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ABSTRACT

A workshop was attended by 36 instructors from departments of education in colleges and universities throughout Ohio for the purpose of identifying criteria for teacher selection. The participants sought to determine ways to achieve a fit between the selection committee's values, perceptions, and personality characteristics and the teacher candidate's values, perceptions, and personality characteristics. The focus was on three major screening areas: skill competence, personality characteristics, and interpersonal skills. Three instruments were used to describe the personality characteristics, and interpersonal skills of hypothetical successful teachers: the Scales of Worker Functions; the Successful Employment Profile (SEP), and the Osgood Semantic Differential. The similarity of colleges and universities in their responses to the SEP and the semantic differential permitted the creation of a statistical model to represent the perceptions of all of the sample colleges and universities in Ohio. A summary of the workshop findings describes areas of agreement among the participants on what constitutes a successful teacher and lists six functions that a teacher should be able to perform, at least minimally. It is concluded that a statistical screening model based upon the data collected in this study can be used and validated concurrently using teachers who are already experiencing varying levels of success in the teaching field.  
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A STATE-WIDE SELECTION MODEL FOR TEACHER EDUCATION  
-A CRITERION-RELATED APPROACH

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A STATE-WIDE SELECTION MODEL FOR TEACHER EDUCATION  
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The antecedents to success in teacher selection seem to vary in accordance with the particular researcher and the nature of the research being conducted. Norm-referenced evaluations based on clinical instruments seldom represent the uniqueness of a particular college and what is required for success in a specific school system. Thus, it would seem that an effort should be made to "fit" every candidate in teacher education with a make-up of a given college and thereby increase the probability of producing successful teachers for public and private education.

Criterion-related validity refers to the effectiveness of tests in predicting an individual's behavior in specified situations (Anastasi, 1988). This is done by comparing performance on a test with an independent measure of validity, that is a criterion. For several years the prevalent opinion in personnel psychology was that selection tests should undergo full scale validation against local criteria of on-the-job performance. Specific procedure for such criterion-related validation would include (a) conducting a job analysis for identifying the major job elements and specifying the corresponding skills, knowledge, values, perceptions, and personality required by the job; (b) selecting or constructing a test to assess these characteristics; (c) correlating the test with appropriate criteria of job performance; and (d) formulating a strategy for personnel decisions (Anastasi, 1988).

This approach is contrasted to the clinical approach of teacher selection which is typically a norm-referenced evaluation. In short, our goal should be to match the right people to the right jobs. Competencies are defined not only as aspects of a given job but also as specific characteristics of people who actually do the job. For example, if one wants to find out who will be an effective teacher, it is necessary to first determine what it is an "effective" teacher does. This implies the need for criterion-related research in any organization to assure a more consistent selection practice. The "fit" between the configuration of the selection committees' values, perceptions, and personality characteristics and the teacher candidate's values, perceptions, and personality characteristics is essential.

Selection practices have become sophisticated managerial tools which attempt to discover potential personnel capable of entering an organization and successfully accomplishing a given task. Regardless of the entry level, the potential teacher should be screened concerning three major areas: (a) Skills Competence-- Can the teacher do the job? Does the teacher have the several kinds of knowledge required, the cognitive skills? Does the teacher have the necessary physical abilities, psychomotor skills? Does the teacher have the necessary background, the experiential skills? (b) Personality Characteristics-- Does the teacher candidate have the type of personality characteristics desired by the selection committee? Regarding attitude, are the teacher candidate's perceptions similar to those of the selection committee? Regarding behavior, does the teacher candidate act as expected? (c) Interpersonal Skills-- Will the teacher candidate fit into the professional organizational environment? In terms of horizontal relationships, will the

teacher candidate interact as expected with other teachers in a given school system? In terms of vertical relationships will the teacher candidate interact effectively with higher and lower level personnel within the school system?

At every level and for every position, emphases upon these areas are adjusted. Within every level, requirements within these areas are adjusted. Typically, a selection committee for teacher education in a given college or university determines the suitability or accuracy of its selection practices through an examination of the reasons for the attrition of its teachers from the profession as well as whether or not they are employed. However the failure is defined, there is an indication of inadequacy in the college's selection procedures.

Rare indeed is the opportunity to unite a group of professional educators who are uniquely interested in identifying the antecedents to successful teaching in the state of Ohio. Such an aggregate, though, attended a series of workshops on various college campuses as well as a statewide conference in Columbus, Ohio. They consented to participate in a workshop on identifying criteria for teacher selection. The purpose of the workshop was to determine if a "fit" could be identified by way of a statistical model utilizing the perceptions of various educational professionals representing several universities and colleges throughout Ohio. The workshop, thus, emphasized model development, not model validity. Three specific questions were proposed: (a) Do teacher educators from universities and colleges agree on some particulars concerning successful secondary and elementary education? (b) Is the extent of agreement among the schools sufficient for one statistical

model to represent perceptions of all schools? (c) What are the implications of these agreements, if they exist?

#### The Workshops

Thirty-six subjects took part in the workshops. Participants were instructors from different departments of education in various colleges and universities throughout Ohio.

Three instruments were used to describe the skills competence, personality characteristics, and interpersonal skills of hypothetical successful teachers. The Scales of Worker Functions (Fine,1973) was used to provide a comparison of the groups' descriptions of minimal job performance in the following areas: "People," "data," "things," "mathematics," "language," and "reasoning." These scales are an adaption of The Functional Job Analysis Scale (Fine,1973) which were originally developed for the US Employment Service from 1950-1955.

The Successful Employment Profile (SEP; Cureton & Hoskins, Note 1) was used to compare the three groups' rankings of 27 personal and demographic traits necessary for successful teaching. This instrument requires a rating of the relative importance of each trait on a five-point Likert-type scale from "very little" to "very much" importance. It also allows for subjects to order the traits from 1, "most important for successful employment," to 27, "least important."

The Osgood Semantic Differential (Osgood, Suci, & Tannebaum,1957) was used to compare the groups' perceptions of 16 paired polar adjectives with respect to their usefulness in differentiating successful and unsuccessful teachers' interpersonal characteristics. Each adjective pair was rated by subjects on a ten-point scale. The 16 pairs were

completed once regarding a hypothetical successful teacher and then again regarding a hypothetical unsuccessful teacher.

The Participants' Responses

The groups' descriptions on the Scales of Worker Functions were very similar. This suggests that departments of education from both colleges and universities throughout the state of Ohio agree about the kind of competence skills essential for a successful teacher.

The correlations of the college and university rankings of the 27 SEP traits were all .90 or higher and were significant ( $p < .01$ ). the groups' average rankings of the traits are shown in Table 1.

Table 1  
Successful Employment Profile Rankings

Factor Traits	Ordered Rankings			
	Group 1	Group 2	Group 3	Group 4
Physical Stamina .....	8	8	3	9
Extra-Curricular Activity .....	13	15	21	15
Academic Accomplishment .....	5	7	8	4
Emotional Maturity .....	4	1	1	1
Hand-eye Coordination Skills .....	23	18	15	20
Physical Appearance .....	9	12	12	16
Letters of Recommendation .....	19	9	20	17
Rating Scales .....	18	14	14	18
Punctuality .....	7	11	9	8
Related Work Experience .....	11	13	16	11
Non-related Work Experience .....	21	25	19	21
Willingness to Relate to Others .....	1	2	2	3
Flexibility .....	6	4	4	6
Marital Status .....	26	24	25	26
Chronological Age .....	25	23	24	25
Associate in Arts Degree .....	27	27	27	27
Bachelor Degree or Higher .....	10	10	10	10
Physical Dimensions .....	20	21	22	22
Written Communication Skills .....	3	6	6	7
Spoken Communication Skills .....	2	5	5	2
Expressed Interest in Job .....	14	3	7	5
Standardized Test Scores .....	17	19	11	13
Liberal Arts Orientation .....	15	16	13	12
Double Academic Concentration .....	16	17	17	19
Community Involvement .....	12	20	19	14
Family Background .....	24	26	23	23
Athletic Skills .....	22	22	26	24

The level of correlation in the groups' rankings implies a high degree of congruence as their perceived importance of the traits. Therefore, it was possible to use average ranking rather than a ranking through consensus. For example, all the colleges and universities represented independently said that the ability to display behavior usual and expected for one's chronological age as well as serenity of mind and stability of feelings in problem-solving are most important criteria for teacher success. They agreed that a teacher candidate, in order to be successful, must desire to understand and be understood by others, be sensitive to the needs of others, and be willing to conform to the changing patterns of a society. Even though 80% of the variance in each of the group scores on the SEP may be accounted for by the intergroup correlation, there were small and subtle differences in the groups' ratings of certain factors which suggests that each institution of higher education sampled is somewhat unique from all other institutions.

Utilizing a series of t-tests, it was found that all the colleges and universities sampled identified 14 of the 16 paired adjectives on the semantic differential as significant ( $p < .01$ ) differentiating between hypothetical successful and unsuccessful teacher candidates. These adjectives associated with successful teaching were "outgoing," "bright," "enthusiastic," "conscientious," "adventuresome," "realistic," "trusting," "diplomatic," "secure," "experimenting," "resourceful," "socially precise," and "relaxed." Paired adjectives that did not differentiate between successful and unsuccessful teacher candidates were "submissive-dominant," and "practical-imaginative."



### The Model

The similarity of colleges and universities in their responses to the SEP and the semantic differential permitted the creation of a statistical model to represent the perceptions of all the sample colleges and universities. The model represents standardization of both the SEP and semantic differential scores, thus providing a matrix for defining the hypothetical relationship between a potential teacher candidate's qualifications/characteristics and a college/university selection committee's expectations. Interpretation of such a model may give direction to the selection task so that individual and group strengths and needs may be identified and matched efficiently. This 3x3 contingency model appears in Figure 1.

Figure 1

**Successful Employment Profile**

	High		Low
High	1	2	3
Semantic Differential	4	5	6
Low	7	8	9

In the model, Cell 1 may be interpreted to represent the candidates population whose conception of personal and demographic traits necessary for teaching is most consistent with that of the college/university they represent and whose evaluations of interpersonal characteristics necessary for successful teaching is likewise consistent with the selection

committee of that university or college. Cell 2 includes those candidates who agree marginally with the selection committee regarding personal factors but agree highly with respect to interpersonal factors. Cell 3 includes candidates who agree the least with the selection committee's conception of personal factors but the most with their perspective on interpersonal factors. Cell 4 represents candidate-committee agreement that is high regarding personal factors and marginal regarding interpersonal factors, while Cell 5 represents marginal agreement in both domains. Cell 6 indicates a candidate population agreeing minimally on personal factors and marginally on interpersonal factors. Cell 7 indicates minimal candidate-committee agreement regarding the interpersonal dimension but high agreement on the personal dimension. Cell 8 represents low agreement in the interpersonal realm and marginal agreement in the personal, and Cell 9 represents low agreement in both personal and interpersonal realms.

#### Summary

The research results suggest significant agreement among all colleges and universities as to what constitutes a "successful" teacher. They independently were able to agree on the minimal job performance skills required for the target person. A typical "successful" teacher is able to minimally perform the following functions: (a) to supervise students including making decisions on procedure and a technical level; (b) to examine and evaluate data about things and/or people; (c) to start, stop, control, and adjust various machines and equipment designed to help them accomplish their task; (d) to perform ordinary arithmetic, algebraic, and geometric procedures in standard practical applications; (e) to have language ability to conduct opinion research surveys and write routine correspondence reflecting standard procedures, and (f) to have knowledge

of a field of study dealing with abstractions as well as concrete variables. The participants were independently similar in suggesting the personal and demographic traits that a teacher must have in order to be successful, and they were able to statistically agree on the interpersonal factors that are most important and those that are least important in assisting a teacher to adjust and function effectively within the classroom.

Since the profiles for all the colleges/universities sampled were similar when being compared on the job functional analysis, SEP, and semantic differential, a model representing all groups was developed. A major function of criterion research has been achieved. The criterion for a "successful" teacher has been identified. But, on the other hand, when calculating the perceptions of the participants there was some noticeable variance. Thus, if a model were developed for each of the colleges and universities, the model would differ somewhat in identifying the "successful" teacher. In such a case, the "fit" between the candidate for teacher education and the selection committee would be even more precise than has been achieved in the present situation.

In conclusion, the implications of these workshops are clear. (a) Institutions of higher education in preparation of teachers can function well in cooperatively identifying the antecedents of potentially successful teachers. (b) A statistical model based upon the data collected in this study can be used and validated concurrently using teachers who are already experiencing varying levels of success in the teaching field. (c) The more specific and unique a particular college, the greater the need for the institution to identify its own successful teachers through this procedure or a similar one. (d) The more unique

the college or university is, the less dependent it should become upon general notions of success which so seldom represent its unique and individualized teacher education program.

REFERENCE NOTES

Cureton, C. & Hoskins, D. Successful Employment Profile. Form A:  
A rating scale of factor-traits for potential salaried employees,  
1976. (Available from Charles B. Cureton, Ed.D., Malone College,  
515-25th St. Northwest, Canton, Ohio 44709.)

REFERENCES

Anastasi, A. Psychological testing: New York: Collier, 1988.

Fine, S.A. Functional Job Analysis Scales. Washington, DC: Upjohn Institute, 1973.

Osgood, C.E., Suci, G.J., & Tannebaum, P.H. The Measurement of Meaning. Urbana, IL:University of Illinois, 1957.