to evaluate strengths and weaknesses in management skills in individual library and information science students, allowing for the tailoring of a specific course of study to student needs;
- and to empower individuals who are part of ethnic or racial groups or other groups with double barriers to overcome, such as gender, to apply for new positions and to advance.

THE CDAACL ASSESSMENT CENTERS

The Career Development and Assessment Center project was guided from the start by the principles of networking and effective professional and association involvement. A thirteen member advisory council represented special libraries, academic libraries, public libraries, community college libraries, school library/media centers, and private academic libraries. Both state and provincial associations and the Pacific Northwest Library Association (PNLA) offered support, communication, leadership, and a means for identifying assessors and assessees. A four member steering committee consisted of the chairperson of the advisory council, a PNLA board representative, the Washington State Librarian, and the principal investigator (the author). This base of professional and association strength was the most important factor in the establishment and success of the CDAACL.

The major ingredients of a successful assessment center are its trained assessors, interested assessees, and well-chosen case studies—but, most importantly, the process itself. The CDAACL set three criteria for selecting assessors: (1) “supports growth of librarians as individuals”; (2) “leadership style respected by staff”; and (3) “perceives women as effective in many roles, professional as well as personal” (Career Development and Assessment Center, 1980). Assessors were trained over two days by Ester Huey, a consultant for Development Dimensions International, Pittsburgh, Pennsylvania. She led the assessors through an evaluation process designed to teach them to observe and measure behavior objectively against carefully defined management dimensions. This intensive training was an important key to the success of the CDAACL.

In the end, the accuracy and effectiveness of the assessment center depends on the quality of assessor training. We refer the reader to the 1989 *Guidelines and Ethical Considerations for Assessment Center Operations* endorsed at the Seventeenth International Congress on the Assessment Center Method (Pittsburgh, Pennsylvania), replacing the 1979 *Standards and Ethical Considerations for Assessment Center Operations* (Task Force on Assessment Center Guidelines, 1989).

Assessees, on the other hand, were selected for the CDAACL from numerous applicants who held an MLS degree from an accredited library school program and who had at least two years' professional work experience. With assistance from other experienced professionals, Ruth Hamilton, one of the two CDAACL codirectors, developed short case studies applicable to a variety of situations for use in the assessment centers. In a typical selection situation, for example, the case study focuses on aspects of a carefully written job description; the assessee then is instructed to perform one of the

tasks. The object of the assessment center from the perspective of the assessee is to provide self knowledge upon which to base career planning. Thus an assessment represents a simulation of the work environment, and the assessee performs tasks to solve problems, evaluate information, prioritize action response, and design plans to achieve new objectives (Career Development and Assessment Center, 1980, back page).

The typical assessment center procedure involved three days: a first session occupied a day and a half; a second session occupied a half day; and a third session, typically held two weeks after the second session, occupied a third day. Three assessees, three assessors, and one of the codirectors to administer the process constituted the staff of an assessment center (six assessees, three assessors, and one center administrator [codirector] would constitute future centers).

Day one of assessment provided orientation for the assessees and introduced them to the assessor team. During the morning the assessees received their case study, reviewed information and instructions; in the afternoon, they participated in one-on-one interviews and a group discussion. They worked independently during the evening to prepare an oral presentation.

During day two, assessees made oral presentations conveying and defending recommendations from their case study. Simulation exercises concluded before lunch, and assessees were free to return to their jobs.

Day three found the assessees in one-on-one interviews scheduled about two weeks later with the codirector (serving as the center administrator) regarding the competency profile which emerged from the assessment process. The objective of this interview was to relate new information to individual career development plans and personal expectations.

The assessors spent day one with the assessees for orientation and introductions, then met with the codirector to prepare for team activities. That afternoon each assessor observed a one-on-one interview and the group discussion. That evening each prepared a written evaluation based on defined measurable criteria for each assessee observed.

During the morning of day two, the team of assessors observed the oral presentations of the assessees. That afternoon and evening, the assessors completed their evaluations and integrated the information of each assessee into a final report. Because each assessor had seen each assessee perform one exercise, all three had observed a different assessee in a different exercise. Trained to record only observed behavior related to a specific skill, the assessor at the end of the simulation examined her or his recorded observations and

arrived at a numerical score which accurately reflected the behaviors. All assessors worked together as a team thereby preserving that objectivity and fairness which gives the assessment center its unique validity. Final agreed-upon numerical ratings are arrived at only with the evidence of observed behavior. Because each assessor has observed each assessee in a different exercise, the range of observations and situations lends further validity to the final rating.

The codirector (assessment center administrator), trained as an assessor and as an assessment center administrator, oversees the entire process and interprets the resulting management profile with each client.

MANAGEMENT DIMENSIONS

Another critical component for a successful assessment center is the choice of pertinent management skills or dimensions for evaluating personnel. Dimensions deemed of critical importance in the library field were identified by Vernon E. Buck, associate professor for management and organization in the University of Washington's Graduate School of Business Administration. Buck identified those management dimensions most important to professional librarians in all types and sizes of libraries and occupying the full range of professional library positions. These dimensions closely parallel those identified by IBM and AT&T and by researchers in graduate business schools.

One goal of the CDACL was to identify barriers that prevented women librarians from occupying administrative posts in anything like their ratio in the profession. During its first two years, the CDACL assessed Washington women librarians only; the third and final year the CDACL was open to men and women from the seven Pacific Northwest states and provinces which constitute the Pacific Northwest Library Association.

NEED FOR STRENGTHENED PROFESSIONAL LEADERSHIP

There is a growing call for librarians to exercise sophisticated control over humankind's records, a mandate that grows from the increased rate and nature of societal change predicted for and even now occurring in the 1990s. The most comprehensive and useful documentation of societal change and its implications which the CDACL team has been able to uncover is United Way of America's (1989) *What Lies Ahead: Countdown to the 21st Century*. The task force authors identify nine major "changedrivers": the maturation of America, the Mosaic Society, redefinition of individual and societal roles, the information-based economy, globalization, economic restructuring, personal and environmental health, family and home redefined, and the rebirth of social activism.

Each of the foregoing changedrivers offers insight into needs of individuals, organizations, and government for information in all its forms—from facts to wisdom, from respite to inspiration, from preschool to lifelong learning. A thoughtful reading of *What Lies Ahead* suggests that strengthened library leadership could empower the profession to take its place as a leader among other professions.

Leadership is indeed the key to assimilating societal change in all the professions, but it is particularly needed in librarianship—the profession which identifies, organizes, disseminates, and stimulates the use of information in all its forms and formats.

Further, such authoritative writers as Peter Drucker (1989), John Gardiner (1990), and Rosabeth Moss Kanter (1989) have described the first major change in organizational management in over 100 years. The move from the traditional hierarchical structure to a flattened structure in management has enormous implications for libraries. In the new manner, decisions are not made at the top of the organizational chart and communicated downward but rather decisions are made on the spot by those on the front line. These workers demand instant access to information. In other words, decision making and the information necessary for making decisions is increasingly in the hands of those on the line. The implications to libraries, both as purveyors of information and as organizations with their own management structure, is increased awareness and progressive leadership.

ELEMENTS OF LEADERSHIP ADDRESSED BY ASSESSMENT CENTERS

As stated earlier, Vernon E. Buck (1979) asked librarians in all types of Washington libraries to identify those management skills deemed necessary to librarianship. He asked them to identify the skills they would like to see in their employers and supervisors. His research design was as follows:

1. Conduct three needs assessment workshops asking the following questions: What technical and interpersonal competencies do managers seek? What competencies can be observed or learned on the job? What competencies cannot be acquired in the library environment? How can these best be taught?
2. Report on data from Needs Assessment Workshops.
3. Questionnaire to attendees to prioritize competencies.
4. Major questionnaire to all employed professional librarians in Washington.
5. Through the computerized database of the major questionnaire, organize professional competencies into functional components.

From the ensuing data, Buck evaluated and organized attitudes, skills, behaviors, techniques, and concerns into three categories: (1) interpersonal learning competencies such as motivation, reading skills, group dynamics, labor relations; (2) interpersonal being competencies, such as a flexible, tenacious, graduate of a good school, is more client oriented than task oriented; and (3) technical competencies, such as expertise in accounting, work-flow analysis, building renovation, and applications of new machines.

Buck's resulting questionnaire was designed so that respondents could regroup the data in order of importance, as well as comment and expand on the data from their own personal and professional points of view (see Table 1).

Based on an analysis of the returned questionnaires and these rankings, Buck then identified fourteen competencies (or dimensions) needed for successful library management in Washington—and, presumably, in areas of North America outside of the PNLA region of Alaska, Idaho, Montana, Oregon, Alberta, and British Columbia, the areas from which participants in the CDACL were drawn. This list can be used to match skills needed for a particular job or used in groupings to develop individualized profiles of management dimensions for a particular library job. In future assessment centers, dimensions drawn from the business world, such as "creativity," might be added; some tailoring of the list to meet regional needs and concerns might also be appropriate.

In any event, the fourteen management dimensions Buck identified served as the basis for evaluating participants in the assessment centers the CDACL conducted. These dimensions may be grouped into two broad categories—communication and management. Each dimension must be defined carefully, and each assessor must use that specific definition in evaluating each assessee.

Career Development and Assessment Center Dimensions

I. Communication

Effectively express the service and program mission of various aspects of librarianship on individual and group situations (includes gestures, non-verbal communications, and visual aids).

1. *Listening.* Ability to accurately comprehend the oral communications of others; to remember, evaluate, and integrate data so obtained.
2. *Oral Communication.* Ability to orally express or present ideas and factual information clearly and effectively.
3. *Sensitivity.* Ability to perceive and reach to the feelings and needs of others. Objectivity in perceiving their own impact on others.

TABLE 1
 COMPETENCIES REGROUPED BY RESPONDENT DATA IN ORDER OF IMPORTANCE

I. Reading skills	104	
Writing skills	114	
Listening skills	117	
Verbal, face-to-face skills	116	ave. = 113
II. Evaluation of personnel	90	
Training and development of employees	99	
Conflict management	68	
Dealing with criticism	77	
Stress management	63	
Decision-making techniques	100	
Problem-solving techniques	107	
Priorities setting	110	
Job descriptions—job analysis	58	ave. = 88
III. Fair	102	
Stable	95	
Mature	101	
Experienced	40	
Faces up to difficult issues	108	
Deals successfully with life crises	65	
Creates and maintains loyalty	72	ave. = 82
IV. Has positive attitude toward self, others, and library science	115	
Faces deadlines without procrastination	83	
Has well thought-out value system	62	
Engenders respect	97	
Has scholarly commitment	19	
Has commitment to library career	86	
Is cooperative within the profession	87	
Admits areas where lacking expertise	74	ave. = 78
V. Management directing	91	
Management organizing	96	
Management planning	105	
Management controlling	64	
Management by objectives	56	
Delegating and accountability	106	
Organizational behavior	48	
Organizational structure and bureaucracy	34	
Marketing of services	70	
Is comfortable with change and innovation	94	
Change-implementing new programs	89	
Conducting effective meetings	82	
Committee and task force effectiveness	46	
Gaining and keeping staff support	92	
Leadership and management style	66	ave. = 76
VI. Enhancing professional contacts	60	
Enhancing professional visibility	49	
Lobby-political-persuasive skills	79	
Public relations and promotional skills	93	ave. = 70
Motivation ²	112	
Graduated from ALA-accredited school	30	total ave. = 71

TABLE I (Cont.)
 COMPETENCIES REGROUPED BY RESPONDENT DATA IN ORDER OF IMPORTANCE

VII.	Open	50	
	Flexible	103	
	Tolerant	69	
	Empathic	37	
	Enthusiastic	78	
	Common sense	113	
	Has sense of humor	71	
	Accepts criticism	76	
	Follows matters through to conclusion	109	
	Is more client- than task-oriented	42	
	Does not engender fear	1	
	Innovative/creative	85	ave. = 70
VIII.	Is aware of own limitations	81	
	Enjoys diverse groups and structures	26	
	Is willing to compromise	61	
	Is comfortable with conflict	47	ave. = 54
IX.	Confident	98	
	Takes risks	32	
	Is geographically mobile	16	
	Has stamina	73	
	Avoids work- and role-overload	6	ave. = 50
	Has been individually responsible for results	75	
	Desires leadership responsibilities	88	total ave. = 55
X.	Desires leadership responsibilities	88	
	Has high tolerance for frustration	57	
	Is tenacious	41	
	Is toughminded	20	
	Is forceful	22	
	Knows own career objectives clearly	53	ave. = 47
XI.	Enjoys being a team player	29	
	Group decision-making and participatory management	51	ave. = 42
	Group dynamics	45	
	Enjoys diverse groups and structures	26	total ave. = 38
XII.	Personnel hiring and firing	59	
	Interviewer-interviewee skills	67	
	Labor relations and labor law	21	
	Negotiating skills	35	
	Affirmative action—civil rights	33	
	Assertiveness training	25	
	Performance appraisal systems	55	
	Wage and salary administration	44	
	Resumé preparation	31	ave. = 41
	Motivation	112	
	Group dynamics	45	total ave. = 48
XIII.	Current trends in library science	84	
	Trends in subject specialties	38	
	Importance of second masters degree	2	ave. = 41

XIV.	Accounting techniques	7	
	Budgeting—general	80	
	Budgeting—zero-based	28	
	Finance	36	
	Economics	18	
	Cost-benefit analysis	43	
	Equipment investment analysis	27	ave. = 34
XV.	Operations and systems analysis	54	
	Workflow analysis	52	
	Statistics and probability	11	
	Quantitative methods—general	10	
	Contingent thinking	23	ave. = 30
XVI.	Recruiting and managing volunteers	8	
	Sensitivity and self-awareness training	24	
	Creative use of leisure time	4	
	Coping with failure	39	
	Career counseling	13	ave. = 18
XVII.	Laws and contracts	14	
	Bidding and procurement	9	
	Insurance	3	
	Building design—new	12	
	Building—remodeling	15	ave. = 11
XVIII.	Tolerates ambiguity and uncertainty	5	
	Perception and stereotyping	17	ave. = 11

Source: Buck, V. E. (1979). Toward professionals managing professionals: A case study of career development for women librarians. In P. P. LeBreton et al. (Eds.), *The evaluation of continuing education for professionals: A systems view*. Seattle, WA: University of Washington Press.

4. *Written Communication Skills*. Ability to clearly express concepts and information, in writing, in well-organized and good grammatical form.

II. Management

1. *Decisiveness*. Readiness to make decisions, render judgments, take actions, or commit oneself.
2. *Delegation*. Utilizing subordinates effectively by allocating decision making, accountability, and other responsibilities to the appropriate subordinate.
3. *Flexibility*. Modifying behavior to reach a goal as work environment changes.
4. *Initiative*. Ability to actively influence events to achieve goals and quotas. Self starting, taking action to achieve goals beyond what is necessarily called for.
5. *Judgment (Decision making)*. Developing alternative courses of action based on logical assumptions and which reflect factual information and rational and realistic thinking.

6. *Leadership*. Ability to utilize appropriate interpersonal styles or methods in order to effectively guide individuals (subordinates, peers, supervisors) or groups toward task accomplishment.
7. *Management Control*. Ability to establish procedures to monitor and/or regulate processes, tasks, or job activities and responsibilities of subordinates. Ability to evaluate the results of delegated assignments and projects.
8. *Planning and Organizing*. Establishing a course of action for self and/or others to accomplish a specific goal; planning proper assignments of personnel and appropriate allocation of resources.
9. *Problem Analysis/Solving*. Ability to identify problems, research relevant information, identify possible causes of problems, and suggest workable solutions.
10. *Tolerance for Stress*. Ability to effectively perform in stressful situations which may be caused by time pressures, frequent interruptions, and/or task difficulty.

The CDACL showed that management skills are essential for success as a librarian (Hiatt, 1982, p. 23). This observation holds for any position, whether or not primarily administrative or supervisory. In other words, the skills (or dimensions) identified earlier are the skills needed for effective leadership throughout the organization.

Some intriguing patterns emerged from the evaluation of the CDACL experience. First, although the typical participant was only slightly above average in managerial skills, all participants reported that their managerial skills were evaluated as higher than they themselves believed them to be. In short, their confidence level was low, a pattern which remained unchanged in the final year when the geographical area was expanded and men were included for the first time (Buck, 1979). If the library profession seeks to identify and encourage leaders and potential leaders, it should ask whether the confidence level is universally low and what can be done to raise it.

A second pattern is best summed up in the comment by a male assessee working with two female assesseees: "First time I ever worked with a woman librarian on a peer basis" (interview, personal communication, July 1981).

Women today constitute approximately 82 percent of the library profession. Yet in 1974 there were no women directors at any of the over-100 large research libraries in North America, and today women remain under-represented in prestigious administrative positions in ARL libraries. According to Schiller (1975):

Nationally, women make up 82 percent of all professional librarians. However, they hold only 39 percent of the public library directorships

in cities with a population of 100,000 to 400,000 and only 10 percent of the directorships of very large city libraries (more than 750,000 population). 37 percent of the largest special libraries (those with a staff of ten or more) are headed by women. In academic institutions with enrollments of more than 3,000 students, women hold only 8 percent of the directorships. (p. 15)

If there is approximately the same percentage of librarians with leadership potential in the 82 percent of the profession which is female—and this assumption is a reasonable one—then it follows that the profession, as well as American society, has lost the benefit of an important cadre of leaders.

Individual career development was specifically addressed by the CDACL. The design matched managerial skills against career plans, and counseling (in fact, simple debriefing) at the close of each assessment center focused on what each assessee might consider doing if he or she wished to pursue the career goals stated at the outset. Some assessees wanted internships to gain managerial perspectives; others wanted courses to strengthen obvious weaknesses; still others wanted to work toward additional degrees, often in management. Several have left librarianship; a few refused promotions when they found they did not have the skills to do the jobs. It appears that most of the assessees (eighty-nine were assessed over the three-year period) used the analysis of their management profiles to increase leadership skills.

DEVELOPMENT OF LEADERSHIP THROUGH ASSESSMENT TECHNOLOGY

A central purpose of an assessment center is to create a profile of the assessee's managerial strengths and weaknesses. Thus leadership potential is uncovered. (The fourteen management dimensions identified through Buck's research are those deemed necessary to effective library management by professional librarians. Within that context, it is revealing to note how the specific dimension, "leadership," is defined in managerial terms: "Ability to utilize appropriate interpersonal styles or methods in order to effectively guide individuals [subordinates, peers, supervisors] or groups toward task accomplishment.") The assessment center experience has direct impact not only on the identification of leaders, but also on the encouragement and growth of leadership. Several important uses of assessment centers demonstrate the power of assessment technology to both identify and to foster leadership in the profession.

Selection

The selection (hiring) of those who have demonstrated needed management skills has a long history of use in business and is, in

fact, one of the two major applications of assessment technology. As noted earlier, the assessment center predicts more accurately than any other evaluation technique or combination of techniques those with managerial skills and leadership potential (Thornton & Byham, 1982, pp. 153-64, 263-320).

Evaluation for Individual Career Development

Each of the management dimensions measures a facet of leadership qualities. After a librarian goes through the assessment center, a management profile results. If this is shared and discussed with the librarian, as in the Career Development and Assessment Center for Librarians, the profile serves as a basis for career planning. The librarian can then work toward the improvement of these management skills by increasing those skills in the identified weak areas. The CDACL, as noted earlier, was created to help women librarians increase their chances for leadership positions in the profession. Because of its purpose of individual career development, individual management profiles were shared only with the administrator of that assessment center (who, in fact, is responsible for writing the final evaluation) and the librarian. Other members of the CDACL staff—e.g., the principal investigator—saw the results only in coded form.

Among assessees on the job market in the two years following their assessment center experience, those with higher performance profiles submitted fewer applications but were more likely to accept a job offer. Assesseees with higher skill profiles were more likely to change jobs (Thornton & Byham, 1982, pp. 153-64, 263-320).

Typical examples of post-evaluation activity include an internship in a large public library's administrative group by a high school librarian; taking formal courses and workshops which address areas of identified weaknesses; embarking on a masters degree in business administration; changing careers (one to become an attorney); reshaping the currently held position; and reworking career plans, comfortably accepting their profiles; or embarking on new professional paths, accepting or working to improve their skills.

Promotion

The other major use of assessment centers in business is for identifying the employee most apt to be successful in a higher position. The high success rate of such assessment centers has been noted. Occasionally, like the CDACL, businesses use the information from such a center to guide the managerial development of individuals who have "failed" to be promoted. Unlike the CDACL, assessment center ratings are shared with personnel, supervisors, and the assessee.

These profiles can be used by the personnel officer and the supervisor as a basis for working with the assessee on her/his managerial weaknesses. There is at least verbal evidence that corporations have found assessment centers to be an excellent vehicle for managerial improvement. (The Washington Mutual Savings Bank, Seattle, is one institution which has used the results of assessment centers for promotion to help those not selected for promotion improve the management weaknesses identified in the assessment center.)

Staff Development

As can be deduced, if individual management profiles can be used to help that individual improve managerial skills, grouped profiles can be used to work on common managerial gaps in a library professional staff.

One of the interesting results of the CDACL was the identification of clusters of management strengths and weaknesses among the eighty-nine librarians assessed between 1979 and 1982. The three strongest and three weakest managerial skills of that group as a whole were as follows (Melber & McLaughlin, 1983, p. 19):

<i>Strongest Dimensions</i>	<i>Weakest Dimensions</i>
Decisiveness	Judgment
Listening	Management Control
Initiative	Flexibility

In 1980 and 1981, the University of Washington Graduate School of Library and Information Science and the CDACL conducted several workshops for practitioners focusing on those weaknesses about which assesseees were most concerned. A library staff development program could be based on a similar appraisal of strengths and weaknesses of professional staff determined through an assessment center process. Agreement would need to be reached ahead of time to share the results with the administration who would be financing the assessment center designed to meet the library's specific needs.

Another use of assessment technology for staff development was projected by a library in 1988. Working with the CDACL team, the director and staff development officer of the Seattle Public Library created a model to train all supervisory (professional) staff in assessment techniques (to E. Stroup, CEO Seattle Public Library, personal communication, November 1988). Each supervisor was to receive training as an assessor. Because a necessary part of becoming an effective assessor is to apply that training, plans were discussed to run a series of assessment centers either for individuals outside the library or for other libraries. The board turned the proposal down, but the concept is valid. In fact, the Battelle evaluation of the CDACL

identified the positive impact of the training of assessors on their job. This model has yet to be tested, but clearly the potential of assessor training as a method for developing leadership within a library system and, in general, improving managerial performance (which allows leadership to operate) is of major promise.

ASSESSOR TRAINING FOR LEADERSHIP

One of the most significant findings of the 1979-83 CDACL was the impact of assessor training. As the program was designed, the purpose of training middle-management and administrative librarians as assessors was to help achieve the objective of running quality assessment centers. The focus of the project was on the assesseees and the project's objective of helping them advance their careers. As the project drew to a close, the Battelle evaluation revealed unexpected impact on the assessors (Melber & McLaughlin, 1983, pp. 44-45).

The original flyer sent to prospective assessor candidates noted that "through participation in the assessment center process, each assessor will gain valuable insights into analyzing a range of managerial problems and identifying essential competencies necessary for upward mobility. This unique synergistic process of assessment recognizes an administrator's responsibility for on-the-job professional development" (CDACL, 1980). The assessors represented a large proportion of the regional (seven PNLA states and provinces) leaders in the profession. The evaluated sample included thirty-two women and seventeen men. The average age was 44.2 and ranged between 30 and 59 (Melber & McLaughlin, 1983, p. 43).

The assessors found the assessor training to be valuable. Over 95 percent of the assessors responded affirmatively and were able to cite at least one specific instance in which the training was valuable in their current position. Over half of the assessors referred to using the training in staff evaluation and development (Melber & McLaughlin, 1983, p. 44):

"A heightened awareness of and ability to see objective, concrete elements in a subordinate's job performance; working with peers in an evaluative setting allowed me to learn much that was helpful from their experience."

"It has helped me to explain putting performance evaluations in terms of observable behavior to my subordinate supervisors."

"Having clear definitions of behavior dimensions and practice in recognizing them as they occur allows me to pinpoint and encourage appropriate behaviors in my staff...."

"I consciously try to be more observant of overt behavior of more minute examples of the characteristics of job performance. At

present I'm using this as a behavior modification to attempt to bring CETA employees to entry level skills emphasizing the positive behavior."

Close to one-third of the assessors indicated improved observational skills as useful:

"Providing awareness of management dimensions and realization of the behaviorally observable manifestations of these dimensions [gave me] a very good frame of reference I didn't really have before."

"Caused me to think about the behavior of individuals in groups—watching who moves a group toward task accomplishment, for example...."

About one-quarter mentioned greater self-awareness:

"Better able to assess own responsibilities and ability to meet those."

"Through self evaluation of those dimensions in which I identified weaknesses, I have been able to analyze my performance for improvement."

Approximately 15 percent used some of the techniques in hiring new staff:

"We used the assessment center dimensions in interviewing candidates for professional positions and we based our ratings on behaviors...observed."

"In terms of impact of the program, 86 percent of the assessors indicated that their participation in the program had a positive impact on their own job performance. More importantly, 88 percent indicated that they expected the Assessment Center program to have a positive impact on the status of women in the profession, and 50 percent expect that impact to be substantial" (Melber & McLaughlin, 1983, p. 43).

ASSEESSEES AND LEADERSHIP

"It is clear that a large majority (approximately 75 percent) of the assessors were optimistic about the Center's potential for improving the skill levels of the assessees and the quality of the profession. Sixty-six percent of assessors anticipated a positive effect on the career mobility of the participants. Approximately 40 percent of assessors thought that identification of areas of competency and areas for improvement would lead to skill development and a better competitive position for women, and 18 percent said that increased self-confidence from program participation would lead to greater numbers of women seeking upward mobility" (Melber & McLaughlin, 1983, pp. 45-46).

The number of assessee responses that point toward leadership awareness and even the development of leaders is impressive.

Approximately 80 percent of the assesseees thought the program would improve career mobility of women librarians, a hoped for sign that women professionals with leadership potential may be able to bring their skills to other libraries. About 70 percent of the assesseees indicated the experience was useful for their current position. The center experience affected both attitudes and behaviors at work. Increased self awareness was mentioned by 34 percent; improved self-confidence was reported by 16 percent; and enhanced job performance was reported by 24 percent (Melber & McLaughlin, 1983, pp. 23-25).

Emerging leadership awareness was evident in many of the assessee responses to the Battelle evaluation questionnaire.

Self Awareness: "When dealing with other people, reminding myself of weaknesses in my profile helped me reduce them."

Self Confidence: "Made me more aware of strengths, more certain of my ability to handle an administrative problem." "Helped in developing a positive self-image." "Increased confidence, verified (I am) moving in the right direction."

Job Performance: "I have taken steps to delegate more effectively ... earlier I would have taken on the work by myself." "Aided in evaluating my own employees."

Skill Development: "More aware of management skills and need to practice." "Tried to improve interaction skills."

Career Planning: "The AC experience was instrumental in my decision to change careers; it provided a springboard from which to plan and evaluate." A librarian determined she was not interested in management positions: "However it demonstrated to me that I could function in a management position if I so chose. That in itself is valuable information to me" (Melber & McLaughlin, 1983, pp. 25-26).

The recognition of their skills and weaknesses impacted the view of many of the assesseees regarding leadership and of their own leadership potential. One of the chief objectives of the CDACL was to encourage librarians, particularly women librarians, to move upward in order to assume their place as leaders in a profession still dominated by men. Battelle Human Affairs Research Center's evaluation of the CDACL demonstrates that assessment centers have the power to do just that.

DEVELOPMENT OF LEADERSHIP THROUGH CONTINUING EDUCATION

During the three years (1979-83) of the Career Development and Assessment Center for Librarians project, quite a few opportunities for continuing education presented themselves. Some grew out of

findings of the center about clusters of management training needs; others were mounted at the request of other groups and organizations. Several models were tested and are indicative of the range of continuing education activities that can be generated by the analysis of assessment center data.

Assessee Generated Seminar

One of the first models was a confidential closed meeting requested by a group of assessees. They asked the center if we could plan a meeting of assessees so that they could informally discuss their work and personal experiences since participating in the center. During the 1981 annual conference of the Washington Library Association in Ellensburg, Washington, Elizabeth Stroup, then director of the General Reference Services Division of the Library of Congress, led a session dealing with the professional and personal aspects of career decisions. The twenty assessees who attended, as well as Stroup, took particular note of the value of their assessee experience in helping them examine career plans on a more realistic and broader basis.

Other Feminized Professions

A test of the validity of the CDACL approach to other feminized professions was conducted in a two day workshop, "Assessing Individual Leadership Skills," for nurses, teachers, librarians, and social workers. A high degree of interest was expressed by each profession as the process was demonstrated. The center codirectors and the consulting administrator concluded that very little adaptation was necessary for the librarian center to be suitable for these other predominantly female professions.

Career Counseling. A career counseling professional from the University of Washington campus conducted a workshop on how mid-career librarians should approach opportunities for a job. A publication was designed to meet the request of a number of participants who asked for further advice on job hunting. (The meeting was successful. A request for further information was met by a publication developed after the sessions by the workshop leader [see Rehwinkel, 1982].)

Graduate Classes. The center codirectors, Ruth Hamilton and Charlotte Wood, presented fundamental elements of the CDACL and of assessment technology to students in several of the required management classes at the University of Washington's Graduate School of Library and Information Science during the CDACL project.

Hamilton designed and taught a graduate seminar in career planning for two years. Not only did the students in this class benefit from the new findings and experiences of the CDACL, but they were also able to contribute to its progress.

Two one-week, credit summer school seminars were held in 1981—"Management Skills for Librarians" taught by Margaret Fenn, a professor of management and organization in the University of Washington's Graduate School of Business Administration; and "Library Career Issues for the 80's," taught by Anne Haley and Sharon Hammer, two outstanding library practitioners.

Association Meetings. In addition, Ester Huey, the center's assessment technology consultant, gave a distant presentation on assessment centers to the Virginia Library Association during this same three-year period; and the codirectors and the PI gave several career planning workshops in California, Illinois, Pennsylvania, and Oregon—e.g., for the Riverside City County Library, Catherine Lucas, director, gave presentations entitled "Identifying Managerial Skills in Observed Behavior" in 1981 and in 1982, at a pre-conference of the joint Oregon and Washington Library Association's Convention, "Design Your Life Work in the 80's."

Staff Development. In addition to the events described, several similar CE events were held at Alaska, Canada, and Oregon library association meetings, as well as a specially designed workshop for Federal Interagency Field Librarians meeting in Seattle. It is important to note that only the limitation of staff planning time outside the CDACL work restricted the number of CE opportunities which could be addressed. There can be little doubt that the assessment center process itself is a catalyst for the identification of significant continuing education needs and opportunities.

Education for Library and Information Science

One place to begin to develop a larger and better prepared cadre of professional leadership is in the graduate programs of library and information science.

CURRICULUM AND BEYOND

During the experimental period between 1979 and 1983, Douglas Zweizig, assistant professor in communications and management at the Graduate School of Library and Information Science, University of Washington, not only worked with his class to develop training tapes for assessors, but also incorporated the early findings of Vernon Buck's research which identified those managerial skills deemed most

essential to professional library practice. This model was first suggested by Margaret E. Monroe (1981).

Inevitably they (the fourteen competency areas that compose the base for analysis in the assessment process) will become an invaluable resource for analysis of management tasks around which internships could be structured and evaluations determined. The potential of assessment centers for education and evaluation as well as for counseling is still to be explored by library education." (Monroe, 1981, p. 64)

Several examples of courses and CE activities which were initiated in response to findings by the CDACL were discussed earlier under the heading *Continuing Education*.

EVALUATION OF APPLICANTS

As regional assessment centers are created across North America, it may be possible to send applicants through an assessment center as part of the evaluation for admissions. Schools which have management and leadership as educational goals for their programs may wish to take into account the ratings applicants received. This author, with thirty years experience as a library educator, is more than aware of the logistical difficulties of such a program but would be loathe not to suggest it as an important step in advancing the profession.

STUDENTS

Far more feasible are two applications of assessment centers in the school program: (1) pre- and post-assessment center evaluations for new and graduating students; and (2) assessment center evaluation of incoming students (volunteer or required). The value of establishing a managerial profile at the start of the student's program and comparing that profile with one generated by an assessment center at the close of her/his program is obvious. The results could be used by faculty in evaluating and improving the curriculum as it affects management skills, and the results could be used by the individual student as a component in career planning.

The National Advisory Committee to the Career Development and Assessment Center for Librarians Project: Phase II, has suggested that assessment centers be used in graduate programs of library and information science to pre-test students in order to develop a management skills profile. This profile would be used to help each student in developing an individualized course of study better preparing her/him to meet the need for leaders in the profession. (As noted later in this article, the W. K. Kellogg Foundation funded a phase II of the CDACL in 1991 in order to prepare the materials and experiences of the 1979-83 CDACL for publication. The American

Library Association served as the institutional base for this project, and the Office for Library Personnel Resources [OLPR], under the direction of Margaret Myers, was the project manager.

For purposes of guiding the project, critiquing the manuscript, and planning for the integration of assessment technology into the profession, OLPR and the CDACL appointed a national advisory committee chaired by Martin Gomez, director of the Oakland [California] Public Library, and including: Mae Benne, professor emeritus, University of Washington; Robert Geiman, vice-president for administration, Masters College, Newhall, California; Kathleen Heim, dean of graduate studies, Louisiana State University; Patricia M. Paine, library administration, Fairfax [Virginia] County Public Library; Sandra J. Pfahler, associate director, University of Wisconsin—Madison Memorial Library; and Jane Robbins, dean, School of Library and Information Studies, University of Wisconsin—Madison.)

ASSESSMENT CENTER AND UNDERUTILIZED LEADERSHIP POTENTIAL

Approximately 82 percent of professional librarians are women (U.S. Bureau of Labor Statistics, January 1976, Table 2, January 1989, Table 22). Many sources offer differing percentages for the men/women ratio in the library profession. Some include school librarians who do not hold the masters degree from an accredited program, others focus on academic and public libraries only, some are sounder in their gathering of data than others. However, for more than three decades the ratio of women to men in the library profession has been consistently reported by all sources in the range between 82 percent and 85 percent. It should be noted that the ALA Office of Library Resources (personal communication, June 1991) reported a 73.15 percent figure for women in 1990 in academic and public libraries who received degrees or certificates in library and information science. The base may be different than that used in the percentages mentioned earlier. It was first reported in *Women in Librarianship: Melvil's Rib Symposium* (Myers & Scarborough, 1975) that only 33 percent of the prestigious library positions were held by women. It can be assumed that the percentage of potential leadership in that 82 percent is not significantly different than among the male 18 percent. If that is so, a large cadre of potential leadership exists and, with evaluation and training, they can become leaders. Further, if the rate of changes predicted by such organizations as the United Way of America (1989) prevail in the 1990s, society will not be able to wait for a new generation of information professionals to reach traditional positions of influence.

The CDACL was first created because of a deep concern of several librarians in Washington state over the continuing discrimination against women's upward mobility to leadership positions in the profession of library and information science. There have been suggestions emerging of late that women administrators bring unique strengths, different than male administrators, to their management style (e.g., Moris, 1990). If research finds this to be so, then the profession can look forward to benefiting from such possible female managerial characteristics as long-range planning and thinking, interdisciplinary thinking (thinking across lines in context), equity (women think in terms of family circles instead of pyramids of power), conservation (and thrift), nurturing and connection (supporting others as opposed to individualism and standing alone), and spirituality (Moris, 1990).

Sally Helgesen (1990), in her new book, *The Female Advantage: Women's Ways of Leadership*, discusses how leaders actually behave and, through case studies, how women approach leadership. She cites what she calls the "Web Structure" or a dialogue of interactions—i.e., a woman is more concerned in getting a "vision" across, and is concerned with the care and empowerment of others rather than personal power.

The Career Development and Assessment Center researched those management dimensions which are deemed necessary to successful library performance. It is to be hoped that this new area of research—seeking differences in managerial skills between men and women—will move rapidly.

THE ASSESSMENT CENTER, LEADERSHIP, AND RESEARCH FINDINGS

During and at the close of the 1979-83 Career Development and Assessment Center cosponsored by the Washington State Library, the University of Washington Graduate School of Library and Information Science, and the Pacific Northwest Library Association, the Battelle Human Affairs Research Centers (Seattle, Washington) conducted evaluative research focusing on the objectives of the project.

An unusual opportunity for follow-up research was presented ten years later when the W. K. Kellogg Foundation contracted in 1990-91 with the original team of Ruth Hamilton, Charlotte Wood, and Peter Hiatt to both prepare the materials and experiences from the original project for publication and also conduct a limited longitudinal study of the original participants. Again, the Battelle Human Affairs Research Centers conducted a major part of this longitudinal research under the direction of Barbara D. Melber, a codirector of the earlier study. Some preliminary data from this latest

Battelle Study are presented later. In addition, some raw material from the case study interviews conducted of assesseees and assessors by this author is presented.

In all three research studies (Battelle, 1983; Battelle, 1991; Hiatt, 1991) the success of the center; the impact (both personally and professionally) on the potential for improving the status of women in librarianship; and the importance of the CDACL in identifying and encouraging leadership are highly rated.

The preliminary analysis of the longitudinal study made specifically for this issue of *Library Trends* is not able to show direct cause and effect relationships between the CDACL and various individual career changes or what impact it has on the status of women in librarianship. The case studies are somewhat more revealing.

1979-1983 BATTELLE RESEARCH

The essential data from the first Battelle evaluation are presented in the earlier material relating to assesseees and assessors. In summary, the eighty-nine librarians assessed by the close of that project reported a wide variety of impacts:

- prioritization of their continuing education needs, based on information from written assessment profiles;
- affirmation of strengths on which to build new concepts of career goals;
- self-knowledge became the essential base for life/career planning;
- managerial dimensions were used in daily responsibilities at all levels of the organization.

Assesseees also validated that the assessment center experience had another impact—i.e., a realistic preview of higher managerial responsibility.

In addition, every assessee began some self-development activities, some quite comprehensive. Each assessee designed a five-year goal program (none of the women had ever done so before; most of the men's plans were vague). Upward mobility, job enrichment in their present positions, and the need to design techniques of self-renewal to prevent "burnout" were common themes resulting from the program.

1991: BATTELLE RESEARCH

In 1991, Battelle set out to compare differences between those who were assessed in the original CDACL and a control group of those who applied and met the qualifications of the center but were not assessed. (The budget was limited by the fact that all expenses were paid for in the initial experiment.) A preliminary overview

focuses primarily on comparing assessee and applicant (control group) data.

Battelle reports that there is no question of the impact of the CDACL on assessees and those who applied, but as yet has not been able to determine what the amount of that impact is relative to the group having assessment center experience versus a "normal" group of librarians. We do not know at this point whether such comparison data are available. Without it—yet another gap in research in library and information science—it will not be possible to determine if the assessment center impact has made specific differences on those assessed compared with the rest of the profession.

The Battelle research team did not expect big differences between the assessee and the applicant groups. This study, in fact, is looking at a self selected, highly motivated, career-oriented group of librarians, and that is true of all who applied, the control group as well as those who went through the assessment center. What the Battelle study reveals to date is a profile of motivated librarians rather than significant differences between assessees and the control group. "By virtue of their application to the Assessment Center program both groups could be characterized as highly motivated and career-oriented librarians" (Melber et al., 1991, p. 1).

"A very high number of assessees (98 percent) and applicants (97 percent) indicated that they are currently employed." (p. 1)

"A large majority of both assessees (74 percent) and applicants (84 percent) remain working in a library position." (p. 1)

"A majority of both assessees (60 percent) and applicants (78 percent) have mid- to upper-level management responsibilities." (p. 4)

As a whole this is a group of librarians who have really moved to management position. Over two-thirds report positions as "Large Library System Director (3%), Large System Department Manager or Medium Sized System Director (20%), or Department Manager or Small Library Director (44%)." (p. 6)

The major reasons for changing jobs are positive: 45 percent for promotions; 40 percent for change in content of work ("more challenging," "more interesting"); very few (15-20 percent) for family reasons (p. 8). There is a strong indication that many librarians follow a career path within a type of library (p. 9).

These preliminary findings reflect the combined profiles of the assessees and the control group. Two factors would seem to be special and specific to the NW CDACL (B. D. Melber, C. O. Westra, P. S. Hunt, personal communication, June 20, 1991):

1. The use of assessment center technology for professional development and not as a selection device. Assessment centers have been, and continue to be, used primarily for selection and

promotion purposes, killing any real opportunity to use the data gained for individual professional development. The CDACL is not a "win-lose" situation, and therefore the information gained in the process can be used in a contributive fashion.

2. The NW CDACL is providing professional development at two levels at once:
 - a) developing managerial levels by training assessors, and
 - b) developing professional librarians at the service level.

Therefore, there is an increasing possibility of having impact on enlightened managers as well as affecting junior staff. Several of the earlier quotes illustrate these points.

As of this writing, Battelle has several additional analyses to conduct. Undoubtedly, additional information will be forthcoming. The full report (Battelle and Hiatt) will be published for the profession. It is clear at this point that, until base-line data for the profession as a whole are available against which we can profile the CDACL group, we will not be able to present a clear picture of either the nature of those who apply for assessment centers or the impact of the assessment centers on those who participate.

1991: HIATT RESEARCH

Concurrent with the writing of this manuscript, a series of longitudinal case studies of assessees and assessors are being conducted. Although these interviews are still in process, making it impossible to draw any general conclusions, a look at some of the responses is revealing not only of the original CDACL and its impact, but also of the future of assessment technology in the profession. Five general areas were covered. A sampling of the responses from summer 1991 follows:

1. **Could you compare the training you received as an assessee with other training experiences you've had?**

"Intensive... concentrated. Excellent laboratory situation. I pushed myself to see what was possible. I really wanted to get something out of it."

"Quite valuable experience as training as against other training experiences."

"Validated what I already knew, and so was not helpful. I never have been able to get the job I wanted."

"Other workshops are very specific (dialogue, etc.) and do not offer as much perspective."

"Very quality experience...intense. I wish I had followed through—I wish I had recognized what it meant. I needed to be kicked in the butt by you people. I wish after about two years,

you could have gotten hold of me, run me through the Center again, or pushed me a bit. As soon as another Assessment Center is opened, I'll be there."

2. Impact of your assessee experience: (a) on your job performance?

"Helped with interpersonal and in developing an approach at meetings...and in developing projects."

"Confirmed what I knew about myself; so I can't say that it was helpful. The Assessment Center did find that I had problems with oral presentations, and I have tried to work on that."

"No. Presentation was a good experience, and I have had to do things like that. It was helpful."

"Yes. I made a career change after the Center. I looked at other places after I learned from the AC that it was possible."

(b) on your career?

"Yes it did. The results and comments did cause me to think I would *not* catalog here for several more years and then travel with my husband." (She was appointed head librarian of that same library six weeks before this telephone interview.)

"I was thinking of changing careers, and nice to have these thoughts of myself validated with Assessment Center. I wanted to work with people—but have never been able to get such a position."

"Changed jobs, but same level. I needed a change in pace."

"Regret is the cancer of life. I regret that I did not follow through on my Assessment Center experience and learning."

3. Ten years later, what is your perspective on the value of your Assessment Center experience?

"Very valuable. Could be to others as well."

"I took my Assessment Center profile to my head librarian (large University Library) who dismissed the profile with, 'No one knows how to evaluate.' I respected him, and agreed. Nice to have personal confirmation, however."

"My Assessment Center was oriented to large libraries, and I work in a one-professional library. It did, however, help me in facing new situations. I can't say it changed my life. I did correspond with the two other assessees I met at the Center, a kind of networking."

"Very valuable experience, and ought to be earlier on. If I had gone through the Assessment Center experience before I went to graduate school, I would not have elected librarianship as a career."

4. Further comments: (a) on the CDACL?

"I know the original purposes—because I was involved in the early research workshop in Spokane—was to do something about

the status of women in librarianship. But this could be useful to people for professional purposes and especially for minorities and underutilized groups such as women. Their participation in the Assessment Center should help them seek further training."

"Very good experience, especially to find that as a female I was valued."

(b) on the Status of Women in Librarianship?

"People are more concerned, but general attitude is blasé. Fill out the forms and go on with the bureaucracy."

"Like the status of women elsewhere—we are losing ground."

VISION OF THE FUTURE

The various articles in this issue of *Library Trends* recognize and address the need for more and stronger leadership from the profession of library and information science. Changes predicted for the 1990s depict a society with an increasing, almost desperate, need to be informed. The library agency and institution has long carried out a responsibility for identifying, selecting, organizing, disseminating, and stimulating the use of "information" in all its aspects. But the need for rapid, almost radical, change in libraries and in library and information science demands both better and more professional leadership and leaders. It demands all the potential power of our profession.

As Peter Drucker (1989) notes:

The information-based organization poses new management problems.

I see as particularly critical:

- Developing rewards, recognition, and career opportunity for specialists;
- Creating unified vision in an organization of specialists;
- Devising the management structure for an organization of task forces;
- Ensuring the supply, preparation, and testing of top management people. (p. 216)

While it is important to distinguish between management and leadership, just as it is between management and administration, Drucker identifies "the fundamental task of management...[as]: to make people capable of joint performance through common goals, common values, the right structure, and the training and development they need to perform and to respond to change" (p. 22). It is the responsibility of the leader not only to manage, or to see that the organization is managed, but also to supply the vision and motivation for the individual and the organization.

The Career Development and Assessment Center for Librarians has demonstrated the contribution which individual assessment can make to the cadre of current and potential professional leaders. Assessment technology long applied to selection and promotion

decisions can further speed the recognition of and development of professional leadership. Some contributions of assessment technology applied to career development, staff development, supervisory training, selection, promotion, and professional education have been noted. The application of assessment technology to the profession is essential for the profession as well as for the society which it serves.

The W. K. Kellogg Foundation, the University of Washington Graduate School of Library and Information Science, the Washington State Library, the Pacific Northwest Library Association, and the American Library Association, as well as numerous leaders in the field, supported and sponsored the first application of assessment technology to career development and to a predominantly female profession. Additional funding from the W. K. Kellogg Foundation and sponsorship by the American Library Association has made it possible to prepare the materials and the experiences from the successful Northwest experiment for publication. The publication of *Assessment Centers for Professional Library Leadership* (1992) will put into the hands of professional leaders guidelines for adapting the successful Northwest experience. The growing interest and support of the application of assessment centers to the library profession suggests that these guidelines will be the first step toward integrating assessment technology into the profession (by the end of 1985, over 100 citations to the project had appeared in the literature. Many of these can be found in: Heim & Phenix, 1984; Phenix et al., 1989).

The future of assessment technology as a leadership tool in a predominantly female profession, such as library and information science, may well be assured. Indeed, as the president of the W. K. Kellogg Foundation, Robert D. Sparks, wrote in 1987: "It is likely that the CDACL model can be implemented across the nation. The study should lay groundwork for progress in this direction. It should also promote broader application of the model by other professions" (W. K. Kellogg Foundation, 1987, p. 9).

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