Presently there are nearly 20,000 undergraduate majors in broadcasting, with the majority enrolled in speech communication departments. However, estimates hold that at best only one-half of those seeking positions in television will actually find them. This indicates the need for a media student to receive a good general education in areas other than communication and to receive specific production/management training in nonbroadcast media. A nonbroadcast institutional media program should be founded on the study of basic communication and should provide training in methods of systematically analyzing alternative approaches to meeting specific behavioral objectives and of designing effective instructional and persuasive messages that make use of appropriate media. It should provide concentrated study of production principles and techniques through directed practice and drill in small-format television and synchronous sound/slide program preparation and should progressively increase student responsibility through full production management of all aspects of planning and execution. The program should also provide opportunities to supplement production courses with those in administration and management, technical operations and engineering, and performance; and should incorporate professional practices or internship opportunities for seniors in corporate or institutional settings. (HOD)
CURRICULA WHICH MAXIMIZE THE MARKETABILITY
OF GRADUATES IN TELECOMMUNICATIONS: RADIO-TELEVISION-FILM

Central States Speech Association
Chicago, Illinois
April, 1981

“PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Garland C. Elmore

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC).”

by

Garland C. Elmore
Indiana University - Purdue University
Indianapolis, Indiana
In the midst of my first year of teaching speech in radio broadcasting, when I was still in that naive state of expecting to find someone from whom I could get the magic formula which would resolve all the difficulties of the art, I visited one of the broadcasting centers. I was armed with a letter of introduction to an announcer who had amazing intrigued people from coast to coast into buying his sponsor's product. The gentle man saw me. In the course of our conversation I questioned him as to what in his opinion could be taught in a college course in radio. His succinct answer: "Nothing. Repeating that the time for my departure had come," left me ponder this pearl of great price with respect to myself and my activities.

Since 1929 when this description was written by Clay Harshbarger, then Professor of Speech at the State University of Iowa, education for broadcasting has grown from a few courses in 20 colleges and universities to a total of well over 1,300 radio and television courses in 230 four-year schools. This proliferation may be dated from 1929, when the University of Southern California reportedly offered the first college course in radio.

Presently there are nearly 20,000 undergraduate majors in broadcasting, a majority enrolled in speech communication departments. Five-thousand seniors were graduated last year from those departments which reported these data in a national survey. According to the San Francisco Examiner, nine Bay Area colleges alone graduate 1000 new job-hunters every year, which helps explain why KGO Radio and Television, a local employer with about 50 openings a year, gets nearly 10,000 job applications. Estimates at best hold that only one-half of those seeking positions in television actually find them, "and they must be willing to take any position available, near and far."
Clearly the number of students studying broadcasting is disproportionate to the size of the industry work force. Being so, it might be expected that the situation would right itself as the word filters down through our colleges and universities to the student. This, however, has not been the case. Studies indicate that broadcasting enrollments in speech departments alone have swelled by 560 percent in 25 years and this expansion is due principally to growth during the last decade, during which time enrollments have quadrupled. The job of educating the marketability of graduates in our discipline remains particularly difficult.

In this paper I will consider some of the ways that communication educators may help insure that graduates have the best possible chance of finding employment in media. More specifically, I will discuss the media student's need to receive a good generalization in areas other than communication and the need for opportunities to receive specific production-management training in non-broadcast media. On this latter topic I will concentrate.

The controversy concerning the proper role of the university in providing vocational practical or professional training, as opposed to a general or liberal arts education, goes back at least to the time of Aristotle. In his Politics he accurately summarized today's dilemma: "The existing practice of education is perplexing," he said. "No one knows on what principle it should proceed--should the useful in life, or should virtue, or should higher knowledge, be the aim of our training; all three opinions have been entertained. Again, about the means there is no agreement."
Yet, there are several reasons why a general education—which is intended primarily for the student's self development as an individual—should be our first goal in preparing the student for employment as a professional. First, the source of all program material in radio and television broadcasting and in institutional media is, as Russell Barber said, "founded in other fields and disciplines rather than in a literature of its own."\(^8\) Secondly, the process of learning "to think, to evaluate, to understand, and to communicate," as the National Association of Broadcaster's Standards Committee put it three decades ago, is founded in a liberal arts education.\(^9\) And a third very practical reason is that studies have shown rather conclusively that media system owners and station managers prefer the broadly educated. This was found by Summers who concurred on the basis of his research that "with few exceptions, broadcasters insist that they prefer to employ men and women who have received a broad liberal education, with a thorough grounding in such fields as English and history, modern languages, the social sciences, and speech.\(^10\) Some executives would go so far as to suggest no specific training in broadcasting at all, Summers said.

Similarly, Guback showed the overall need for liberal arts education through his survey of 79 station managers.\(^11\) Linton and Hyden found that station managers in the five states that they surveyed wanted more liberal education for future employees.\(^12\) F. Virginia Howe suggested a solid foundation in the liberal arts and social sciences rather than in technical areas as a result of her Ed.D. thesis findings.\(^13\) Jack Bain, in his M.A. thesis, reported that the 36 managers of the nations largest clear channel radio stations who responded to his query
"were by far in favor of a liberal college preparation in compar
with vocational training." 14

Other surveys of station managers and employees in the broadcast
industry have been reported by Baskette, 15 Reed, 16 and Starlin 17
Starlin discussed the results of a study which surveyed about 1,000 radio
and television station managers, nearly 2,000 radio and television
employees, and over 100 former employees. This study confirmed their
findings by showing that among the educational backgrounds of those
actually employed by the industry "the liberal arts field is prominence
in both radio and television groups."

Blended with the study of principles, techniques and practices in
media, the general education, then, will "foster an understanding of the
ethical and social responsibilities of the communication specialist
[who] will make the right use of [his media] knowledge and skills." 18
But about that media training: Last year a survey the author conducted
of all radio-television-film degree granting institutions in
United States did not reveal a single department offering a curricu-
oriented primarily toward non-broadcast television or industrial
Yet corresponding to the tightening job market in broadcasting:
expanding employment opportunities in the industrial uses of media
"In 1973, internal television programming for business and industry
amounted to over 13,000 programs for a total of 3,500 hours--more than
the production of the three networks that year combined." 19 Three years
ago the Brush Report indicated "that more than 300 corporations spent
over $500 million for program production and distribution." It is
estimated that this industry has now tripled in size, surpassing the
5 billion dollar mark and will continue to expand at a rate of 40% per year. With the obvious implications of this market to college campuses, the question arises: What training should be provided to those interested in non-broadcast institutional media and how all, does this training differ from that for the broadcasting specializations?

Using as a model the Indiana University-Purdue University academic program in non-broadcast institutional media recently developed in Indianapolis, I should like to briefly discuss these characteristics: first, that the program be founded on the study of basic communication; second, that it provide training in methods of systematically analyzing alternative approaches to meeting specific behavioral objectives and for designing effective instructional and persuasive messages which make use of appropriate media; third, that it provide concentrated study of production principles and techniques through directed practice and drill in small-format television and synchronous second-slice program preparation; fourth, that it progressively increase student responsibility through full production management of all aspects of planning and execution; fifth, that it provide opportunities to supplement production courses with those in administration and management, technical operations and engineering, and performance; and finally, that it incorporate professional practice or internship opportunities for seniors in corporate or institutional settings.

At IUPUI the speech department provides two courses in basic communication which are required of all student majors, including those in telecommunications. The first core course, Communication
Performance, focuses on the verbal and nonverbal bases of oral communication. Importantly, it provides for study and practice of the problems and skills required in professions. In a sense, the course represents a "back to the basics" movement by the department. Although it considers the appropriate choices an effective communicator makes, the course focuses on delivery of messages in a variety of contemporary settings.

In the second course, Communication Theory, the student examines the communication process. It includes a broad survey of theories which help explain human communication behavior, such as formal systems theory, information theory, theories of interpersonal communication and small group communication, theories of human organizations, and theories of communication in societies or mass communication theories.

While training of the type described here would be appropriate in broadcast education as well, it is particularly so in curricula designed primarily to meet the needs of media professionals in education, industry, government, business and the professions. For institutional media is always communication oriented—it is message oriented—with over 90 percent of the programs used being produced internally for an identifiable audience.

In addition to communication courses, future job-hunters, if they are to be attractive to media department employers, need backgrounds in instructional systems design. For this reason a course entitled "Methods in Educational and Industrial Telecommunications" is an area requirement. The course helps majors gain a working understanding of how institutional
closed-circuit television, sound-slide programs and other media may be used effectively for instructing and persuading. Understanding these processes begins with a study of the findings in media effectiveness research, but the course focuses on methods of successfully completing each step in Jerrold Kemp's design model. During the semester each student works with a content specialist who has a general instructional goal. As a media specialist, it is the student's task to identify specific objectives, set the objectives behaviorally in terms of individual needs of the intended audience, select the subject content and learning experiences which are believed to be most effective and efficient while keeping in mind limitations of budget, personnel, facilities, equipment and schedules, and then test the materials on a sampling of learners. The student is encouraged to use all available human and non-human resources. The decision-making process—indeed all the activities of the course—parallel the practical problem-solving methods of institutional media.

Because of the need to learn not only about television or radio, but to be familiar with other media which might be more appropriate in the institutional setting, a reorganization of the traditional production sequence seemed necessary at Indianapolis. Rather than a single introductory production course which covers a single medium, the major requires three introductory production courses which divide early study into distinct phases common to many media. A three-hour course Visual Production Principles, for instance, deals with theory and application of methods in still photography, motion picture photography, and television camera technique. Audio Production Principles covers
indemnent and studio recording, then adapts the basic methods to the requirements of television, synchronous sound-slide presentations, film, and... Similarly, Production Planning and Writing involves analysis of production management problems and preparation of scripts and storyboards appropriate to various media. Considerable emphasis is given in all three courses to practical and technical encountered bases of production because many of the problems encountered in relatively small media departments reach back ultimately to these principles.

After completing the introductory courses, production students concentrate on small-format television and sound-slide preparation methods, these being the most commonly used media in business and industry. Because of its complexity and requirements for precise teamwork, television is a three-semester course ending with Directing. There is a single course covering problems in Programmed Multi-Image Slide Production. As the student studies each medium, his responsibilities increase until he is in charge of all aspects of production. By this time he has learned that a lot of other people must be allowed to "do the doing" and it is up to him to tell them how to get it done.

An important provision of each course in the curriculum is that students prepare substantive materials to be placed in their professional portfolio. The graduate's materials include a series of slide displays, photographs, audio tapes, sound-slide presentations, scripts and instructional plans, videotaped programs, and other records which will be helpful in demonstrating acquired skills to the potential employer.

Although production is central to curricula in telecommunications, students need opportunities to supplement primary interests with courses
in management, technical subjects, and performance. Perhaps courses offered by other departments may be taken as electives at the school level if the student's educational strategy is planned well and early enough. Or these studies may be worked into the major through agreements with other departments and schools. In Indianapolis, for example, the Area of Telecommunications of the Indiana University School of Liberal Arts has an agreement with the Department of Electrical Engineering of the Purdue University School of Engineering and Technology, located a few hundred feet away. By accepting a selected number of each other's courses for credit, students from both schools benefit. Because the new technology and the growth of institutional media has created the need for a new type of professional—sometimes called a production engineer—this inter-school cooperation helps prepare a more marketable individual. Similarly, cooperation between communications departments and those of Business Administration (and others) may help students prepare for the turns their careers are likely to take down the road, as they move out of their first production jobs into management roles.

Lastly, the more marketable student is one with experience. Practicum courses, where students receive academic credit for practical work experience gained on campus, are helpful when listed on the resume. But better still is a professional practices program or internship which entails full-time work experience with a qualified cooperating off-campus organization. We are fortunate in Indianapolis to have a Professional Practices Office funded by the university to seek out, gather appropriate information relative to, and prescreen possible employers of student
interns. The Office also facilitates the student's formal application process and discusses the nature of the available work assignments with them.

The application process itself is an important part of the program. Like at many other institutions, the student begins career counseling during the semester prior to the desired internship. This includes information about how best to apply for a position. He or she is guided through resume development and works under direction to improve weaknesses in the portfolio. Then, with the recommendation of the faculty supervisor, the student requests a personal interview with the cooperating employer. If the employer, who has the final word, accepts the applicant, then the student may register for Professional Practices and begin the work experience. The student works full-time with the employer for one semester.

In summary, then, the most marketable telecommunications graduate is one who has received the best possible liberal arts education and whose specific telecommunications training included practical skills development in non-broadcast television and other institutional media. This person has a communications perspective of organizations, is able to identify objectives, and design strategies to meet those objectives by choosing appropriate resources; is able to accept and give directions; is hardware oriented to the new technologies but understands accepted production principles and techniques; and who has had at least some full-time experience outside of the academic setting.
END NOTES


19 Glassmeyer, op.cit.

This document considers several aspects of the use of assessment centers for the evaluation of school principals. Citing the literature, the document defines the assessment center concept, and describes the operation of a typical four-day assessment program. The paper also recounts efforts to ascertain the reliability of assessment results, comments on some of the relative cost factors involved in operation of assessment centers, and presents a brief history of the assessment center concept. The author finds the research on use of assessment centers in selecting school administrators sketchy, but points out that the literature reveals a growing use of assessment center data for professional development purposes. The document states that while the school principal's role can be conceptualized in terms of a task component (what must be done) and a style component (how it should be done), assessment centers have typically focused on the style component and have provided incomplete information as a result. Typical parameters used for assessment of school administrators are listed. The document concludes that research is necessary, but that even with their present limitations assessment centers provide a viable means for assessing and improving the effectiveness of school administrators. (PGD)
AN EXAMINATION OF THE USE OF
ASSESSMENT CENTERS TO SELECT AND DEVELOP PRINCIPALS

ADRIAN D. GEERING, Ph.D.
ADELAIDE COLLEGE OF THE ARTS AND EDUCATION
AUSTRALIA

November, 1980
INTRODUCTION

Previous theoretical work and research suggest that the specification of competence, as derived from need assessment surveys, is a practical and workable process. Some of these studies have used, or have advocated the use of, competence as a basis for program planning. Webster, by means of a need assessment survey, studied areas of competence needed by superintendents.1 Laurence did similar work as he compiled a source book on areas of competence based on judgments of professors of school administration, supervisors, and administrators.2 Treblas went a step further than his predecessors in studying, more distinctly, areas of competence in educational administration.3 He, like them, needed assessment through elicit responses to a questionnaire of, in the case of college and university level, superintendents and principals.4 A man has provided applying theoretical works relative to conducting assessments in education. We recommend that need assessments of administrative competence be conducted within a total systems concept, the result of such an assessment being carried through to the planning of

1E. T. Webster, "The Opinions of Superintendents of Schools and Professors of Education Concerning Competencies of Internships" (Doctoral dissertation, University of Alabama, 1959).


educational programs. Needs assessment of the competencies of principals could be used in several ways including: the preservice preparation of principals; the selection of school principals; and in the development of inservice programs for school principals—a consideration of the latter two follow as it will be outside the scope of this paper to examine preservice preparation of school administrators.

Selection of School Administrators

In the current era of accountability, the assessment of the quality of school programs focuses on outcomes—what pupils are learning and how they are progressing. Research has shown that there is a relationship between administrative behavior and school productivity.

In Stogdill’s exhaustive survey of the theory and research concerning leadership he says in summary: "When teachers and principals are described high in consideration and structure, their pupils tend to make higher scores on tests of school achievement." He also pointed out that "consideration and structure are positively related to various measures of group cohesiveness and harmony. . . . Consideration is related to low absenteeism, grievances, turnover and bureaucracy."

A study by Keeler and Anderson found that leader behavior of principals is significantly related to the achievement of followers. Forty-six schools were selected on the basis of a mixture of productivity, location, size, scope and tenure of the principal. The researchers found:


7 Ibid., p. 140.
All of the statistics give strong support to the hypothesis that leader behavior of the principal as perceived by his staff, was significantly related to the productivity of the schools. The weight of evidence supported the hypothesis that the morale of the staff of a school was related to productivity.

Further corroboration is to be found in a study of two New York inner-city schools. Despite identical faculty, staff, and low income student enrollment, important differences in pupils occurred between the schools. The researcher concluded: "The findings of this study suggest that differences in pupil's reading achievement were primarily attributable to administrative policies, behavior, procedures and practices." The above is corroborated also by research studies examining organizational climate of schools and teacher morale. The principal's role is key in determining both the climate of schools and staff morale. So a needs assessment approach which can assess the competencies and skills that are relevant for a particular school in a school district will be most valuable in the selection process of new principals.

**Inservice Education of School Administrators**

There is a need in all systems of education for inservice training to enable principals to better carry out these roles and improve the quality of education in schools. The research studies about pupil achievement, discussed above, show that some resources should be directed toward helping administrators develop behavior that is high in consideration and which allows staff participation and fosters staff leadership. Improving the

---


skills of the principal and the organizational climate of the school may in the long term, have a significant payoff in student growth. It is important that opportunities for such skill building and influencing experiences be provided for the building level principal.

One of the most critical problems of school systems today is the difficulty of defining and establishing an appropriate role of the principal, based upon specific competencies and skills. As Pharis stated:

The role of the elementary principal is, at best, a "mixed" bag and, at worst, practically schizophrenic. There are principals who find themselves in schools that approach educational utopia, while others work in environments that are hazardous to both mental and physical well being. These are extremes found in principalship today. Little seems to be common to the job but the title.\textsuperscript{10}

The principalship is a broad, complex role requiring many competencies and skills, particularly as societal demands are changing and will affect the school directly and indirectly. Obviously, principals need to participate in some kind of staff development program that will identify areas of need and enhance their professional skills beyond what they normally may have been able to acquire through on-the-job experience. This problem is going to become even more pronounced because principals will be remaining in their current position for a longer period of time. There will be a stable or even declining position in most school districts and less job mobility among principals will occur. Consequently, training and retraining of principals must become a high priority so that schools can meet the challenges of the future. Assessment of the professional

development need of principal is essential for the development of relevant inservice courses.  

Assessment centers are not widely used in private enterprise or selecting and developing managerial staff. In educational administration, assessment centers are a relatively new phenomenon. The National Association of Secondary School Principals, between 1975 and the present, have focused on the development of assessment centers to select and determine professional development needs at building level administrators.  

In this paper the potential of assessment centers as a needs assessment for selecting and developing principals is examined. First, assessment centers will be defined, including their history, validity, reliability, and cost. Next their application in education will be surveyed. Finally, some concluding comments will be made.  

**Definition of Assessment Center**

Assessment center is a term which is used to describe a method or program which has been designed to provide data for use in the identification, selection, and training of managerial and administrative personnel. As Bender clarifies:

The program originally was held on a full-time basis at a special location; hence the word center; but the term is now used to describe any situation in which similar assessment methods are used, regardless of the degree of permanence or location of the program.  

Nevertheless, one of the main characteristics of the program is that it takes place away from the job and so the term center remains appropriate. Whilst

---

many large organizations use specialized assessment center locations, smaller organizations tend to establish or rent temporary locations, as they only require intermittent use of the method. An assessment is basically a formal procedure to determine the suitability of applicants for a particular position, using job-relevant data gathered over a short period of time. Multiple testing procedures are used by multiple assessors (trainer-managers who do not personally know the candidates) to assess a number of applicants at the same time. The testing procedures cover a wide range of work situations and include various forms of job-related simulations, such as:

- Immerse simulations
- Management games
- Group discussion simulations
- Situational interview with subordinates or clients
- Fact-finding exercises, oral presentation exercises and written communication exercises. The exercises are selected to bring out behavior related to the dimensions identified by research as important to job success in the target-level positions for which the participants are being considered.  

In fact, assessment centers are distinguished from other assessment techniques by the utilization of job-related simulations as the basis for assessment. As Jelks commented: "The program is not designed as a final judgmental factor in the selection of management personnel, nor does it replace the supervisory appraisal of current job performance." However, it does provide a range of information about an individual's capacity to perform the specific functions of a job and this can be used in the selection process, along with other measures.

---


The assessment center procedure has been used in five different areas of management, as identified by Cohen:14

1. Selection—the assessment center is used as an employment screening device.

2. Placement—the increased knowledge of participants' abilities is used to place candidates in positions for which they have potential for success.

3. Training and career development—feedback is given to the individual to assist him in the development of a program of self-improvement. Assessment center results are also used by management to plan training programs.

4. Rapid advancement—one of the first and most widespread uses of assessment centers was the early identification of management potential. The intent of such programs was to accelerate the advancement of these people. Because the method has been shown to be non-discriminatory, it has, in recent years, been used to assist management in the correction of imbalances in minority representation.

5. Organization development—the non-involvement of immediate supervisors in the assessment process permits a new boss-subordinate relationship to emerge. This new organizational practice allows superiors and subordinates to cooperatively evaluate the assessment results and jointly plan and monitor self-development programs.

Various adaptations of the first four uses for assessment centers are widely reported in the literature.  

Operation of an Assessment Center

First the objectives of the program are determined and the dimensions of the job performance to be assessed are identified. This latter aspect is usually worked out by conducting some form of job analysis. Assessment techniques are then selected that measure these identified dimensions. Next the assessors are selected and trained and the assessment program is designed. Information about the qualifications of candidates and procedural aspects are communicated to all interested parties. The selection of candidates signals that the assessment center is ready to begin the actual operation which lasts from two to five days. A typical four-day assessment center is as follows:  

Day 1, Orientation Meeting

Management Game--Participants are usually required to solve problems similar to those that will be encountered in the job.

Background Interview--A 1-1½ hour interview conducted by an assessor. This is actually the only phase of the process that focuses on the candidate's past performance.

Group Discussion--Three or four short management problems calling for various forms of management judgment are presented. Acting in groups of four, the participants must resolve the problems and submit recommendations in writing.

---


Individual Fact-finding and Decision-making Exercise--The participant is given limited time to ask questions and dig out facts related to a specified problem. At the end of the allotted time period, his decision must be presented and defended orally.

Day 2, In-basket Exercise

Participants are given typical in-basket items and asked to dispose of them in the most appropriate manner by writing letters, notes, self-reminders, agenda for meetings, etc.

Assigned Role Leaderless Group Discussion--Each participant is assigned an individual role as a committee member. The role players are usually asked to defend a particular point of view in resolving an assigned problem.

Analysis, Presentation, and Group Discussion--Participants are assigned the same problem and asked to present their individual recommendations orally. Then they are grouped and asked to arrive at a single set of recommendations.

Final Announcement.

Days 3 and 4, Assessment

Assessors meet to discuss their observations and prepare written reports. During the discussion phase, all assessors that have had an opportunity to observe a particular individual will summarize their impression of the candidate's behavior in the various exercises. These descriptions are non-evaluative and objective. Only when all views are presented does the group begin to formulate judgments regarding the management potential development needs of the individual. After reaching consensus, final reports are prepared. These reports are not simply hire or not hire recommendations but are summative description of performance during assessment and predictive estimates of potential for future performance in the dimensions determined to have importance to success on the job.

Several important tasks in the procedure remain, after the assessment phase of the center terminates with the preparation of reports. The results must be communicated to the organization. The candidates' skills and abilities to perform the functions of the job are important data which the organization must consider. However, other sources of data such as situational aspects and organizational goals are important in the decision-making
The results from the assessment center must be communicated to the candidates to provide direction for self direction and this is usually done by a manager who has had experience as an assessor.

The last two steps in the operation of an assessment center focus on evaluation of the center itself. Study of the procedural and operational aspects as well as feedback from candidates regarding positive and negative effects of the assessment experience would be used as a basis for future center developments. The last step involves the arrangement of procedures to validate the results against the criterion of job success.

In 1973, Bender surveyed 34 organizations in the United States and Canada that used assessment centers—a summary of the prominent features of assessment centers follows:

18

- In-basket exercises are used.
- Games and leaderless group discussions are used.
- Psychological tests are used in conjunction with simulated exercises.
- Assessment instruments are locally produced.
- In-depth interviews are conducted.
- Assessees are nominated by supervisors.
- Four simulation exercises are used during evaluation.
- Assessment centers are operated by part-time directors.
- Females are assessed.
- Minorities are assessed.
- Homework is assigned.
- Assessment is conducted away from the work environment.
- Assessors rotate in viewing assessees during evaluation.

---

18 Bender, op. cit., pp. 55-56.
Re-assessment is permitted.
Peer evaluations are made by assesses.
One assessor for one assessee is used.
A maximum of six people are assessed at one time.
Assessors are two organizational levels above assesses.
Assessment centers operate for three days.
Assessee's performance is rated, not railed.
Rating systems are based on research.
Parameters assessed depend on the purpose of the assessment center.
Assessee receives immediate oral feedback of their performance.
Feedback is disseminated by assessment center personnel.
Assessment center results are used for formal development plans.

Reliability and Validity of Assessment Centers

Hinrichs and Haanpera have suggested that reliability of measurement in assessment comes in three varieties: interrater, test-retest, and internal consistency. The first of these, interrater reliability has been investigated by a number of different organizations using a variety of approaches. The research is rather conclusive in showing that given proper observer training, the assessment process is not limited by low interrater reliability. It also shows the need for multiple assessors in assessment centers.

---


Various studies have also investigated the stability of assesseses' performance over time.\textsuperscript{21} It was concluded from the studies that assessment center programs were reliable and assesseses' performance was consistent over a period of time. The third category of reliability relates to the internal consistency of the measurement of the assessed dimensions by the various exercises in the assessment program. Both Hinrichs and Haanpera\textsuperscript{22} and McConnell and Parker\textsuperscript{23} from studies in a number of countries found some degree of internal consistency. The results of additional research should raise the measurement of internal consistency to higher levels.

The most extensive effort to validate the assessment center approach has been made by large business and industrial corporations. Generally there have been two kinds of validation studies described--pure research programs and operational research programs.\textsuperscript{24} In the latter the data have been shared with management several levels above the assessee. Research results have been impressive in demonstrating the validity of assessment centers.\textsuperscript{25} It will be outside the scope of this paper to discuss these results specifically. Eventhough additional research will be necessary, assessment centers have: demonstrated success in predicting job advancement;

\begin{itemize}
\item \textsuperscript{21}\textsuperscript{See for example: Hinrichs and Haanpera, op. cit., p. 32; and J. H. McConnell and T. Parker, "An Assessment Center Program for Multi-Organizationl Use," Training and Development Journal, 26 (March, 1972), p. 13.}
\item \textsuperscript{22}\textsuperscript{Ibid.}
\item \textsuperscript{23}\textsuperscript{McConnell and Parker, op. cit.}
\item \textsuperscript{24}\textsuperscript{W. Byham, "Assessment Aid in Management Training," op. cit.}
\item \textsuperscript{25}\textsuperscript{See for example: D. W. Bray and D. L. Grant, "The Assessment Center in the Measurement of Potential for Business Management," Psychological Monograph, 1966, 80 (17, whole No. 625); D. W. Bray and R. J. Campbell, "Selection of Salesmen by Means of an Assessment Center," Journal of Applied Psychology, 52 (1968), pp. 36-41.}
\end{itemize}
contribute a substantial performance, beyond that which is found in other measures alone; and do not possess differential validity with regard to race or sex.

Assessment Center Costs

Assessment centers are not inexpensive, the reported costs varying, depending upon such things as: location of the center; method by which costs are estimated; and upon length of the program. Some companies do not include lost time on the job, either for their assessees or assessors, in determining costs. Whereas larger companies such as American Telephone and Telegraph and IBM, estimate that it costs $400-$500 per candidate for three to five day assessments.26

A number of organizations have limited assessment time to one day, to reduce costs, and this change has been accompanied only by minimal loss of predictive or criterion validity.27 Byham claims that additional savings can be obtained by: using company property instead of motels; using Saturdays or Sundays; having some exercises, personal information sheet, or even an in-basket, completed at home; and combining assessment activities with existing training programs.28 However, one should be very cautious in reducing costs too far as the resultant loss of important data could have long term repercussions for the organization if poor selection occurs.


A Brief History of Assessment Centers

In 1956, the "Management Program Study," initiated by the American Telephone and Telegraph Company (AT&T) developed assessment procedures which became the model upon which subsequent assessment methods were based.29 In 1958 Michigan Bell, a part of AT&T, developed an "assessment center" for use in the selection of supervisory personnel, and this has become the prototype of assessment.30 By 1970, approximately one hundred business and industrial organizations or governmental agencies were using assessment centers as the basis for selecting personnel.31 In 1973, the first meeting of the International Congress on the Assessment Center was held. At the third congress in 1975, the first set of Guidelines or Standards and Ethical Considerations for Assessment Center Operations was adopted, and this was revised in 1978. By March 1977, Turner estimated that over 2,000 organizations in the U.S.A. were using assessment centers as well as a number of organizations in overseas countries.32

Cohen anticipates a continued growth in the number of assessment centers during the 1980's as well as a continuing shift in the variety of purposes for which assessment centers will be used--from an emphasis on selection to developmental functions within personnel management.33


In the next section the application of assessment centers in education will be considered.

**Application of Assessment Centers in Education**

In this section, a review of research undertaken using assessment centers will be presented, the use of assessment centers in the professional development of school administrators will be considered, evaluation of the principal's role will be discussed, and some concluding comments presented.

**Selection of School Administrators**

There have been few studies which relate the application of assessment center methodology to the selection of school administrators, and a consideration of these follows. In 1973 Merino compared the selected behaviors of participants in an assessment center and their on-the-job behaviors.\(^{34}\) Based on the data collected, Merino recommended that additional studies be undertaken to refine the assessment center approach and make it more relevant to an educational setting. In 1975 Streitman conducted a study to determine the relationship between ratings obtained from two simulation techniques for evaluating administrative potential.\(^{35}\) He recommended that future research redefine assessment center rating instruments and be directed toward validating assessment center procedures for selecting school administrators. Britt found in 1976 that assessment center ratings could be used to accurately predict high-effective and low-effective

---

\(^{34}\) A. Merino, "The Development of an Assessment Center for the Selection of School Administrators" (Doctoral dissertation, Georgia State University, 1973).

\(^{35}\) H. Streitman, "The Use of Simulation Techniques to Identify Potentially Effective Educational Administrators" (Doctoral dissertation, Georgia State University, 1975).
administrators. He recommended that research be conducted to determine the interrater reliability of assessment center instruments in the field of education and that the instruments be refined in order to eliminate criterion contamination.

Zubray (1976) compared student ratings obtained in a one-day assessment center with ratings obtained in the block-of-time program in the Department of Educational Administration at Georgia State University. The assessment center activities used were designed to be relevant to the field of educational administration. Zubray recommended the development and validation of instruments which would measure the dimensions more discreetly and lead to the refinement or deletions of some of the present assessment activities.

In summary, the research on assessment centers and their application in the selection process of school administrators is most sketchy. In the next section, the use of assessment centers for the professional development of school administrators is considered.

Professional Development of School Administrators

The use of assessment center data for professional development purposes has been a by-product of their use in the selection process. There is


37 A. Zubray, "The Use of the Assessment Center to Identify Potentially Effective Administrators" (Doctoral dissertation, Georgia State University, 1976).

considerable evidence in the literature that there is a growing use of assessment center data for professional development purposes.  

Many organizations have had a limited view of leadership and assumed that there is a common set of skills and abilities that all successful managers have. However, there is a growing body of literature which indicates that there is no one "best" way to manage or lead, but that it depends upon the nature of the task and the contingencies of the environment. Fiedler encouraged organizations to design training programs that would help individuals learn to capitalize on individual strengths rather than concentrating on remediation of weakness.

There have been several projects undertaken in educational administration for the professional development of principals, using assessment center technology. Stone reported on the development and implementation of three administrative assessment centers in Florida in 1975. The three centers were established as part of the Florida Educational Leadership Training Act program. The intent of the project was to provide superintendents and boards of education with a method to assess the strengths and weaknesses of candidates for promotion and to assess the needs for staff development.

In contrast to the local development in Florida, in 1975 an educational assessment center had been developed by the National Association of

---


Secondary School Principals in conjunction with the American Psychological
Association. The center was piloted during late 1975 and was applicable to both elementary and secondary schools; it was also flexible enough to be used for selecting new administrators or developing the skills of existing administrators. The purpose of the pilot project was to develop a model assessment center that could be replicated in numerous school districts around the country.

Two school districts in Virginia were selected as pilot assessment centers and were used to evaluate administrators on twelve behavioral dimensions which were based on the following skills: the ability to plan and organize work, the ability to work with and lead others, the ability to analyze problems and make decisions, and the ability to communicate orally and in writing.

Five exercises were chosen to assess these behavioral dimensions--four simulations and a semi-structured personal interview. The exercises required ten hours of participant activity, six hours of which were observed by assessors. Two of the exercises were in-basket simulations requiring the assessee to assume the role of a building level administrator. Another simulation involved the analysis and group discussion of a case study about problems in a fictitious school and community. Finally, the assessee participated in a fact-finding and decision-making simulation where insufficient information about an incident or problem situation was

---

42 P. Hersey, "NASSP's Assessment Center--From Concept to Practice," NASSP Bulletin, September, 1977, pp. 74-76.


44 Ibid.
given. The participant's task was to obtain the necessary information from a resource person, to develop an understanding of the problem, and to recommend a solution. Following the observations by the assessment a report was given to each participant describing his strengths and weaknesses with respect to the assessment center dimensions. In 1962, the NASSP began its first validation study of the use of assessment center methods in the selection of school administrators. In the next section, the school administrator's role and parameters of evaluation will be considered.

Evaluation of the Administrator's Role

The role of the school principal, like any role, can be conceptualized in terms of two primary components—the task component and the style component. The task component of the role defines what the principal is expected to do whereas the style component of the role defines how the principal is expected to perform these tasks in a social context. There have been a number of prescriptions over the last 50 years which have identified the tasks of the school principal. In 1925 Strayer identified the following tasks of the school administrator: business administration of schools; school publicity; building and equipment; census and attendance; classification and progress of school children; supervision of instruction; curricula and courses of study; records and reports; extra-curricular activities; and personnel management. In a similar book published 18 years ago, Campbell listed essentially the same administrative tasks:

---

45 Ibid.
46 G. Strayer, Problems in Educational Administration (New York: Columbia Teachers College, 1925).
school-community relations; curriculum development; pupil personnel; staff personnel; physical facilities; finance and business management; and organization and structure. 47 In a more recent book, Lipham and Hoeh listed the following tasks of the principal: instructional program; staff personnel; student personnel; financial and physical resources; and school-community relationships. 48 Deros used twelve categories to study competencies of principals in Connecticut: working relations with central office; financial management; community services and community relations; pupil personnel; student activities; pupil control; school plant; auxiliary services; personnel administration; personnel improvement; evaluation and planning of the educational program; and research and development projects. 49 While space does not permit a complete review, a recent article by Walters reviewed four relatively well-known systems for assessing or measuring administrative competence. 50 The four systems reviewed were: Georgia Principal Assessment System (GPAS), Individual Learning Materials (ILM), Special Education Supervision Training (SEST), and the Critical Competency Interest Scale. Walters in conclusion stated:

All four systems were designed to be used with inservice administrators; only two (ILM and SEST) had been used extensively in preservice training programs, but in neither case has a major

---


portion of the training program been competency based. The area of supervision was most frequently the area selected for this approach. One system (CPAS) was designed specifically for use with school principals. The validity of the instrument was largely based on content validity judgments by experts and practitioners. Extensive field tests were conducted in one case and some field-testing was done in others. No measure of reliability was reported for any of the instruments.51

There are many other classifications that have been used to gather data about the tasks of the principal over the last few years. In fact, there are so many researchers in the field who use various categories of tasks that there is much overlap and duplication. McLeary et al claims that "a competency is the capacity to perform a specific task or assume a defined role at a satisfactory level of performance."52 They view competency as a function of the person and the task situation, and the interaction of these two variables will determine the performance level. Assessment centers only concentrate on one dimension (the behavior dimension) and this is a major limitation of this approach in determining inservice needs. The task aspect of the principal's role is totally neglected and the resultant information will not be a total "picture" of the assessee's performance.

Even the parameters that have been used in assessment centers have varied, in the same manner that lists of "competencies" for school administrators have varied and that items listed in job descriptions have varied.

Despite these variations, there are some common behavior dimensions which are assessed. For example in 1973 Bender listed twenty-six commonly

51Ibid., p. 425.

used parameters and these are listed below in order of frequency of use.53

<table>
<thead>
<tr>
<th>Evaluation Parameter</th>
<th>Response Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Communication Skills</td>
<td>30</td>
</tr>
<tr>
<td>Leadership</td>
<td>29</td>
</tr>
<tr>
<td>Organizing and Planning</td>
<td>27</td>
</tr>
<tr>
<td>Decision-Making Skills</td>
<td>25</td>
</tr>
<tr>
<td>Problem Analysis</td>
<td>24</td>
</tr>
<tr>
<td>Resistance to Stress</td>
<td>24</td>
</tr>
<tr>
<td>Written Communication Skills</td>
<td>23</td>
</tr>
<tr>
<td>Energy</td>
<td>21</td>
</tr>
<tr>
<td>Use of Delegation</td>
<td>21</td>
</tr>
<tr>
<td>Oral Presentation Skills</td>
<td>21</td>
</tr>
<tr>
<td>Behavioral Flexibility</td>
<td>21</td>
</tr>
<tr>
<td>Forcefulness</td>
<td>19</td>
</tr>
<tr>
<td>Impact</td>
<td>18</td>
</tr>
<tr>
<td>Creativity</td>
<td>17</td>
</tr>
<tr>
<td>Perception</td>
<td>16</td>
</tr>
<tr>
<td>Salesmanship</td>
<td>16</td>
</tr>
<tr>
<td>Management Control</td>
<td>16</td>
</tr>
<tr>
<td>Risk-Taking</td>
<td>16</td>
</tr>
<tr>
<td>Independence</td>
<td>14</td>
</tr>
<tr>
<td>Range of Interests</td>
<td>12</td>
</tr>
<tr>
<td>Listening Skill</td>
<td>12</td>
</tr>
<tr>
<td>Attitude Toward Peers</td>
<td>12</td>
</tr>
<tr>
<td>Attitude Toward Superiors</td>
<td>11</td>
</tr>
<tr>
<td>Self-Evaluation</td>
<td>11</td>
</tr>
<tr>
<td>Inner Work Standards</td>
<td>10</td>
</tr>
<tr>
<td>Attitude Toward Subordinates</td>
<td>8</td>
</tr>
</tbody>
</table>

In its materials, Assessment Designs, Inc. lists a set of common examples of parameters measured by an assessment center:54

---Organizing and Planning. Ability to establish administrative goals and plans and to structure situations to solve problems more easily.

---Perception. Ability to identify, analyze and evaluate the factors essential to problem-solution.

---Decision-Making. Ability to use sound and logical judgment in selecting from alternatives for the solution of problems.

53 J. M. Bender, "What is Typical of Assessment Centers," Personnel, 50, pp. 50-57.

Leadership. Ability to get people to follow in the solution of a task by directing and coordinating their efforts.

Sensitivity. Ability to deal effectively with all types of people through the evaluation and reaction to the needs of others.

Decisiveness. Ability to take action when called upon to do so.

Resistance to Stress. Ability to maintain performance under the demands of time, pressure, and opposition.

Oral Communications. Ability to speak effectively and convincingly.

Written Communications. Ability to write clearly from both a technical and content standpoint.

Adaptability. Ability to modify behavior in dealing with different situations.

Energy Level. Ability to operate consistently at a rapid pace and to maintain attention to all situations.

Control and Follow-Up. Ability to maintain order and periodic review of assignments, subordinates, and processes.

Ethical Responsibility. Ability to adhere to ethical codes and policies in dealing with people and issues.

Individual Work Characteristics. Ability to handle assignments without direct supervision, and to maintain working in a thorough manner.

Forcefulness. Ability to persist and command attention from others.

In its work with the Pinellas County School Board, Assessment Designs, Inc. identified ten parameters of interest to the school board:

Leadership. Ability to take charge—to direct and coordinate the activities of others; to maintain control of situations and others; to achieve results through delegation and follow-up.

Sensitivity. Ability to be sensitive to the needs and feelings of others; to develop rapport and trust; to accept interpersonal differences; to deal effectively with others regardless of level or status.

Perception. Ability to identify, assimilate and comprehend the critical elements of a situation; to extract and interpret

55 Ibid.
implications of courses of action; to attend to details of a problem (including both data and people related issues).

--Decision Making. Ability to use logical and sound judgment in choosing a particular course of action; to generate and evaluate alternative courses of action (this refers to the quality as opposed to the quantity of decisions).

--Decisiveness. Ability to take action when called upon to do so, (quantity of decisions); and to defend decisions when challenged.

--Organizing and Planning. Ability to systematically structure tasks, plans and objectives; to establish priorities and set goals, to classify and categorize information.

--Flexibility. Ability to alter normal posture with presentation of additional information; to appropriately change courses of action dictated by changes in the situation; to have the ability to behave in more than one way in a given situation; to adapt to stressful situations.

--Oral Communication. Ability to effectively and clearly present and express information orally, in both formal and informal situations.

--Written Communication. Ability to present and express information effectively and clearly through written means.

--Awareness of Situational Influences. Ability to perceive social or organizational attitudes and respond appropriately and constructively within the constraints of the situation.

The NASSP Assessment Center. The National Association of Secondary School Principals identified twelve parameters (or behavior dimensions) for inclusion in the NASSP Assessment Center. These twelve are:

--Problem Analysis. Ability to seek out relevant data and analyze complex information to determine the important elements of a problem situation; searching for information with a purpose.

--Judgment. Skill in identifying educational needs and setting priorities; ability to reach logical conclusions and make high-quality decisions based on available information; ability to critically evaluate written communications.

---Organizational Ability. Ability to plan, schedule, and control the work of others; skill in using resources in an optimal fashion; ability to deal with a volume of paper work and heavy demands on one's time.

---Decisiveness. Ability to recognize when a decision is required and to act quickly. (Without an assessment of the quality of the decision.)

---Leadership. Ability to recognize when a group require direction, to get others involved in solving problems, to effectively interact with a group, to guide them to the accomplishment of a task.

---Sensitivity. Ability to perceive the needs, concerns, and personal problems of others; tact in dealing with persons from different backgrounds; skill in resolving conflicts, ability to deal effectively with people concerning emotional issues; knowing what information to communicate and to whom.

---Range of Interests. Competence to discuss a variety of subjects (educational, political, economic, etc.); desire to actively participate in events.

---Personal Motivation. Showing that work is important to personal satisfaction; a need to achieve in all activities attempted; ability to be self-policing.

---Educational Values. Possession of well-reasoned educational philosophy; receptiveness to change and new ideas.

---Stress Tolerance. Ability to perform under pressure and opposition; ability to think on one's feet.

---Oral Communication Skill. Ability to make a clear oral presentation of ideas and facts.

---Written Communication Skill. Ability to express ideas clearly in writing; to write appropriately for different audiences--students, teachers, parents, other administrators.

**Conclusion**

In conclusion, it is evident from the above review of literature that it is has been difficult to determine what tasks and skills contribute to the effectiveness of a principal. Abbott, using Katz's earlier work, stated that the effectiveness of a principal depends on: how well the administrator fulfills the tasks which help the school achieve its goals; how the administrator functions in achieving those tasks; and this depends upon
the skills he acquires on the job as well as skills he brings to the job. 57 Abbott, using Katz's earlier work, identified three broad skill categories: conceptual skills, technical skills and human skills.

According to Abbott, the skills that contribute to effectiveness must be identified operationally, a means of measuring the skills must be devised, and a means for improving an individual's performance must be developed.

The assessment center technique is a viable means for assessing and improving the effectiveness of school administrators. The problem has been the difficulty in deriving both task and behavioral dimensions which relate to effective education administration. The limited review of literature has revealed numerous lists of tasks, function categories, competencies and skills. A lot of these are either too heavily cognitive, too general, or too specific to be compatible with the assessment center concept. Obviously assessment center technology will only be one of a number of needs assessments of professional development needs of principals. The focus of future research will need to be on construct validity, content validity, predictive validity and reliability of assessment center design, practices, and operation.