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ABSTRACT

In an interpretive studies project conducted for the Office of Education, Dr. Dale L. Bolton of the University of Washington, Seattle, surveyed the findings of research and the hiring and placement practices of business and industry, governmental agencies, and large school systems. In his final report he examines such problems as how to approach and carry out the tasks of recruiting, selecting, and evaluating teachers in a school district; how to determine the number of teachers to be hired; who to involve in determining what is effective teaching; how to collect and analyze information on applicants; what strategies to use in making decisions; and how to alter the system which presently exists. He also suggests some implications and applications of his findings to assist administrators, teachers, and board of education members to apply research and development results to the processes of recruiting, selecting, and evaluating teachers. This PREP kit on "Teacher Recruitment and Selection" is the first of two kits based on Dr. Bolton's final report. The second kit will treat the evaluation of teachers. Both kits are being entered into the ERIC system and will be available from the ERIC Document Reproduction Service, in microfiche and hard copy. The final report from which the two kits were taken will also be available from EDRS, but only in microfiche. (Author/LS)

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Enclosed are specially designed materials on a topic of current interest to educators. The purpose of the materials, produced under U.S. Office of Education contracts, is to bring research and development findings to bear on the practical problems of educators.

Because OE is able to produce only a limited number of copies, the materials are designed so that educators can easily and inexpensively reproduce or adapt them to meet local needs, and distribute them in their educational communities. Other studies are being supported on problems now facing school personnel. As materials from these studies become available, they will be disseminated in the same manner.

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Effective dissemination, especially of research and development findings, can be a powerful force in advancing the cause of education. To facilitate communication between the researcher in the laboratory and the educator in the classroom, the Bureau of Research has inaugurated a special report service. These reports, prepared under USOE contracts, are interpretations of educational research and development directed at solutions to problems faced by the Nation's schools. Many State agencies and other groups concerned with education are participating in this service by repackaging and disseminating the reports to meet the needs of their local school districts. The cooperating agencies have been selected because of their strategic position in the educational community. Through this joint effort the Bureau of Research hopes to strengthen State and local educational information services and to speed the adoption of tested educational innovations.

Norman J. Boyan / Associate Commissioner for Research

putting research into educational practice

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PREP BRIEF

No. 20

TEACHER RECRUITMENT AND SELECTION

School administrators, after decades of worrying over the teacher shortage, find themselves in a new, welcome, but still problematic situation in the '70's--for the first time in the Nation's history there is a surplus of teacher applicants. No longer free to hide behind the rationalization that "we take what we can get," the administrator must face the responsibility of choosing the best teachers for the positions available, and be accountable for his choice. Furthermore, while the general teacher market is finally abundant, there are still certain areas--early childhood education, special education, counseling, vocational education, to name a few--that continue to suffer a personnel shortage. Thus the administrator must give renewed attention not only to the teacher selection process but also to the teacher recruitment effort. But where does he begin?

Steps In The Teacher Recruitment-Selection Procedure

Determine Need--The first step in the selection process is to determine the number of teachers needed, both in quantity and kind. Needs should be determined in relation to the overall goals of the organization, the resources available to the district, the previous staff accomplishment, and previous misestimates. A clear specification of desired teacher attributes assists those who recruit and initially screen candidates to help them locate and attract the type of teacher needed for a given position.

Determine Criteria--No single criterion exists to predict the "good" teacher. Instead, criteria are changing, multiple, and situationally determined. A position analysis is recommended; it should include information about the job requirements and the employee characteristics. Examination of position analyses should be made frequently. Teachers, vice-principals, department heads, and central office personnel should all be involved in the development of criteria.

- The major situational factors affecting teacher performance are pupil, principal, and colleague characteristics.
- The purpose of a specific position analysis is to gather and analyze data about the nature of the position so the personnel worker can (1) identify what is important to teaching success and how these aspects can be measured; (2) communicate to prospective teachers the major and minor features of the position; and (3) infer what information might be collected to help predict the success of the applicant if selected.
- Observing teacher behavior as a measure of student growth must emphasize objectivity, consistency, and accuracy.

Recruitment--Although an applicant pool may be large, data should continue to be collected to determine whether modified recruitment procedures might produce more diverse and highly qualified applicants. In order to attract an adequate number of well-qualified teachers, one should establish good public relations procedures throughout the selection process. Since applicants form

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definite impressions and may become "recruiters" for the school system even though they are not hired, one should always make an effort to show potential applicants that the district has something to offer now, in the near future, and in long-term career goals. They should be made aware of the professional possibilities for growth and successful fulfillment of goals. Throughout the selection one should:

- Show consideration for all applicants and avoid any practice that creates ill will.
- Be truthful; do not create false hopes.
- Develop ways of saying "no" sincerely, yet as unobjectionably as possible.

Analyze Cost--Some recruitment procedures cost more than many school districts want to spend; however, industry generally spends considerably more than schools on recruitment and considers it money well spent because of turnover reduction and higher productivity.

Collect Data--Without a systematic means for collecting and analyzing information, the differences between candidates are less apparent and precise. Without data the selection decision becomes one of chance. As compared to industry, school districts do not capitalize on the potentially beneficial, predictive information contained in the application form and personal history questionnaire. Other sources of candidate data are:

- Letters of application and inquiry, and resume
- College placement and commercial agency materials
- Actual performance assessment
- Certificate and licenses
- Paper and pencil tests
- Recommendations

Most studies indicate that letters of recommendation are worthless for obtaining an accurate and unbiased appraisal of an applicant's personal character or potential worth to an employer. The most useful suggestions for countering these problems are:

- Inquire only about those qualifications that are most important.
- Seek information from a variety of sources.
- Clarify who is seeking the information and how it is to be used.
- Provide information to the reference regarding the position to be filled.
- Seek specific information regarding behavior and results of behavior, as well as the exact nature of the prior position.
- Seek information regarding the conditions under which the respondent observed the applicant.

Process Data--The information that is collected must be processed so that the data collected does provide a basis for selection or rejection. Common practices for processing include a file folder, computer service, and visible record files.

For More Information

An interpretive studies project was conducted by Dr. Dale L. Bolton of the University of Washington, Seattle, for the Office of Education on "Selection and Evaluation of Teachers." The final report on this study--which surveys the research findings on the hiring and placement practices of business and industry, governmental agencies, and large school systems--will be available from the ERIC Document Reproduction Service (EDRS), 4936 Fairmont Blvd., Bethesda, Maryland 20014, in microfiche.

PREP kit No. 20, "Teacher Recruitment and Selection," was adapted from this final report. A forthcoming kit will treat the area of teacher evaluation. Kit No. 20 deals with selection and recruitment in six documents, including developing selection criteria, recruitment, collecting and processing data on applicants, making decisions, assessing the selection process, and current references. The kit will also be available from EDRS, in hard copy and microfiche.

PREP

TEACHER RECRUITMENT AND SELECTION

No. 20

PREP is . . .

- *a synthesis and interpretation of research, development, and current practice on a specific educational topic*
- *a method of getting significant R&D findings to the practitioner quickly*
- *the best thinking of researchers interpreted by specialists in simple language*
- *the focus of research on current educational problems*
- *a format which can be easily and inexpensively reproduced for wide distribution*
- *raw material in the public domain which can be adapted to meet local needs*
- *an attempt to improve our Nation's schools through research*
- P *utting*
  R *esearch into*
  E *ducational*
  P *ractice*

The estimated number of teachers in U.S. classrooms during the spring of 1970 was just slightly less than two million; the number hired for the 1970-71 school year is estimated to be approximately 240,000. For each teacher hired, a number of others are considered and rejected; each teacher in the United States is evaluated by someone, either formally or informally, and decisions are made based on each evaluation.

An *NEA Research Report*, 1969, states: "Literally millions of decisions concerned with selection and evaluation of teachers are being made annually in the U.S.; each decision has a potential impact on school children." In order for teachers to make a maximum contribution to the education of children, they should be: (a) selected and placed in situations best suited for their talents, and (b) evaluated and provided with feedback in relation to specified goals.

Teacher selection and evaluation practices of many districts fall far short of the innovative practices of business, industry, governmental agencies, and some of the better school systems. One reason for this lag is unawareness of the total scope of promising practices that can be implemented within the constraints of local situations. In addition, educational administrators are often unaware of the extensive research in the behavioral sciences, business, and governmental agencies that is directly pertinent to the recruitment, selection, and evaluation of teachers. Modern personnel practices account for much of the adaptability and rapid progress of business organization, and these procedures should be applied to education where practicable and appropriate.

In an interpretive studies project conducted for the Office of Education, Dr. Dale L. Bolton of the University of Washington, Seattle, surveyed the findings of research and the hiring and placement practices of business and industry, governmental agencies, and large school systems.

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In his final report he examines such problems as how to approach and carry out the tasks of recruiting, selecting, and evaluating teachers in a school district; how to determine the number of teachers to be hired; who to involve in determining what is effective teaching; how to collect and analyze information on applicants; what strategies to use in making decisions; and how to alter the system which presently exists. He also suggests some implications and applications of his findings to assist administrators, teachers, and board of education members to apply research and development results to the processes of recruiting, selecting, and evaluating teachers.

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PREP

No. 20-B

RECRUITMENT

Each school district, once having established general needs and developed more specific job descriptions within the framework of those needs, cannot actually begin the selection process without a pool of candidates from which to choose. Because selection implies choice, recruitment or the search for enough capable personnel is crucial to the selection task.

In addition to the development of an applicant pool, recruitment is crucial to selection because it is the basis of the *quality* of candidates as well as the *quantity*.

⇨ NOTE

Recruitment must attract both a high quality and an adequate quantity of applicants if it is to enhance the selection process. (viewpoint: research staff)

Generally, the intensity of recruitment is related to the availability of potential candidates from the teacher market.

⇨ NOTE

When a surplus of teachers exists, school systems use rigorous selection procedures; however, when there is a shortage of candidates, school systems must develop and maintain an effective recruitment program as a prerequisite to selection. (practice: schools)

It is axiomatic that no selection program can be effective unless the number of candidates is substantially greater than the number of positions (Fear: 1958), i.e., a systematic selection program cannot compensate for an inadequate number of candidates. A recruitment program must provide an applicant pool that is adequate in number and diverse in characteristics. When the applicant pool is too small, the problems are obvious; and most administrators try to make positions more attractive or to contact more potential applicants. When the applicant pool is at least adequate or very large, there is a tendency to be complacent. Often a careful examination of the recruitment process does not occur.

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CAUTION

Although an applicant pool may be large, evidence should continue to be collected to determine whether modified recruiting procedures might produce more diverse and more highly qualified applicants. (practice: industry)

The large applicant pool may not always contain candidates to fit special needs nor does it guarantee enough high quality candidates.

Effective Strategies

In order to attract an adequate number of well-qualified teachers, one should establish good public relations procedures throughout the selection process. Since applicants form definite impressions and may become "recruiters" for the school system even though they are not hired, one should always make an effort to show potential applicants that the district has something to offer now, in the near future, and in long-term career goals. They should be made aware of the professional possibilities for growth and successful fulfillment of goals. In addition, throughout the selection process, one should:

- Show consideration for all applicants and avoid any practice that might create ill will
- Not create false hopes
- Develop ways of saying "no" that are sincere and yet as unobjectionable as possible
- Show interest in professional development of applicants and in their being placed in the position which is most advantageous to them

The following recruiting procedures are being used effectively by industries, Government agencies, and school districts:

- Develop a close relationship with colleges and universities in order to let colleges know what positions are available and what types of people are needed, and to influence the curriculum being offered to future employees. The procedure for developing close relationships varies, but includes:
  - --Sending the same recruiters to the same campuses annually so that they become acquainted with campus personnel
  - --Sending recent graduates back to the alma mater to talk to seniors and tell campus personnel how well they like their position
  - --Providing each campus with a cumulative list of graduates who have been hired by the organization
- Sponsor a 2-day tour and visit of the district for placement directors.
- Use minority employees to visit colleges to help identify prospective candidates in minority groups.
- Participate in "Career Day" programs on campuses.

- Provide supervisors, teachers, or principals to talk to classes or groups of students on campuses.
- Send curriculum materials to colleges and universities for use in curriculum classes. (In industry this takes the form of sending products to a campus for examination.)
- Encourage employees to ask friends and acquaintances to apply for employment; in some cases, incentive bonuses are given to employees if a referral is employed.
- Establish a temporary recruitment center in a given geographic center. Advertise in advance to attract inquiries, and send teams to interview those who make requests. This is a procedure used to attract experienced teachers.
- Use a 10-to 15 minute slide-tape presentation before the interview to acquaint the applicant with the district and give him a more realistic view of the community (or prepare a brochure on the district, including not only salary schedules and promotions policies, composition of student population, etc., but also information on living expenses).
- Advertise in Afro-American newspapers to attract minority group teachers.
- Devise ways to help placement directors get acquainted with the school system.
- Use multiple media teaching procedures to acquaint applicants with details of the system.
- Explore unusual advertising means to attract specialized personnel.

Cost Analysis

Because recruitment is continuous, fast moving, and competitive, recruiting programs tend to require considerably more money and a disproportionate amount of administrative time (Maloney: 1961), partly due to the fact that some administrators like to maintain personal control of this phase of selection. However, the absolute cost of recruitment should not be considered separate from the results, and there is a continuous need for school districts to monitor recruitment procedures, to measure their effectiveness, and to make appropriate modifications.

Some recruitment procedures cost more than many school districts want to spend on this aspect of selection; however, industry generally spends considerably more than schools on recruitment and considers it money well spent because of reduction of turnover and higher productivity (Hinrich: 1960).

⇨ SUGGESTION

School districts should analyze the results of their recruitment programs as well as the costs. Increased initial costs may produce a more effective recruitment program which establishes better long-range results and and reduces costs through smaller turnover.

A recent study of recruitment practices in some randomly selected districts in a midwestern State found that the average cost per teacher hired amounted to $146 (Fitzgerald: 1970). A remarkable and especially interesting comparison occurs when this is compared to the financial effort put forth in business and industry, $1,822 per professional hired.

Fitzgerald also found a lack of written policy and budgeting for recruitment in the districts studied. The project found that often the recruitment program is looked upon as only a scheduling of interviews on a travel itinerary (with occasional advertising). It would seem that, if recruitment is important enough for the kind of expenditures noted by business and industry, if schools do not look upon recruitment as important enough for policy and budgeting, and if school officials are not seeing recruitment as part of the larger selection process, school officials should begin to seriously examine their recruitment efforts and begin local research.

Long-Term Recruitment

Recruitment serves more than the immediate function of strengthening an applicant pool. Although forecasts are not clear as to the duration of any current teacher surplus, there seems to be a trend for teacher training institutions to be more selective in accepting trainees.

Because it may become necessary for school districts to attract those fewer but better trained teachers being produced, recruitment will remain essential to the selection process. If a large surplus remains, recruitment will still serve its function of attracting high *quality* candidates.

⇨ SUGGESTION

Diverse recruiting practices should be developed for both long-term and short-term needs. (practice: industry, schools)

No. 20-C

Collecting Data on Applicants

The selection process and its sequence are based on the collection of data on applicants. Without a systematic means for collecting and analyzing information, the differences between candidates are less apparent and precise. Without data the selection decision becomes one of chance.

The selection decision has multiple sources for the information needed. The following list comprises the main sources of candidate data:

- Letters of application and inquiry, and resume
- Application form and personal history questionnaire
- Recommendations
- College placement and commercial agency materials
- Certificates and licenses
- Interview(s)
- Paper and pencil tests
- Actual performance assessment

The effectiveness of each of these sources is discussed below:

Letters of Application and Inquiry, and the Resume

Although little research information has been found on these sources of information in relation to selection decisions, they are usually unsolicited and the first contact (other than possible recruitment interviews) from a potential applicant. However, the information they supply may be differentiating to some degree. For instance, it could be hypothesized that the spelling and clarity of these initial sources of information may indicate some candidate quality (or lack of it).

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CAUTION

Any decisions made at this point should only be made on the basis of rejection of the obviously incompetent. (practice: schools, industry)

NOTE

Businesses have indicated that there may be some value in evaluating the applicant's letter in terms of the information he is seeking and what information the applicant has about the employing organization which may have prompted the inquiry. (practice: industry)

The resume is included in this first group of information sources because it is usually unsolicited and accompanies the letter of inquiry.

CAUTION

The resume may not always be a reliable source of information because of the variety of acceptable formats and because its purpose is to make the potential candidate look attractive. The resume may have been written by a professional agency rather than the candidate. (practice: industry).

Application Form and Personal History Information

One of the common personnel practices in industry on which considerable research has been conducted is use of the application form or its companion, the personal history questionnaire (Dunnette, 1959; Heilig, 1963; Edgerton, et al., 1957).

CONCLUSION

School districts do not capitalize on the potentially beneficial predictive information contained in the application form and personal history questionnaire. (practice: industry)

In school personnel selection, application forms tend to be lengthy and contain much information that is not used for prediction purposes. Sometimes this length is due to the fact that a general purpose form is used for all applicants for all positions. Industrial organizations tend to devise forms for specific positions in order to reduce the time spent by applicants in completing the form and to make it more usable for prediction. The implication of such procedures is that local districts should investigate the possibility of devising different forms for different types of positions, e.g., secondary and elementary teachers, or team teachers and self-contained, etc.

The use of the application form as a source of information to predict a candidate's success is based on studies which usually use current employees as subjects. Generally these studies correlate information from the application blank (often called demographic data, such as age, marital status, number of dependents, years of experience, etc.) with some measure of success (supervisor ratings, salary, etc.).

These correlations become the basis for *predictive validity estimates*. Those items on the blank which correlated significantly with "success" items are then used to predict the success of new applicants.

Heilig (1963) completed a correlation study between application form data and teaching success. The criterion was the department chairman's judgment of "success." He found that the age when hired, teaching professional society membership, publication, and former military rank were the most frequently occurring predictors of success in individual departments. Specific characteristics for individual departments or divisions of the employment group did vary and "characteristics accepted as predictors of teaching effectiveness did not apply in some departments."

SUGGESTION

Since application form data do not predict success equally well for all positions, local school districts should develop and validate their own forms. (viewpoint: research staff)

In contrast to the weight application form, the "personal history" correlates various background topics with criteria which deal with human relations effectiveness and creativity (Edgerton, Feinberg and Thomson: 1957). The predictions made in these studies are concurrent validity estimates; they can cover such items as preferences, attitudes, and interpretation of experience rather than being limited to factual items so characteristic of the studies of weighted forms.

Typical of some of the studies conducted in industry is one done by Smith, et al. (1963) who found that the personal history technique was valuable and that it yielded noncurrent validity estimates of .61 and .52 for overall performance ratings.

References and Recommendations

Application forms and documents from placement offices generally have a place where references may be listed; these references are usually asked for recommendations. Likewise, immediate past employers are usually asked for recommendations. Two methods are used for checking references:

- *Written* (most businesses and many school districts have a checklist of items for which information is to be provided)
- *Telephone or visit* (many businessmen use a form to record the information acquired). The benefits of the telephone check are that it saves time, reduces ambiguity because of the two-way conversation, amplifies incomplete or unfavorable information, and is often the easiest way to get to a supervisor (especially where mail is shunted to a central personnel office).

NOTE

Industry checks references before an applicant is employed, generally obtaining information from the immediate supervisor rather than the personnel office and checking on:

- *Strong and weak points of applicant*
- *How he performed on prior jobs*
- *Why he left prior position(s)*
- *Work habits*

Most studies indicate that letters of recommendation are either worthless generalizations or have not kept up with the changes in skill of the applicant. Stone and Kendall suggest that a request for references should cover specific questions such as dates of employment, salary, whether former employer would rehire, basis of judgment, etc., and should seek an appraisal of performance. Most if not all letters of recommendation carried by the applicant are worthless in obtaining an accurate and unbiased appraisal of his personal character or worth to an employer (Stone and Kendall: 1956).

Since these problems with recommendations exist, most businesses and schools have taken steps to remedy some of the problems. Among the most useful suggestions are the following:

- Inquire only about those qualifications that are most important.
- Seek information from a variety of sources.
- Clarify who is seeking the information and how the information is to be used.
- Provide information to the reference regarding the position to be filled.
- Seek specific information regarding behavior and results of behavior as well as the exact nature of the prior position.
- Seek information regarding the conditions under which the respondent observed the applicant.

With regard to written materials, the U.S. Civil Service Commission (1961) cautions the employer to be sure that:

- Elements in his inquiry form correspond to the more important qualifications of the position
- He has obtained information from as many persons as possible who have observed the applicant in a variety of situations during, as a minimum, the past 5 years
- He includes a letter, signed by the responsible executive, with the form, emphasizing the importance of the evaluation process, presenting a description of the job to be filled, asking for full cooperation, and stressing that the form is confidential and will be used only to evaluate the candidate
- He gives greater credence to forms where the narrative indicates that the rater has full information, has seen the applicant in a variety of situations, and has used high standards in his evaluation.

Some studies about letters of recommendation do indicate that they contain some worth if they contain discriminating adjectives.

NOTE

Letters of recommendation from previous employers which describe specific mental ability and precise job success are much more discriminating than those which merely damn with faint praise. (research: Peres and Garcia: 1962)

Placement Agency Data

Although information from the candidate's placement agency may include information redundant to the application forms, it can be used as a check against the application data. Placement agencies also furnish transcripts, student teaching evaluations, and references and recommendations from college personnel and/or former employers.

Certification

It is usually the candidate's responsibility to present evidence that State and local legal requirements have been met and that he has been certified or licensed. Teaching certificates are nearly always prerequisites to being hired; therefore, they serve to screen out those applicants who do not legally qualify for consideration.

Interviews

Purpose--No part of the selection process is more widely used than the personal interview; most people feel that the interview contributes something to the selection process that cannot be gained in any other way (Fear, 1943). Perhaps this feeling is the result of the personal contact that provides a two-way exchange of information or the opportunity to give information as well as get it (Moyer, 1948; Horst, 1962; Wagner, 1949). Certainly the person interviewed is left with an impression, correct or not, of the entire organization (Moyer, 1948; Hansen, 1960).

NOTE

Interviews are designed to acquire information about applicants and to provide information to them; the type of information being sought and provided decides the structure and content for the interview. (practice: schools, industry)

For example, where the purpose of the interview is to determine if the individual's aspirations are aligned with a vacancy in the district, certain questions and areas of discussions are suggested. Also, the interviewer can ascertain that the applicant fully understands the work involved, thereby decreasing later turnover from job dissatisfaction. The amount of time spent in presenting information about the school district depends on the scarcity of applicants and the nature of information provided in other formats. Some districts and businesses use written brochures or slide-tape presentations to supplement the interview.

Interview design--When designing the total interview procedure, one should consider many different factors, among them the following:

- Number of interviewers to be simultaneously involved in an interview
- *Which* people to involve as interviewers

- Number of interviews to be conducted per candidate
- Number of interviewees to be observed at one time
- Nature of the interview
- Relation of written information available about the candidate to the interview

⇨ NOTE *The most outstanding characteristic about interview practices throughout the country is their variety. (practice: schools, industry)*

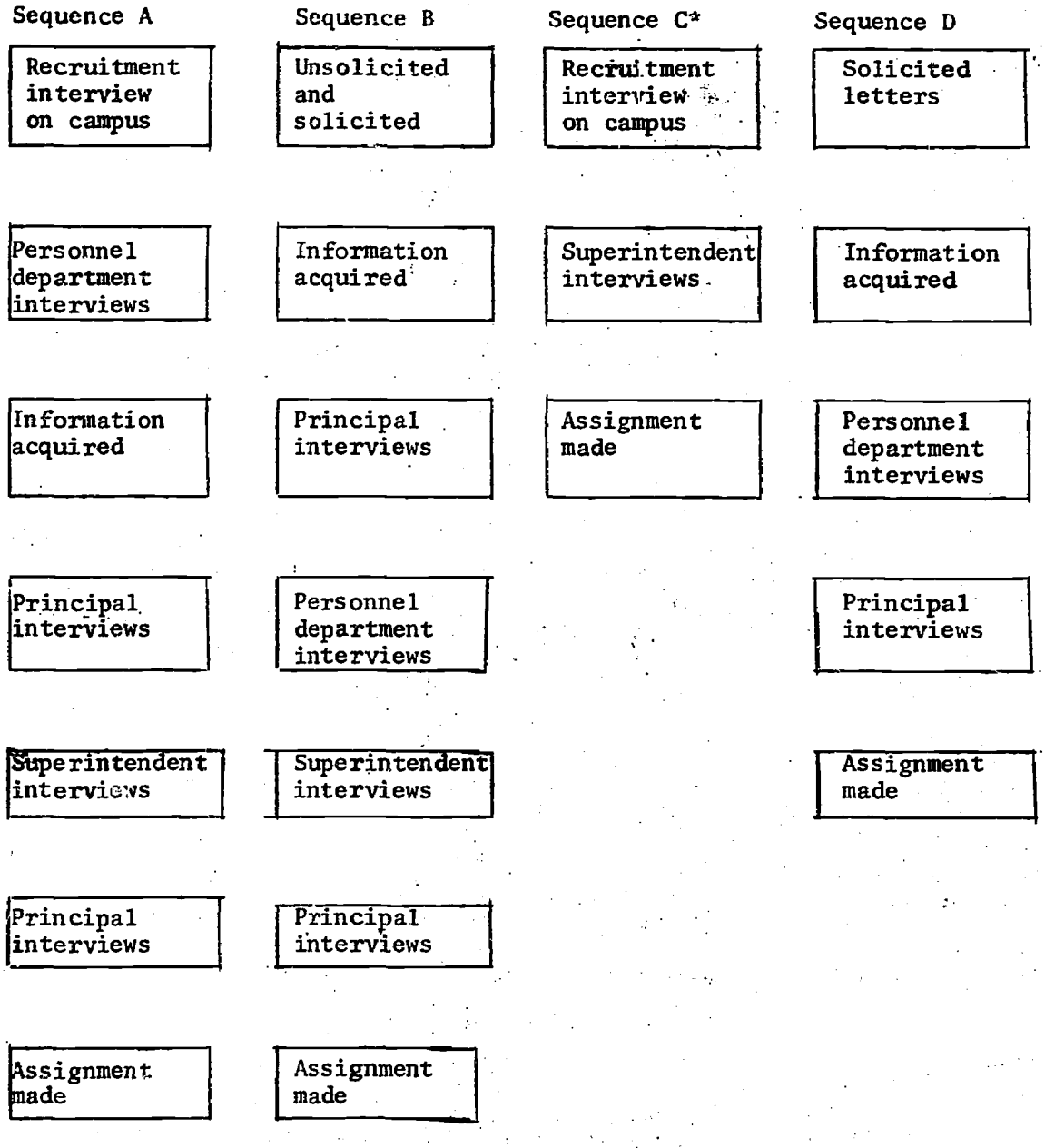
The structure of interviews varies from virtually no structure at all, with great flexibility available to the interviewer, to highly structured interviews where questions to be asked are decided beforehand. One personnel director reported that he allows each interviewer to design the interview to fit his own personality. Several industries make use of on-site visits which allow the applicant, as well as his potential supervisor, to become well acquainted with the future working conditions. In some places semipatterned interviews are conducted to minimize overlap of questions by different interviewers. In that way the applicant is not compelled to answer the same set of questions in a series of interviews.

Interview sequence--Some idea of the variety in the number of persons who may interview a single applicant, as well as the different patterns of interview sequence is presented in figure 1. The first box in each sequence indicates the source of initial contact. In some cases this may be simply an unsolicited letter; it may be a letter solicited by publicity sent to the college; or it may be a regularly scheduled interview on campus.

Teachers sometimes help to determine how the applicant will work in a team situation. Also, they may help "sell" an applicant on a position or provide information to assist him in making a decision.

Usually, at least one interview is arranged with a person high in the organization, another with the principal or the academic supervisor, and sometimes a peer is utilized in order to give the applicant a complete picture of the organization. Sometimes principals or consultants are asked to make composite ratings on applicants subsequent to ratings on specific qualities. Where this happens, the personnel department usually analyzes the data and makes a final decision. When the final decision is not made by the personnel department, the principal is often asked to indicate a preference among applicants.

Industry makes use of similar sequences; the head of the personnel department makes decisions similar to those of the superintendent of schools, and the department supervisor plays an analogous role to that of the principal. In addition, many industries are concerned that applicants have "homework" on the industry, demonstrating their interest by acquiring considerable information about the company before making application for work there.



* Usually only in small school districts

Figure 1.--Typical sequences of interviews in the selection process.

Interviewer training--Another source of variety in interview practices is the amount of training given to interviewers. One school district reported a full 2-day workshop is devoted to training. More generally, schools and industries tend to devote an hour or two at the most; some were as casual as "an informal discussion in the car on the way to the college to interview." The use of training manuals for interviewers was found in a few cases. Occasionally, if untrained interviewers were used, a trained or experienced interviewer accompanied them.

Small school districts frequently involve principals in interviewing.

⇨ SUGGESTION

Regardless of the size of the districts, when principals are involved in interviewing, school districts should consider following the general practice of industry (and of some school districts) of providing relatively extensive training in interviewing procedures.

Use of single criterion--Many school districts and industries still erroneously use the interview as a way to uncover *the* single criterion which they believe predicts teacher or employee effectiveness. For example, some districts expressed the desire for teachers who care more about children than subject matter, or who were enthusiastic (believing that enthusiasm overcomes most difficulties) or who were of a specific race. There seemed to be, in many instances, little recognition of the need for multiple predictors, as well as predictors specific to each situation and group of students.

Group interviews--Industries tend to make more use of group interviews (e.g., where more than one interviewee is observed as a discussion is held on a given topic) than do school districts, but neither schools nor industries use them extensively.

As an example of a group interview, the Leaderless Group Discussion technique is used to select persons exhibiting leadership ability. Six to eight examinees are asked to discuss an assigned topic for a specific length of time. Raters, who do not take part in the discussion, observe their performance.

Bellows and Estep (1956), Bass (1954), and Willing (1962) cite several advantages of the group interview:

- All applicants are seen simultaneously by all of the people responsible for the selection decision.
- Multiple observations of the same behavior tend to increase reliability.
- Less time is used by each observer.
- People who find interviewing difficult because of poor face-to-face human relations skills may be able to observe and rate in this manner.

Structured versus unstructured interviews--Some investigators believe that non-directive or unstructured interviews result in better evidence than more direct questioning (Richardson, et al., 1965; Chruden and Sherman, 1961). When the applicant is allowed to talk about whatever seems important to him, it is believed he will provide the essential information, even though each applicant provides different information (Moyer, 1948).

Other investigators state that only through the structured interview, which facilitates collection of comparable information among applicants, can reliable and objective decisions be made (Ulrich and Trumbo, 1965; England and Patterson, 1960; Crissy, 1952; Maccobby and Maccobby, 1954). In practice, most interviewers use varying degrees of structure during different parts of an interview.

Need for specific objectives--The importance of specific objectives in the interview is frequently stressed.

CONCLUSION

"When the objective is vague and ill-defined, and no particular form has been given to the interview...the reliability can be shown to be very poor and it follows that the validity, too, would be very poor." (research: Younge, 1956:26)

Guidelines for interviews--Most interviewers combine directive questioning and nondirective procedures which use broader, open-ended questions. Following are general guidelines used by many organizations:

- Put the applicant at ease by asking some specific questions and getting him to talk.
- Never criticize or register disapproval; do not give applicant indications of what you consider to be a good response to a question.
- Ask some questions which require the applicant to structure his own response and resist talking during pauses to give him time to reflect.
- Keep the interview focused by restating questions and be alert to areas that need additional probing.
- Allow sufficient time for each applicant to acquire adequate information about the position.
- Provide information in written form to the applicant to read prior to the interview to save interview time for questions.

Stress interviews--Another variety of interview discussed in the literature on interviewing is the *stress interview*. When the job for which the applicant is being interviewed involves stress of some kind, the interviewer may attempt to simulate the tensions of the position in order to observe the applicant's emotional stability and frustration tolerance under strain. While current government practices and literature on school interviewing indicate that stress interviews are being used, research does not yet prove their success--beyond the satisfaction expressed by people who have tried it (Bellows and Estep, 1957; *School Management*, 1964).

Early commitment--Some interviewers believe that in only a few minutes, 5 to 10 at the most, an opinion can be formed to screen out obviously unqualified candidates (Fear, 1958). In fact, the early part of the interview is when many interviewers commit themselves to a decision regarding the applicant. This commitment may be made either consciously or unconsciously. Bolster and Springbett (1961) found this same early commitment, although it was followed by tendencies to shift decisions according to these principles:

- The amount of interview commitment at the time of a decision shift and the weight of the challenging information both affect the amount of change made in decisions.
- It is easier to shift a rating in the direction of a rejection decision than in the direction of acceptance.
- People have different amounts of sensitivity to negative evidence.
- An item of information received toward the end of the interview carries more weight than it would if received earlier in the interview.

CONCLUSION

Therefore, when information is received, as well as its content, affects how it is perceived. (research: Bolster and Springbett, 1961, and others)

Use of written information--If written information about an applicant is read prior to the interview, it is done to help structure the interview and to probe areas that should provide maximum information. Reading the information during the interview is justified on the basis of inability to acquire the information ahead of time and a desire to see it prior to leaving the individual. When interviews are conducted prior to reading written information, the rationale is usually that it prevents the interviewer from establishing biases.

NOTE

No generalizations can be made regarding the goodness of interviews. This is due to the fact that the interviewer is a part of the measuring instrument as he judges each candidate; hence there is no common measuring instrument to be studied, nor can generalizations be made regarding the precision of the instrument. (viewpoint: Springbett, 1958)

Functions of interviewer--The interviewer performs three separate information processes: gathering, processing, and evaluating information. These processes are, to some extent, independent. Some insist (Springbett, 1958) that the same person need not do them all, and that they do not necessarily have to be done during the interview. The interview itself may serve only to gather information from which another person makes the decisions involving synthesis and evaluation.

In addition to gathering, processing, and evaluating information, an interviewer may be called upon to predict what the applicant will do in the future. The two tasks of observation and prediction may have little relation to each other; some interviewers may be able to do one effectively and not the other (Giedt, 1955).

SUGGESTION

Not all people are equally adept at interviewing. When selecting interviewers, the following qualifications should be considered:

- *Alertness to cues*
- *Ability to make fine distinctions, perceive accurately*
- *Ability to make immediate and accurate records*
- *Willingness to use criteria established by the organization*
- *Ability to suppress biases*

Sources of error--Additional sources of interviewer errors are given in the literature. Many of them result from attending to cues that are of little consequence.

⇨ CAUTION

Administrators should be aware of the fact that relatively minor items may influence the interviewer unduly. (research: Mandell, 1961b)

Such items as the chance of a superficial resemblance of the applicant to someone the interviewer has known in the past, the interviewer's reaction to nervousness on the part of the applicant, and the interviewer's fear of weakness in the applicant are sources of error related to the interviewer's attitude and expectations of the respondent (Mandell, 1961b).

Often interviewer decisions are most nearly predictable from the interviewer's action than from the actions of the applicant (Ulrich and Trumbo, 1965). This is the case when an interviewer projects characteristics of his own onto the applicant. For example, the interviewer may see the applicant as an unusually critical person when, in fact, it is hiw own attitude that is overly critical. In addition Sydiaha (1962) found that the tendency to empathize with some interviewees interfered with the objectivity of interview decisions.

Six common errors in the use of questions in the interview are identified by Magee (1962):

- Stating questions so they can be answered by *yes* or *no*, which elicits so little information from the applicant that hidden strengths and weaknesses are not revealed
- Unimaginative questions for which the astute applicant already has ready-made answers
- Leading questions which suggest proper answers
- Questions and comments which are non-neutral and reveal the interviewer's attitude
- Questions not related to the task at hand
- Questions that are already answered on the application form or resume

⇨ NOTE

The personal interview can help discriminate between applicants as well as increase confidence in the selection decision. (research: Bolton, 1968)

Increased discrimination and confidence--Recent research (Bolton, 1968) has indicated that the interviewer has a greater feeling of *certainty* about his decisions when he has both the opportunity to see and to hear the applicant. Audio-interview information increases the interviewer's ability to *discriminate* between applicants. Thus the personal interview, since it combines visual and audio information, contributes to the selection process by increasing the success and confidence with which people select from among a group of applicants.

Conclusion and recommendations--The following conclusions and recommendations should be kept in mind:

- The interview may be valid or not according to the skill of the interviewer, the situation, and the nature of the interviewees. The assumption that the interviewer, regardless of who he is or whom he is interviewing, is consistently able to gather, weight, and evaluate information accurately has not been proved.

- Interviewers involved in the selection of teachers should receive training in the interview process, since training has been demonstrated effective in preventing common interviewer errors and in improving the ability to discriminate among applicants.

Paper and Pencil Tests

Purposes--Psychological and educational tests are used in the selection of personnel because it is generally accepted that they supply information which gives additional and valuable assistance in making decisions about people. Many businesses use psychological tests in their data collection process. Business and industry are aware of the limitations and effect which testing programs have on their organizations, but the merit of the extensive use of tests for selection purposes in businesses cannot be denied because of their many successes (Ward, 1960). However, the contribution these tests make to the selection process for school districts is unclear.

⇨ NOTE

Although psychological tests can supply predictive information not otherwise available from other data collection instruments, the information from tests is not universally predictive. Therefore, tests must be locally validated. (research: synthesis)

Research in industrial psychology can indicate which tests predict specific kinds of success; where this is done, the use of tests can simplify the selection of employees. However, school administrators may reject paper and pencil tests on the ground that human behavior is too complex to be handled by other than implicit, intuitive means (Stone and Kendall, 1956). Although this reluctance to use tests may be attributed to a number of factors (e.g., cost, lack of trained personnel, fear of dehumanization), and although tests may not be absolute and perfect predictors, it is clear that they do have the capacity to improve batting averages in selection (French, J., 1956) and thus should be examined for their utility in specific school situations.

For example, if a school requires that teachers have a specific level of intelligence and/or a special aptitude, testing may be the only way to get objective and quantifiable information. The reason local validation is necessary is because some of the standardized tests have not been effective as predictors in certain conditions. For example, a study with student teachers indicated that only selected scales of the Minnesota Multiphasic Personality Inventory appeared to be effective as screening devices at the preservice level, while tests of academic achievement and intelligence (the School and College Ability Test, the Purdue Intelligence Test, and Sequence Tests of Educational Progress) did not prove to be predictive as selection devices (Mascho, 1966).

NOTE

What test users in an employment office are trying to predict with tests is the potential job success of the applicant, not his intelligence, mechanical ability or his personality. (viewpoint: Albright Glennon and Smith, 1963:18)

If a decision maker believes that there is a need to consistently apply s standardized procedures to all applicants in order to assure that the best selection will be made, then he cannot disregard the value of tests. Tests, in themselves, are neither good nor bad and should be selected in terms of the appropriateness for a given situation.

CAUTION

Paper and pencil tests must have a proven relationship to job success, otherwise hiring high scorers only amounts to hiring those who are test performers. (research: synthesis--Cronbach and Gleser, 1965; Guion, 1965; Albright, Glennon and Smith, 1963)

What tests measure--One useful way to look at what tests measure can be seen in figure 2. This "model" of the measurement of human characteristics is somewhat generalized but useful in seeing the continuum of characteristics to be measured and the kinds of precision one can expect from psychological, physical, and educational tests.

Appreciating the worth of competently used tests and understanding the need for local validity are not the only factors which influence the decision to use tests for selection and placement.

NOTE

Factors which must be considered in the decision to use psychological tests for selection purposes include:

- *Ultimate worth in predicting applicant success*
- *Cost*
- *Impact on potential applicants*
- *Current employee morale*

(viewpoint: research staff)

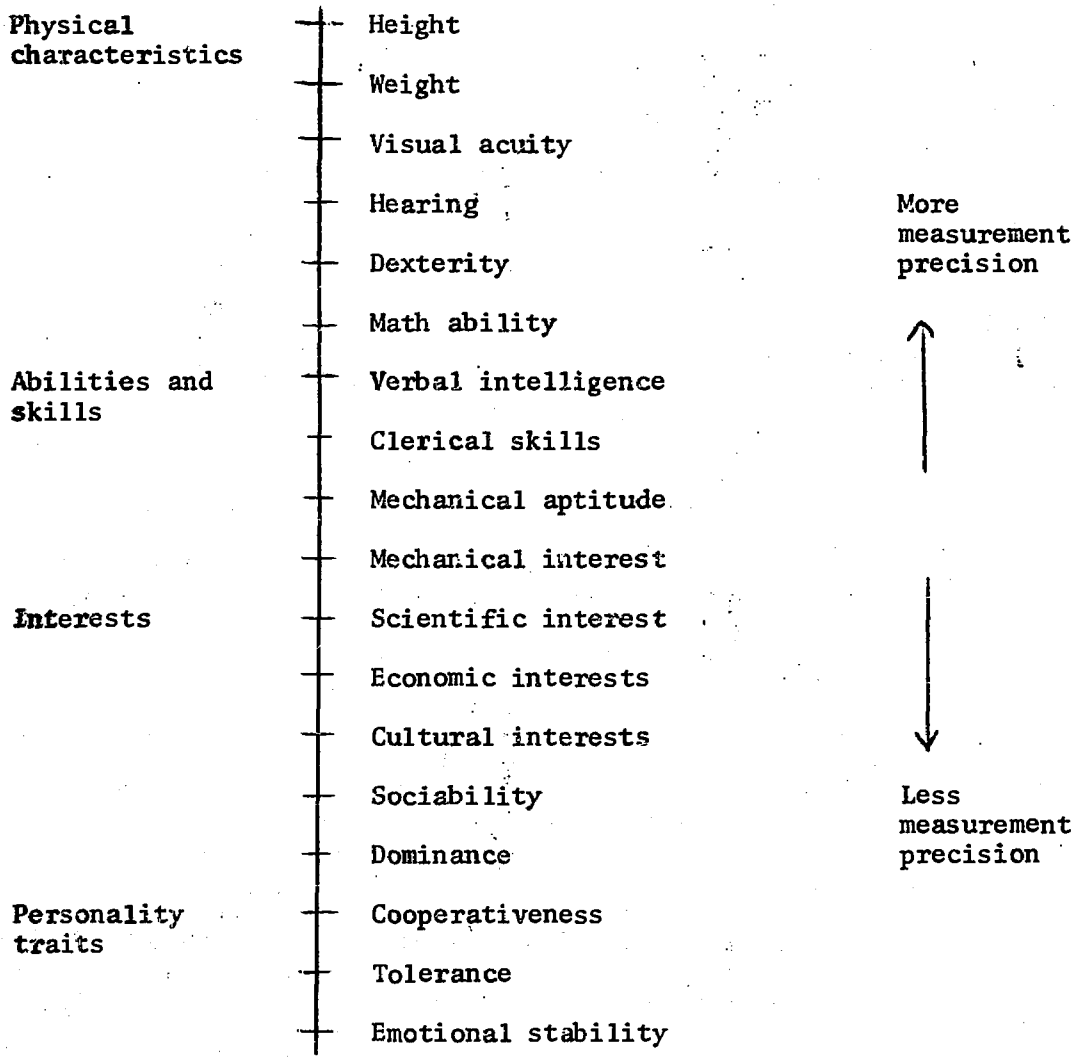


Figure 2--Measurement of Human Characteristics. (Albright, Glennon, Smith, 1963: p. 41)

A testing program is not inexpensive. Development of materials, training of personnel, and informing the staff are costly. Employee-employer relationships and public relations can be adversely affected if the purpose and procedures of the testing program are not clear to staff and community. The question of their value, validity notwithstanding, must be dealt with, i.e., one must always answer the question of whether the improved prediction of successor failure is worth the cost.

Resources on tests-- School districts considering a testing program for selection purposes would find two resources quite valuable:

Albright, Lewis E., et al. *The Use of Psychological Tests in Industry*. Cleveland, Ohio: Howard Allen, Inc., 1963.

Cronbach, Lee J., and Goldine C. Gleser. *Psychological Tests and Personnel Decisions*. Urbana: University of Illinois Press, 1965. Second Edition.

Assessment Centers-- A relatively recent development being used by business and industry to appraise a candidate's potential for success is the assessment center approach. This procedure combines simulation exercises, observation of behavior in small groups, writing, problem solving, and paper and pencil tests.

For example, the popular "in-basket" test, which presents the candidate with a typical day's problems, not only probes his technical knowledge and his familiarity with company policy but also his ability to plan his work, to deal with emergencies in the absence of his superior, and to delegate or postpone solution of less important problems. In industry, assessment centers are often used to test employees for "management potential." The procedure has met with some success in industry and has shown enough promise to merit investigation for possible application in education, especially by large school districts and colleges of education.

Likewise, other approaches to performance assessment via teacher internship, microteaching, and recently combined efforts of training institutions with local districts and professional associations are occurring and show promise of benefit. The emphasis of these activities has been on teacher training rather than on selection, but they do contain components which relate strongly to the selection process.

Several studies by Midwestern and New England companies (Campbell and Bray, 1967) identified assessment ratings and criterion measures which contributed to the selection process; 91 percent of the men selected under the assessment center approach were promoted. Other studies have indicated that the difference the assessment center makes in selection policy is related to its acceptance by the management of the organization. Supervisors must be encouraged to attend, and even participate as staff, in the assessment centers. This opportunity to evaluate the diagnostic information the center makes available permits greater involvement in the selection process and develops evaluation skills in those who participate as staff. A followup on persons assessed in centers can determine (1) the value of the process and (2) whether modifying the process and/or training of those who function within it is necessary.

PREP

No. 20-D

PROCESSING CANDIDATE INFORMATION

Data collection provides a basis for selecting or rejecting candidates. Therefore, the information that is collected must be processed so that it actually does serve that purpose. Several options are available for the processing of information; all are related to the degree of sophistication and precision of the total process

CONCLUSION

Where data collection becomes more precise and objective, and when the information is used in quantitative and composite form for prediction, the processing of that information becomes more complex. (viewpoint: research staff)

Common Practices

The most common technique for processing information on a candidate involves the creation of a file folder, containing his documents and miscellaneous selection information. The file may be reviewed by the personnel officer and/or principal, and may be assigned a reject, hold, or hire rating.

When districts can determine which information best predicts success by performing local validation studies, information processing becomes more complex. Data must somehow be condensed and coded so that candidates can be ranked when the point of final selection approaches; the processing of the information and the resulting format play a significant role in that final decision.

Research indicates that the format in which information is presented enhances selection decisions, particularly when data is condensed on a single summary document rather than left as a mass of data in a file folder (Bolton, 1969). When school districts move toward more sophisticated and precise selection procedures, using large amounts of data to validate the selection process as well as to make actual selection decisions, the need for computer service to handle this information becomes more apparent.

Computers have considerable potential use in the recording, processing, and retrieval of candidate data in the selection process. However, because of cost, cooperative intradistrict planning and purchase of computer time may be the only way smaller districts can have computer service available.

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Approaches for Smaller Districts

It may also be that computer service is not necessary for the smaller district and their selection efforts, if sufficient attention is paid to efficient processing of paperwork, for example, visible record files which show at a glance the number of applicants for specific jobs, the comparison of candidates, and what action needs to be taken to make the selection process more efficient (Bolton, 1962). The information processing system can also be used to develop a graphic record which shows when most applicants inquire, send in the application, and are interviewed (Bolton, 1963). This can guide the timing in making actual selections.

Red Flags

As information is being examined (regardless of the source) and weighed, personnel in business and industry, governmental agencies, and school districts consider the following as negative information and the person who exhibits them a poor risk:

- Negative attitudes toward supervisor and organization
- Excessive illness or tardiness
- Poor strength or energy
- Poor motivation as indicated by a need for a lot of followup or a need to be pushed to do a job
- Slow learning as indicated by a lot of mistakes, trouble understanding instructions, impulsive actions, or unwillingness to think independently

IPRIP

No. 20-E

MAKING DECISIONS

Institutional Decisions

The first idea which must be grasped by a person making teacher selections is that he is involved in making institutional decisions; difficulties arise when this fact is overlooked. Institutional decisions employ a common value system for a set of decisions, and an attempt is made to use the same criteria over a sustained period of time.

CAUTION

When decisionmakers allow the value system of the applicant to sway their judgment regarding organizational needs, their decisions are likely to be inconsistent and not as beneficial to the organization.

For example, if a given applicant does not fit the job particularly well but has a great need for a job and is willing to take risks with regard to his own success, there may be a tendency to hire the individual out of sympathy for his need. However, unless the extra motivation (which might be indicated by the need of the applicant) compensates for other shortcomings which are evident, the decision to hire this person might not be in the best interest of the organization.

Sequential Hurdles Strategy

Most strategies for selecting teachers allow decisions to be made at several points during the selection process, including any of the following:

- Preliminary interview
- Application form
- Tests
- Interview(s)
- Check of references

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- Written records of background
- Discussion with principal
- Physical examination
- Certification

Although decisions may be made at any of these points, usually the decision is either not to hire the applicant or to continue seeking additional information. In effect the strategy is a "sequential hurdles" approach, with the decision to hire the individual being made only after all information has been collected.

Involving People

It seems relatively obvious that a number of people might be involved in making decisions regarding applicants at the various steps indicated above. The initial screening may be done by one person or one group, while the final judgment might be made by another. Likewise, the decision of fitness for hiring may be made by one individual, while the decision about placement may be made by another.

NOTE *The sequence of activities for information collection and decisionmaking is affected by which phases of the selection processes are centralized. (Practice: schools)*

The two sequences which follow are examples of divergent practices representing different emphases on central control of information collection and assignment of authority for making choices.

Sequence #1: Strong Principal Involvement

a. Central office conducts recruitment

b. Central office conducts screening interview

c. Central office processes written records

d. Principals examine written records, information regarding initial interview

e. Principal is responsible for contacting applicants in whom he is interested

f. Principal interviews

g. Central office interviews if the principal's interview is favorable

h. Other principals who have vacancies of interest to the applicant interview the applicant

i. Principal(s) make recommendation that offer(s) be made

j. Central office makes offer(s)

k. Individual decides which offer, if any, he will accept

Sequence #2: Strong Centralization

a. Central office conducts recruitment

b. Central office processes written records

c. Central office conducts interview

d. Central office summarizes information from written records and interview

e. Written information and summary are routed to all principals who have potential vacancies

f. Principals make recommendations regarding selection

g. Central office makes final decision

The functions of central office and building personnel are different. Central office personnel are responsible for coordinating the total system; consequently, when uniformity is desired, they must initiate procedures that will produce it. However, building personnel such as principals are in a much better position to explain the individual problems and diversity among their subunits and to relate to the personal concerns of the applicants.

Selection of teachers is a major personnel function; how it is done affects relationships with staff, students, and parents. The function of selection of teachers is too important not to be systematically planned and well executed; therefore, one person in each school district should have the responsibility for organizing, coordinating, and directing the selection process. In larger districts, this is likely to be a full-time position for an assistant superintendent or personnel director, whereas in smaller districts one person might have this as one of his several assignments.

- The important point is that poor selection procedures should not be allowed to develop because of a lack of specification of who should be responsible for the function.

Since the selection process is not a single-phase operation (it consists of much more than simply making a choice), one of the major responsibilities of the person in charge of selection is to determine *who* should be involved in *what phase* of the selection process and what should be the *sequence* of activities.

Suggested Actions

There is little research available which indicates how data descriptive of teachers should be interpreted. However, the analysis of factors which enhance interpretation and factors which cause errors suggest specific actions which offer promise for reducing problems of data interpretation. These actions are:

- Limit the number of behaviors that are to be assessed in the selection process

- Develop specific definitions of desired characteristics

- Specify behaviors desired and situations wherein those behaviors are appropriate (for example, consider the requirements of an urban classroom filled with alienated students as opposed to a suburban classroom filled mainly with students motivated for school activities)

- Focus on specifics rather than general impressions; where possible avoid inferences

- Assess observations immediately, rather than delay assessment

- Assess behaviors independently (for example, teacher behaviors, pupil responses, and pupil-teacher interactions)

- Suppress rating and observer biases based on an awareness of those biases

- Replicate observations and assessments

Decision

When making the final selection decision, a person tends to use one of two different strategies.

- *Subjective.* At one extreme are those authorities who recommend what is essentially an intuitive judgment, called "clinical" by Meehl (1954: 3).

- *Objective.* Others insist that only an objective process using the qualification of verifiable information can render valid decisions. The objective method is sometimes referred to as "actual" or "statistical" decisionmaking.

In general, opinions still differ about which of these two strategies produces the sounder judgment. Authorities do agree that an essential task of the decision-maker is to predict the future performance of the applicant. How this prediction can most reliably be made is the issue.

Clinical decisions.--*Clinical* decisionmaking refers to the use of processes resembling those of the psychologist (who regards each person as a unique individual with a set of traits, abilities, motives, and values so entirely different from all others that he cannot be adequately described by a set of standardized tests and procedures) (Scott, 1964). The use of intuition that cannot be supported by statistical evidence is considered necessary because the uniqueness of each individual does not allow for previous development of measures suited to his particular pattern or structure of behavior (Scott, 1964). The interviewer's understanding and empathy may play a larger role in this kind of decision than does objective evidence (Sydiaha, 1962).

What does determine the validity of subjective methods? Other than counting the number of "hits or misses" after the fact, there exists no means to measure success. Mandell (1964:27) states: "We cannot discuss the validity of subjective methods in general; their validity is as high or as low as the competence of the evaluator." Obviously, considerable training and experience are necessary before one is competent to make this kind of selection decision (Hammon, Hursch, and Todd, 1964).

Actual decisions-- On the other hand, objective or *actuarial* methods are supported by those who believe that, complicated though behavior patterns are, behavioral dimensions do exist in common in individuals and provide a sounder and more explicit basis for selection than intuitive decisions do (McMurray, 1947; Scott, 1964). Particularly where the job environment is relatively standardized and there are large numbers of repetitive decisions to be made, attempts to develop objective instruments and methods should be considered (Mahoney and England, 1965).

⇨ CONCLUSION

Most current advocates of decisionmaking strategies see the necessity for a combination of clinical and actuarial methods (position: Meehl, 1954; Scott, 1964; Bellows and Estep, 1957; OSS, 1948)

Several authors (Bellows and Estep, 1957; Sydiaha, 1962) who recognize the advantages and disadvantages of both methods recommend a combination of the two to arrive at the best selection decision. The choice of strategy for processing decisions then becomes a matter of degree and less a matter of either clinical or actuarial selection decisions. As much as possible, item analysis and validation of information should be used, with reliance on properly trained clinical "intuition" when and where it is necessary.

Other Strategy Issues

In considering strategies for making selection decisions, issues and concerns other than the actuarial-clinical controversy are significant. Of particular importance are such items as:

- The use of eliminator or selector variables
- The use of a probationary period as an extension of the selection process
- Which variables compensate for one another
- Placement procedures
- The method and timing for making offers of employment

⇨ NOTE

As one examines the variables being used as predictors, he should choose those to be used to eliminate certain applicants, those which will be used as selectors, and those to be used both as eliminators and selectors.

Eliminators vs. selection--One might decide that prior experience with youth activities would make an applicant more suitable, but that lack of such experience would not eliminate an applicant; that habitual absenteeism in prior work experience would be sufficient to eliminate an applicant; and that scholarship might, depending on its quality, cause an applicant to be selected or eliminated.

- The *eliminators* function as *hurdles* which must be passed.
- The *selectors* are those variables which indicate what *desirable behaviors* will be exhibited.

Where eliminators are used, one should be certain that the predicted behaviors (for example, "morality compatible with the district," or "lack of absenteeism") are actually necessary to the teacher's satisfactory performance.

⇨ NOTE

In addition, one should be relatively certain that the behaviors are necessary for acceptable initial work and are not likely to be attained after the position is taken. This latter point is especially crucial when the number selected per the number who apply is high, because otherwise acceptable applicants who could acquire needed skills on the job may be eliminated. (viewpoint: research staff)

For example, a certain position may require a given level of organized activity in the classroom. If evidence from practice teaching is used, a given applicant's credentials may disqualify him by indicating that activities during practice teaching were not very well organized. *An error might be made in immediately eliminating such an applicant.* Further inquiry may indicate that this applicant's *attitude* toward organized activity is excellent, but that his skills in planning, allocating and sequencing are weak. If he has had very little assistance with these skills, he may respond favorably to a helpful principal and colleagues who serve as good models. Note that the behavior required was not changed; but that a decision was made that the behavior was not necessary *prior to* selection for the position.

⇨ NOTE

When the selection period is considered to extend into the period of employment in the form of a probationary period, decision strategies are not likely to focus on variables which eliminate applicants; rather, the focus is more likely to be on variables which function as selectors. (practice: schools, industry)

Use of probationary period-- where the possibility for release of a teacher is low, as is the case where a probationary period does *not* exist, the decisionmakers are less likely to risk hiring individuals who have some evidence of negative information. Therefore, the decisionmaker tends to use a strategy which emphasizes information likely to eliminate an applicant than to attend primarily to selector variables.

Compensation-- Prior to making selection decision, one should ascertain whether predictor variables interact so as to compensate for one another. For example, does intelligence compensate for hard work or diligence, or vice versa; would experience substitute for education? Where compensation occurs, individuals assessed on a number of dimensions may differ quantitatively on several dimensions and still have an overall prediction of similar value to the organization.

Placement---When a person is hired for a specific position, no separate strategies for placement are necessary; but when teachers are hired into a "pool," special placement strategies are necessary. Such strategies in use in public schools include:

- Central office makes the placement decision
- Central office makes the placement decision on approval or recommendation of the principal
- A committee makes the placement decision
- The applicant has the opportunity to make a choice and be approved by the principal

Job offer--The decision of who is the most suitable of a number of applicants is a different decision from the one to make a job offer. The first decision involves predicting how each of a group of applicants will perform in a given position; the second involves predictions regarding whether other applicants will apply and whether certain other applicants will accept the job if it is offered. The following points should be considered in making job offer decisions:

- Are better applicants likely to apply within the time period when an offer should be made?
- If other applicants do apply, what is the likelihood that this position will be attractive to them?
- Should multiple offers be made?
- Who will decide when to make an offer?

Errors by People

In making decisions about the selection of teachers, a number of errors may be made related to the interpretation of data. Some of these errors are due to the *people* involved, while others can be traced to faulty *organizational procedures*. Those which are most likely to be made by people include:

- Errors of rating such as leniency (bias which allows one to reduce the importance of negative characteristics exhibited by a candidate), halo effect (bias in favor of an individual candidate resulting from an overemphasis placed on specific desired characteristics), contrast (the tendency to rate a candidate low in an area in which the rater considers himself strong) and central tendency (the tendency of individuals to average judgments)
- Errors of logic (ambiguous interpretation of similar characteristics, e.g., integrity and truthfulness)
- Errors of rationality, including faulty rating, confounding, overgeneralization, and premature closure

Some of these errors may be reduced by training, but *much research needs to be done to determine how to reduce human error in decisionmaking*. Other errors by people may be reduced by selecting people who make fewer of these types of errors.

Procedural Errors

Poor organizational procedures can contribute to errors in:

- *Human relations*, such as careless treatment of candidates
- *Decisionmaking strategies* which overtly depend on expert opinion, which misjudge job requirements, or which overlook the need to select people compatible with personnel within the organization
- *Policy*, such as that which makes stop-gap appointments
- *Communication*, because of inadequate means to process applications and documents

CONCLUSION

On the basis of the research conducted to date, the following conclusions appear to be justified:

- *Training and experience of the decisionmaker influence his interpretation of information.*
- *Ability to interpret data is not related to sex.*
- *More accurate judgments are made by those who do not become emotionally involved or who are socially detached.*
- *Use of multiple raters tends to improve predictions.*
- *The selection decision is improved by using a single page summary document and by providing instructions on how to process information.*

PREP

No. 20-F

ASSESSING THE SELECTION PROCESS

The Validation Process

The outcomes of selection decisions must be subject to evaluation if the selection process is to be improved. Thus, if the selection decision is to be self-correcting, an evaluation system must be established which will determine whether a given district's basis for selecting its teachers has been effective in selecting the kinds of teachers needed in a given situation.

NOTE

The ultimate validity of the selection process rests in how efficient it is in forecasting a teacher's success in meeting a given school district's needs. (viewpoint: Crissy, 1952; French, W., 1966; Gage, 1968; Thorndike, 1949)

Validation, in order to be useful, requires that objective investigations be conducted at the local level. The nature of the evidence gathered from these investigations is dependent upon the "type" of validity required. Many types of validity can be defined. Those commonly discussed in the literature are:

- Predictive--the extent to which a relationship exists between measures of desired behaviors and future behaviors which are exhibited
- Concurrent--the degree to which test scores are associated with measures of desired teacher behaviors, assuming these measures of desired teacher behaviors and test scores are available concurently
- Content--the degree to which a test includes a representative sample of all the tasks that could have been included
- Construct--a judgment that a test does in fact measure a specified attribute to the extent that it can be used in the prediction of behavior

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Regardless of the type of validity desired, one should remember that there is no such thing as general validity for any test since its usefulness as a selection instrument has to be proved for every job in every situation in which it is used. Further, even when accurate forecasts are made, decisionmakers must recognize that working conditions and people change, and, consequently, the obtained validity is likely to be only temporary. This makes it necessary to periodically check the validity. (Lawler, 1967; Bellows and Estep, 1955)

CONCLUSION

The selection process is dependent upon evaluative feedback resulting from local investigations which are designed to validate the process; such validation should be checked periodically because of changing conditions. (research and viewpoint: Bellows and Estep, 1954; Hinrichs, 1960; Redefer, 1962; Nunnally, 1967; Lawler, 1967)

Controls of the Selection Process

To control the teacher selection process, one should analyze sources of error and initiate procedures to eliminate errors. In most cases, errors result from improper goals, inadequate procedures, and/or improper implementation of procedures. Since errors may occur at any stage in the selection process, a periodic examination should be made to determine if the process is functioning well at each of the following stages:

- Determination of teacher need
- Determination of teacher attributes desired
- Recruitment
- Collection and processing of data
- Making predictions
- Developing strategies for choices
- Final selection
- Placement

In addition to checking errors, one should also examine outstanding success in an attempt to determine what procedure was used, how the predictions were made, and who was involved. Successful selections may yield as many clues to proper functioning of the selection process as errors.

To investigate possible alterations in the implementation of the total selection process, one should examine the collection and processing of data by looking at:

- Ease of administration of information collection
- Ease of scoring of tests or of rating of observations in interviews or written documents
- Ease of interpretation and application
- Reasonable cost
- Proper construction of records, instruments

Measurement specialists caution that there is no such thing as general validity for any measure, since its usefulness has to be proven for every situation in which it is to be used. Research indicates that correlations among two or more variables

tend to change from time to time because both working conditions and personnel in schools change.

CONCLUSION

The implication of research findings and advice from measurement specialists is that any measure of success of a selection process is likely to be only temporary. This means that the value of the procedure should be checked periodically.

Finally, the ultimate value of a district's selection process depends on how well it predicts the success of teachers in meeting a given school district's needs. For this reason:

- Objective investigations must be conducted at the local level to determine effectiveness of the selection process.
- Local districts cannot depend entirely on research conducted outside the district to evaluate their selection procedures (since general research gives clues to what might be tried, but cannot tell what is actually effective in a given situation).

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