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ABSTRACT

The 13th Western Regional Conference on Testing Problems dealt with testing in relation to teaching and teachers. The following speeches were presented: (1) "Testing and the Teaching Act" by Arthur P. Coladarci; (2) "Examinations and the Advancement of Teaching" by Arthur Benson; (3) "An Exploration of Different Teacher Role Expectations" by A. Garth Sorenson; (4) "The Unreconstructed Teacher: Tomorrow's Roadblock" by Robert E. Stake; and (5) "The Role of Testing in the Selection of Teachers of English" by Edward S. Noyes. (KM)

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EDUCATIONAL TESTING SERVICE

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**The Thirteenth Annual
Western Regional Conference on
Testing Problems**

Testing in Learning and Teaching

May 1, 1964 • Hilton Inn
San Francisco International Airport

Carl A. Larson, *Chairman*

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Princeton, New Jersey • Berkeley, California

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The Thirteenth Annual Western Regional Conference on Testing Problems

The thirteenth annual meeting of the Western Regional Conference on Testing Problems was convened at 9:15 a.m., May 1, 1964, at the Hilton Inn, San Francisco International Airport by Mr. Richard S. Levine, Director of the Western Office of the Educational Testing Service.

MR. LEVINE: I'd like to welcome you to the Thirteenth Western Regional Testing Conference. We are delighted that you could come.

I suppose when you are in California for a long enough period of time you are no longer impressed by first events. But I have only been here for about six months and I am overwhelmed by the number of things that seem to happen here for the first time. Obviously this is our first meeting in the Bay Area. We are completing the first year for the Western Office in the Bay Area and for all of us it has been very exciting. We are very glad that so many of you were willing to come to a new location.

Among the other firsts that are exciting to me—though perhaps not totally relevant to the Conference—is that this is the first year that we have had a research division in the Western Office. That division is fully represented here today.

Now to get to the program. I suppose that most of you know how this developed. Early in the game a three-man committee met to discuss possible themes for the Conference. The three members of this committee were Merle Elliott, Richard Harsh and Garth Sorenson. They told us, or advised us, I should say, on the kinds of things that might be interesting for this kind of meeting. We picked it up from there. This three-man group has met for at least three years to my knowledge. I think it might be interesting to some of you who

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might be invited to become a member of a similar group to review some of the recent history of this triumvirate. Dick is now employed by ETS. Garth Sorenson is on the program. Merle called last week and said he was called away and I have to believe him.

To go on from that point, given the theme of the Conference, it was picked up by our staff. Bob Lambert, who did the lion's share of the work, is really the person who should be up here. He assumed full responsibility for inducing eminent educators to volunteer to be speakers and for arranging for the place to meet, as well as for all the minor details involved in setting up a meeting of this kind. He had a great deal of help from Mary Owen, who helped particularly with the arrangements for the meeting place.

The final message I have for you is an introduction of your chairman and this is almost ludicrous. Here I am, a Californian for six months, about to introduce Carl Larson, a man who has been in the State Department of Education for fifteen years, to a group of educators. Half that time, the initial half, roughly, he spent in research, the remainder of the time he has been concerned with Teacher Education directly. As you all know, he is now Chief of the Bureau of Education and Certification. He got his doctorate on the West Coast at Stanford and he holds an honorary law degree. He is very much interested in education, works at it full time, and I cannot think of anyone who would be better qualified to lead the type of discussion we are planning today. Given this, I think the best thing I can do is get out of the way and let him do just that. Carl.

GENERAL CHAIRMAN LARSON: Thank you very, very much. I appreciate that introduction. This is a little better introduction than I got a couple of years ago when the Legislature was working through a new certification law and I had been asked to come to a meeting and bring people up to date on the legislation. At that time I was introduced by someone, saying, "Now we will listen to the latest dope from Sacramento."

I sincerely appreciate the privilege of chairing this meeting. It's an honor to the State Department of Education and it is an honor to me personally. I did spend the first part of my experience in the State Department of Education and the Bureau of Educational Research. I was privileged to attend the first Western Regional Conference on Testing Problems in Los Angeles. This is the thirteenth annual meeting.

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I thought that you conference goers might appreciate a little item I picked up in the *Mainliner* magazine of United Airlines. A young boy writing a paper to his teacher reported "People talked about flying balloons for centuries. Finally there was enough hot air to get them off the ground." Let us hope that this conference will produce a different kind of vertical lift.

I appreciate very much the fact that the topic today concerns testing in the area of teacher education and teacher selection. Naturally, with my job I think this is probably the most important thing in education. I may be suspect of having a slight bias but I am certainly delighted to have the opportunity to attend this meeting and to share in the discussion of this important topic.

■ The first person on the program this morning really needs no introduction. I have been provided a lot of material regarding him, his education, the honors that he has had. It would be difficult to do justice to all of the achievements of each of our speakers this morning but Dr. Coladarci suggested that I try anyhow. Dr. Coladarci is Professor of Education and Psychology at Stanford University. I heard him say last night that one of his interests, in addition to psychology, is horsemanship. Now I don't know if he has anything to say about horsemanship today, but I know he has a great deal to say on the topic of this morning. He has been a seventh and eighth grade teacher in elementary school. He has been a teacher-psychologist. He has been involved in the Child Study Center at the University of Maryland, and he has had many other rewarding and responsible experiences. He is a fellow of the American Psychological Association, Fellow of the American Association for the Advancement of Science, American Educational Research Association, National League for Nursing, California Educational Research Association — this is what he handed me — the California Psychological Association, the Western Psychological Association and the California Association of School Psychologists and Psychometrists. Time and propriety necessitates that we do not complete the dossier. It is a pleasure to present to you Arthur Coladarci.

Testing and the Teaching Act

ARTHUR P. COLADARCI

MR. COLADARCI: Thank you Dr. Larson. I have something I want to say today. I wish to pose a question at some length. I have no resolution for it, but the question has troubled me for some time. It is clear, and everyone here knows this, that a significant portion of the time, and energy, and talent in the schools in America is devoted to the planning of testing programs, to the administration of tests, to the recording of results, and sometimes even to interpretation. Although a question is raised from time to time regarding the content of this testing program, by and large, this enormous activity goes unquestioned as a demand on time. That is, it is presumed to be important and necessary. Indeed, this level of activity in American schools has supported, at a reasonable level, some non-school organizations which devote all of their time to producing service testing programs.

I'd like to utilize this particular forum to argue the thesis that, while the present use of tests has adequately served the public and institutionalized needs of the American School System, by and large, the testing programs and testing activities have tended to have little im-

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pact upon the *raison d'être* functions of the school – what I will call teacher-pupil function, or more specifically, the teaching act. This assertion is admittedly a hyperbole which I hope you will pardon. For my purpose, at the moment there are institutionalized purposes for schools and to discuss them is relevant.

Briefly, I refer to the use of testing and test results to convey the public image which the school would like to convey, to make statements to the public about the relevant goodness of the school system and (less frequently) its relative badness, to provide some assessment of the levels of strength or general points of weaknesses, to maintain an accounting of pupil data for research uses, general public information, general guidance purposes, and so on. On the other hand, I wish to argue that the critical school function, the critical function of any school, appears to be less well served and even, perhaps, overlooked in selecting and using tests. This statement applies to some conception of what this critical function is and I wish to elaborate on it. By the “critical function” I refer to the specific teacher-pupil system.

I have written elsewhere a description of the conception of the teaching act that I like and find useful and, at the risk of wasting the time of those who are already familiar with it, I must say a little about it because what I have to argue rests on it. My conception of the act of teaching – and I mean by “act,” literally any moment of professional time in which something happening rests on a general definition and two assumptions. The definition is a very coarse one. By “education” I simply mean an attempt, an explicit attempt, to bring about the changes in the pupil and in the directions stipulated as desirable. That definition does not meet the test of a good definition, but I’m sure it will communicate what I have in mind. The two assumptions I think are rather straightforward; one of them is arguable. The arguable one is that an act of educating or teaching is an *intentional* one. I mean by that, that it should be thought of as intentional, as opposed to unconscious, unaware, etc. An educator explicitly and consciously intends to bring about change and has explicit notions in mind of the nature and direction of those changes. Now, that is argumentative, I know. The second assumption probably is palatable – I will extend it later; namely, that any prediction about the world of events can have only probable validity; one can make no statement of certainty about what is going to happen. I think we can all accept such an assumption without trouble. Now,

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given that general definition and these two assumptions, I would like to conceive of the act of education in terms of four dimensions, which are concurrent and interrelated.

Very, very briefly, the first of these dimensions I term *the criterion dimension*, and I mean by that to refer to the explicit purposes that have to do with the directions in which the pupil is hoped to change.

The second dimension is what I shall term *the procedures dimension*, and this comprises all of the behavior, the actions, the decisions of a teacher; those things which a teacher does, presumably, because, through doing them, the purposes will more likely be achieved. This dimension covers the whole range of possible teacher behavior: interacting with the pupil, planning curricula, selecting materials, and so on.

The third dimension I am calling the *theory and information dimension*, and I mean by it to refer to the sources of the procedures. If one asked a teacher, ideal or not, why he's doing what he's doing at the moment, presumably he will get an answer. That answer is in my *information or theory dimension*. In fact, any time I am deliberately attempting to produce a result, I am doing it on some grounds (informal grounds, theory grounds, assumption grounds); this dimension, therefore, is a necessary part of any analysis of the act of teaching. This information and theory dimension may be broken down further into two sub-categories. One, *general information*; and I mean by this, for example, a proposition of this order (which might be in the memory and conscience of the teacher): that children who have had a history of failure experiences, when confronted with a new experience, may unrealistically change their levels of aspiration. We call it a very general informational statement, meaning that it need not apply to every pupil, it may indeed not apply to the pupil who is the case in point for a particular teacher. It probably serves to generate some kind of response, some kind of plan. On the other hand, is *specific, relatively idiosyncratic information*, such as, "Mary Jones, with the wart on her ear, has difficulty in hearing." The latter is not generalizing on Mary Jones, but leads to some procedural behavior by the teacher that presumably may make a difference in Mary Jones' achievement. My feeling is that teaching behavior as we see it in the schools from day to day, can be exhausted by these three dimensions; teachers have purposes, they obviously do things and they can give reasons for the doing of them; for weal or woe, and good or bad, there are purposes, procedures and reasons.

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What is missing is what I incorporate in the fourth dimension: *the evaluation dimension*. This involves a very particular meaning of "evaluation." Before describing it, let me say something more about the procedure dimension; that is, the action in which a teacher engages. Then I will turn to the question I have about testing.

I referred earlier to the assumption that predictions of the world of events have only probable validity and I am sure that everyone can respond intellectually to that position. If we read a statement that it will rain tomorrow, we are not fooled by it; it is a statement of probability. It probably will rain tomorrow and we remain sane even if it does not rain. The teacher's task, it seems to me, is precisely that of prediction in the sense that, at any moment in which the teacher is educating, responding in one way or another for the purpose of bringing about change, the change which he hopes to bring about has obviously not yet occurred. That is, he is *predicting* that what he does now, will, in effect, produce some future result. It is a straightforward prediction. Or to use another term, we can say that the teacher is *hypothesizing* that what he is doing, or about to do, will bring about the desired conditions in pupil changes. "Hypothesis" is a good term; it has a heuristic meaning and a long history of respectable uses.

If one can think this way, there is a consequent moral obligation to do something else. In my fourth dimension, it is a moral obligation to evaluate; not evaluate in the general use of the term of evaluation, but evaluating the procedural hypothesis. It strikes me as a moral obligation on the part of a person to do this, and it is an inherent, necessary, and critical part of the teaching act concerned as a continuing function.

Given this particular conception of the teaching act as a hypothesizing act, I can say that two of the dimensions of that act, the third dimension (particularly specific information), and the evaluation dimension call on and require some kind of systematic information about pupils; that is testing—testing, in its broadest and best definition. The brute reality, however, may well be that the critical and the consequential teacher information and evaluation may, in fact, arise from sources historically unreliable, questionably valid and not clearly valuable; that is, a "teacher-made" test, rather than the very competently and expensively constructed, carefully administered tests of the "regular testing program." It strikes me as a very interesting condition, and in many respects a critical one, that

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the tremendous amount of talent that produces the test ... commonly think of when we think of educational test ... considered to have any direct relevance to what the teacher ... doing at the points where it makes a difference; namely, from day to day, week to week, hour to hour. Now, why is this the case? I suppose there are many answers. It seems to me that the regular testing program—and I use that term in the absence of a better one for the moment—in a school district may be considered to be irrelevant by the teacher, for at least a few reasons. One of these is that it tends to be untimely with respect to the conceptions of the education act I have outlined. For instance, by and large, this act of testing in regular programs occurs only at selected intervals, usually at infrequent intervals, and it is typically slow in feedback. The teachers get the information back much later than it is convenient to use, and indeed, sometimes it is not fed back at all; it is “recorded.” Also, it strikes me that what we call the regular testing program of any school district may be largely designed for the ritualized “public” needs of the school system rather than for the enabling and enhancement of the education act, and I don’t mean to suggest anything invidious, by that. But of greatest interest to me is the possibility that the most competent tests in the school system are, first, possibly not relevant at all to the specific teacher-pupil system or the on-going teaching act and, second, in any event are not perceived as relevant by the teacher even where they may be.

Now, the second of these can be dismissed as a problem that can be remedied easily by good in-service education and better pre-service education. But the possibility of an inherent lack of relevance is more critical, and I suggest that it may obtain in the case of the standardized and, by and large, competently constructed and prepared achievement tests available to the teacher. The general assumption has been, apparently, that the “target” for standardized tests can be only that target shared in common by most teachers—and the assumption may be *logistically* necessary. On the other hand, that target, the most commonly shared purposes of most teachers, comprises an inherent limitation to what I earlier described as the evaluation dimension, in the sense that it permits only partial testing of the teacher’s hypotheses or procedures and only after awkwardly long intervals. Now, the response to this dilemma, of course, is that the most specific, continuing, and immediate pupil-achievement information needed by a teacher should be acquired by him through

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tests and procedures of his own devising. This presents an arresting contradiction given the present conditions of teaching and the present status of pre-service and in-service teacher education. Teachers, at the moment, simply do not have the time to produce reliable measures for the kind of pupil information that are relevant and valid for all the broad range of purposes they pursue. By and large, teachers are unprepared to do this adequately even if time permitted.

What can be done to incorporate responsible and competent testing in any rational conception of the teaching act? I ask the question of you as a genuine one, as I said in my introductory comment, and one for which I have no clear answer. It is somewhat less than satisfactory to say merely that the teachers must become better test constructors. Although that is true, it is much less than realistic to say that teachers should have more time for evaluation—at least in California! Is there not some way in which the tremendous resources of skill, of technical knowledge, and experience, of, let's say, the Educational Testing Service, among others, can be pointed effectively and economically in the direction of instruments and procedures that are relevant to the full range and specificity of what I call the purposes dimension in the teaching of Mr. John Doe, eighth grade, social studies, May 1, Swampwater Junction Unified School District? The temptation is to respond to such a question with horror. We have had such responses before. I ask you, if it is a matter of interest, to respond to it only with some kind of alarm.

Thank you.

■ CHAIRMAN LARSON: Our next speaker is Arthur Benson. I have known Art Benson for a good many years, and I was delighted when I learned that he was on the program. He's had almost a life time experience with teacher examinations. Art received his baccalaureate degree at Lehigh University. He has been a teacher and a counselor. He was a Psychological Research Assistant with the Army Air Force. He was an Assistant Supervisor of Guidance Services for the Maryland State Department of Education—maybe this is why I like him. He's sort of sympathetic when he talks with me. He was a Guidance Specialist with the United States Office of Education. He was awarded a Masters Degree from George Washington University. Presently, he is Director of Teacher Examinations with the Educational Testing Service, working out of the Princeton office.

He has authored a number of publications. He was a co-author with the late Cliff Froehlich of *Guidance, Testing*, a publication which a lot of counselors in California Public Schools really cut their teeth on. While with the Maryland State Department of Education, he was in charge of the State High Schools Equivalence Certificate Program. He was co-author of a manual on the IBM test scoring machine, published by the Air Force.

He now devotes his full time to the direction of examination services for evaluating qualifications of candidates for teaching, administrative, and supervisory positions in school systems. It is a real pleasure to present to you, Mr. Art Benson.

Examinations and the Advancement of Teaching

ARTHUR E. BENSON

Sandwiched as I am between two California educators on your morning program, it is comforting to me to look forward to the afternoon session when you will be addressed by two gentlemen, both of whom you will probably regard as coming from the eastern section of the country, although Bob Stake may remind you that Illinois is seldom ravaged by high tides. This is small comfort though, because I am still wondering if the Western Office had mislaid its marbles when it decided to invite me as the only speaker who has not, at one time or another, been engaged in what one of my worst friends refers to as "the dismal business of training teachers."

In choosing, several months ago, the topic "Examinations and the Advancement of Teaching" for my remarks at this conference, I was

prompted by two considerations. The title had to be sufficiently ambiguous to encompass anything the spirit might move me to say today. Further, it had to be amenable to such delimiting as might enable me logically to avoid discussing matters which I would prefer to leave unsaid. Having made this confession of original duplicity, let me proceed now to the necessary, and comparatively straightforward, hedging.

Without any intention of deprecating teacher-made tests, essay tests, or any other techniques for measuring student behavior, I shall confine my remarks to examinations which are *not* locally-prepared, which can be objectively scored, and which have been standardized so as to yield normative data of wider significance than the distribution of scores obtained in a single college or school system. In short, I shall discuss only examinations which are published for use by many colleges and school systems and are commonly described as objective, standardized tests.

A few basic assumptions underlie the remainder of my remarks. I believe that one of the many roles a teacher is called on to perform is that of a director of learning, and, consequently, that the teacher should know something about the direction of learning. Perhaps you will permit me to define this very broadly to include knowledge of the learner as well as of the teaching-learning process. Hence, it is my conviction that teachers should possess a body of knowledge not possessed by non-teachers and that the acquisition of this knowledge requires a relatively long period of study and preparation. I have deliberately avoided the assertion that this preparation must all be formally pursued in college. On the other hand, I would insist that in no profession worthy of that name can the specialized knowledge of the profession be learned during a relatively short period of on-the-job training.

I believe also that while the teacher must direct many kinds of learning, the learnings to which our culture expects the school to devote its primary attention encompass intellectual, as contrasted with emotional or social, development. Moreover, I would contend that the teacher himself must, within reasonable limits, exhibit the behaviors he attempts to teach, or at least be capable of learning these behaviors, and I see no necessary contradiction between this position and Margaret Mead's assertion that teachers must be able to teach what they don't know.

Finally, as a staff member of the Educational Testing Service, it

may be important for me to confess where my primary allegiance lies in the variegated educational enterprise to which all of us here are devoting a major portion of our energies. When I am not in my own country, that is when I am more than forty miles from Princeton, New Jersey, two things commonly happen to me. I am often awarded a traveling Doctor's Degree, and, I am usually perceived as a measurement specialist. Both counts are wrong, but only on the latter do I consider it worth the while to set the record straight. In my own eyes, I am a teacher first and foremost. If I am a measurement specialist at all, it is only to the extent that I know enough of the psychometric lingo to translate educators' requests for testing services into terms which ETS measurement specialists can understand. In brief, my day-to-day job is to talk with teachers, school administrators, and professors of education on the one hand, and to statisticians, item-writers, and computer programmers on the other hand. If you have ever had to communicate with such diverse groups, you realize that I need to speak several languages, none of which, I sometimes think, is English.

So much for basic assumptions and personal idiosyncracies! Let me plunge ahead into a brief summary of the five major points which I wish to discuss, as well as acknowledge that one point which may be uppermost in the minds of a few of you is not, in my humble opinion, worth discussing. In summary, I would like to comment in much too brief and over-simplified terms on what I perceive to be five proper roles of examinations in the advancement of:

1. The pre-service preparation of teachers,
2. certification or licensing policies and practices,
3. the selection of professional personnel at the local district level,
4. the in-service education of teachers, and
5. the aspirations of teachers toward true professional status.

Some of you may have noted with scarcely-concealed glee that I have carefully avoided any mention of the role of teacher examinations in improving the classroom performance of teachers. It may be wearisome, but if this issue is broached in the discussion period, I can be persuaded to deal with it. Let me warn you, however, that anyone who asks for validity coefficients relating scores on teacher examinations to "teaching success," or "teaching effectiveness," will be asked to define these elusive constructs, to describe his criteria of teaching success in behavioral terms, and to cite validity coefficients between these criteria and the particular course he teaches or the

kind of pre-service teacher education program he espouses. Until educational research provides us with better constructs for describing the teaching-learning process, and until the profession itself makes the essential value judgments with respect to "good" and "bad" teaching, debates about the statistical validity of different teacher education programs, certification standards, and selection procedures, are, in my judgment, exercises of less than fascinating futility.

The multiple roles which examinations can perform in *advancing the pre-service preparation of teachers*, I dealt with systematically, and at some length, in an article published nearly five years ago. Since time will not permit me to review the details of that paper, I will be flattered if a few of you note that it appeared in the December, 1959, issue of the *Journal of Teacher Education*. In this article, I proposed two primary functions which appropriate tests can serve with respect to pre-service preparation: namely, the development of individual students, and the development of individual institutions. Members of this conference do not need to be reminded that both of these notions evolve from the concept of individual differences—the recognition that individual students are different and that individual institutions are different. All of us here are well aware of the wide range of individual differences among students. But on the assumption that many of us have had limited opportunities during our professional careers to gain perspective on the range of institutional differences, I should like to discuss this matter more fully.

Three states, the two Carolinas and West Virginia, currently require all college seniors preparing to teach in their states to take teacher examinations. This requirement enables these three State Departments of Education to conduct continuing research studies on the test performance of graduates from each of the institutions which they approve for teacher preparation, and to analyze the achievement in professional education, general education, and subject-matter specialization demonstrated by seniors completing preparation for each of the various teaching fields or levels for which the State authorizes professional certification. Outside of these three states, approximately 150 institutions in the country require all seniors to take either the National Teacher Examinations or the tests offered in the Teacher Education Examination Program. The test performance of graduates from each of these institutions is highly confidential. It is not, however, a secret that on any one of the many tests

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offered in these two testing programs, we at ETS can identify each year several institutions where the highest-scoring seniors score below the lowest-scoring seniors at several other institutions. This phenomenon can occur within a single state, with all institutions, both high-scoring and low-scoring, approved by the State Department of Education, by the appropriate Regional Association, and in a few lamentable instances, which I trust are the result of inheritance rather than evaluative studies, by the National Council on Accreditation for Teacher Education.

I do not know whether such wide institutional differences exist in the 13 States represented at this conference. Neither the National Teacher Examinations nor the Teacher Education Examination Program has excited much interest in this region. Nevertheless, some not wholly irrelevant data are available for 58 of the 146 institutions preparing teachers in your states.

You may be aware that just about a year ago ETS invited all 1150 of the teacher education institutions in the country to participate in a nationwide survey of teacher education. Each institution accepting this invitation administered to its seniors preparing to teach a 50-item, 40-minute objective test sampling the students' knowledge of professional education and general education, plus a ten-minute questionnaire. Fifty-eight institutions in the Western Region gave the Teacher Education Survey test to all seniors preparing to teach, or to a large, and presumably representative, sample of this group, testing a total of nearly 3500 students in the process. For the 58 self-selected Western colleges, the mean raw score on the 50-item Survey test was 25.8. This may be mildly gratifying in comparison with the mean of 25.3 for the 582 institutions in the nation which tested 20 or more seniors.

Since the standard deviation of institutional means was 4.5, it may be more satisfying to note that not a single one of the 58 Western colleges achieved a mean more than two sigmas below the national mean. There were 36 such colleges in the national sample, and it is to such institutions one of my colleagues refers when he rails against "degree-granting junior high schools."

On the other hand, none of the 58 Western colleges earned mean scores more than two sigmas above the national mean. This shouldn't be disturbing as only three colleges in the rest of the country achieved such excellence. Perhaps my colleague will designate these institutions as ones which award Bachelor's Degrees for Master's work.

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It was not entirely idle curiosity which prompted me last week to identify the dozen highest-scoring and the dozen lowest-scoring colleges among the 58 administering the Survey test in your region. From each of these two groups of institutions, I selected four, all of which are accredited by a Regional Association. My four high-scoring institutions are located in four different states, and include one private college, one church-related college, and two state-controlled colleges; one offers work only at the Bachelor's level, one at the Master's level, and two at the Doctoral level. The four low-scoring colleges are located in three different states; one is church-related and three are state controlled; one offers work only at the Bachelor's level, and the other three at the Master's level. As to NCATE accreditation, two of the four high-scoring institutions are approved by NCATE, as are three of the low-scoring institutions.

Now I shall not draw any conclusions from the data presented thus far, and I sincerely hope you don't because they would be unjustified. My whole purpose in citing the test performance of the 320 seniors at the four high-scoring colleges and the 284 seniors at the four low-scoring colleges is to demonstrate that institutional differences are not insignificant in a region of the country which is generally considered, and properly so, well-favored in the educational opportunities it affords its youth. The mean score of the four high-scoring colleges is 30.2, and of the four low-scoring colleges 21.7, not quite two full standard deviations apart. Perhaps easier to understand is the fact that less than 17% of the students at the low-scoring colleges achieved the median score earned at the four high-scoring colleges. In other words, more than 83 percent of the seniors at the low-scoring colleges demonstrated less professional and general cultural knowledge, as sampled by the test, than the average senior at the four high-scoring colleges.

At the risk of over-emphasizing this matter of institutional differences, let me cite two more bits of data. Fifty-nine percent of the relatively poor scores achieved by seniors at the four low-scoring colleges were matched by equally low scores at the high-scoring colleges. On the other hand, 41% of the relatively good scores obtained by seniors at the high-scoring colleges were not matched by equally high scores at the four low-scoring colleges. I doubt that I would be indulging in particularly censurable speculation in suggesting the possibility that even in this region, for whose teacher education institutions I have the greatest respect, whether a student graduates

with a straight "B" average or a straight "D" average may depend to a significant degree on the institution which he attends.

From my viewpoint, the use of test results to demonstrate significant differences between institutions and their products is like, if I may be pardoned for conforming to the current craze, using a foot-rule to prove that adult Indian elephants are larger than adult pygmy elephants. But this difference in size may not be apparent unless both are viewed from the same distance. If you agree that the range of differences among teacher education institutions is probably wider than either the institutions themselves, or the consumers of their products, ought to tolerate, then you may be persuaded to explore the proper functions of examinations in advancing the pre-service preparation of teachers. The December, 1959, article referred to earlier was designed as a rough map to guide explorers of this almost taboo territory.

In discussing the role of examinations in *improving certification or licensing policies and practices*, I will not make any distinction between certification and licensure, although I find myself in substantial agreement with the views expressed by Professor Lucien Kinney in his excellent and timely book entitled *Certification in Education*. For the present, I am going to assume that most of us have not recognized the importance of distinguishing between a certificate issued by the state and a license issued by the profession, although on this distinction may hang the future status of teaching.

Regardless of how that issue is finally settled, I am convinced that the teacher education institutions of this country will not be free to determine the specifics of their own teacher education programs until such time as either the state, or the profession, and possibly both, accept their responsibility to evaluate the competencies of each prospective teacher as an individual, and *not* assume that he possesses the desired competencies simply because he has completed a process which is generally approved. Let me hasten to add that I recognize the enormity of individually evaluating each petitioner for a seal of approval to teach. But because such a task would be difficult, expensive, and perhaps completely beyond the resources of existing agencies does not mean that it is the wrong approach.

The city of Chicago certifies more professional personnel each year than do some states, and the Board of Examiners for that city finds it feasible to require each applicant not only to meet fairly broad requirements with respect to pre-service preparation, but also

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to meet its standards on written examinations, and to satisfy a professional interviewing committee of his personal fitness to teach. Three states, Florida and the two Carolinas, currently require all applicants for regular certification to meet minimum examination score-standards regardless of the amount and nature of the college preparation shown on their transcripts. In addition, Delaware, Georgia, South Carolina, and West Virginia permit experienced fully-certificated teachers to add new teaching fields to their certificates if they are able to demonstrate by examinations that they are as well informed on content and methods of teaching in these fields as the average candidate who has completed a regularly-approved program.

West Virginia actually goes one step further. It offers provisional certificates to college graduates who have *not* completed an approved program of teacher preparation if they can demonstrate by examination that they are as knowledgeable in professional education, general education, and subject-matter specialization as the average graduate of an approved program in West Virginia; after three years of successful teaching on a provisional certificate, such a teacher may be awarded a standard professional certificate if he is recommended by his employing superintendent and by the supervisor in charge of his three-year internship period. The West Virginia program was adopted in 1958, and it has not proved to be a popular means for circumventing normal pre-service preparation. On the contrary, it appears to have served mainly to take the wind out of the sails of nautical critics, and their disciples, who are appalled by the fact that Albert Einstein could not have been certificated to teach physics in Princeton High School or Charles Laughton to teach drama in Hollywood High. Finally, Delaware, New York, and Pennsylvania use the results of the MLA Tests for Teachers and Advanced Students as a basis for certificating teachers who speak a language as their native tongue, but can not meet course requirements in the language.

I will mention only briefly the roles of examinations in *selecting professional personnel at the local district level*. To the best of my knowledge, Los Angeles and San Francisco are the only two districts in your region which are using test results to provide assurance of teacher competence beyond that furnished by state certification. However, in the selection of promotional personnel (administrators, supervisors, and to a lesser extent, counselors) the use of examination results by local districts in the initial screening of promotional applicants is becoming quite widespread. Again, I would not defend this

practice by attempting to cite validity coefficients because of the criteria problem. But the research reported by Hemphill, Griffiths, and Frederiksen in their book on *Administrative Performance and Personality* yielded encouraging statistical evidence that objective tests can make constructive contributions to administrator selection, as well as reduce non-professional influence on appointments to leadership positions. Of the nearly 100 local districts in the country which use examinations as a factor in selecting some promotional personnel, at least 20% are located in your region.

My next point refers to the roles of examinations in *improving the in-service education of teachers*. It would be exciting for me, and perhaps not unduly tiresome for you, if I could describe programs involving diagnostic use of teacher examination results as a basis for individualizing in-service education programs under the auspices of local districts. Unfortunately, this is not the case. So far as I can discover, effective communications along these lines between school personnel officers in local districts and those charged with conducting the districts' in-service programs are tenuous if not non-existent in most school systems of the country.

However, I can outline the main features of a state-wide program in which test scores are used as a major factor in identifying experienced teachers the state wishes to encourage to remain in the profession and to increase their competencies on the job. Four years ago, Georgia inaugurated a Professional Advancement Fellowship Program in which scores on tests of professional education, general education, and subject-field knowledge are used by the State Department of Education as an important factor in awarding to tenure teachers fellowships to complete, through summer school attendance, planned fifth-year programs, or sixth-year programs if the fifth year has already been completed. On the successful completion of these programs, higher certificate ranks are awarded, along with accompanying salary increases. The State Department of Education, in conjunction with its Council on Teacher Education, has developed guidelines for fifth-year and sixth-year programs which specify a minimum amount of preparation in the teacher's subject field rather than in Education courses. The Professional Advancement Fellowship Program is operated under regulations designed to assist experienced teachers to achieve such diverse objectives as: strengthening their subject matter competence, preparing themselves for teaching fields in short supply, developing the abilities needed for advancement to

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leadership posts, and demonstrating their qualifications for salaries at a truly professional level. While the salary increment earned by successful completion of a fifth-year program is modest, Georgia awards a \$1,000 salary increment to teachers completing a sixth-year of study through summer school attendance subsidized by grants to those able to achieve the State's examination standards and other requirements.

Georgia laymen and legislators seem genuinely satisfied with the program since it assures that substantial tax monies have not been dissipated on "across the board" salary increases, but have been selectively distributed to teachers able to achieve specified performance on comprehensive objective tests. Teachers generally applaud the fact that the program implements the traditional principle that higher salaries should accompany advanced college preparation. Colleges are enjoying larger numbers of well-qualified graduate students in their summer schools. And last, but by no means least, the press has backed the program as a major breakthrough in the impasse between the public and the profession which has characterized teacher salary negotiations throughout the country during the past few years.

Finally, what contributions can examinations make in *realizing teachers' aspirations for true professional status*? Well, to be honest, I am not sure that teachers over the country understand what being a member of a profession entails, or that they are willing to take advantage of professional privileges with due restraint, or to assume professional obligations with mature responsibility. I am reminded that several thousand years ago the Israelite slaves of Egypt wanted to be free, but if I read the record right, there is little evidence they wanted to enter the promised land or to accept their role as a chosen people. Perhaps those who would take up Moses' staff today and lead us toward a true profession might review with profit the sobering history of those 40 years of wandering in the wilderness.

Furthermore, professionalization of teaching inevitably involves a relocation of power. A professional controls himself, or is controlled only by his peers, and admission to the peerage is controlled by the peers. I suggest that it may be a good deal easier for teacher associations to gain control over national testing programs for those seeking membership in the associations than it will be for them to win control of institutions whose unique function in society resides in their right to teach what they damned well please.

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Control of teacher examinations by the profession is already well under way. The national advisory committee which Educational Testing Service appoints to guide it in the development of teacher examinations is composed entirely of professional educators—state and local school officials, faculty members of teacher institutions, officers of national professional associations, and the like.

The two major teacher examination programs which ETS sponsors are currently being revised in accordance with recommendations made by committees nominated by the American Association of Colleges for Teacher Education and by the National Commission for Teacher Education and Professional Standards. Each of the NTE options in the various teaching fields is being re-designed by a test review committee named by the professional association representing teachers in that field. In short, control over the major instruments available in this country for measuring academic preparation for teaching is now largely in the hands of the profession itself. If it uses these instruments wisely, they may be made sharp enough to hew a path through the wilderness in less than 40 years.

Can examinations make a significant contribution to the advancement of teaching? I think they can, and I believe that the nature of this contribution may depend very largely on the imagination and wit we, as teachers, exercise in the use of these tools.

■ CHAIRMAN LARSON: I think we should move to our third speaker this morning. Garth Sorenson is an Assistant Dean, School of Education, University of California, Los Angeles. Garth is another man whom I have known for many years. He is respected throughout California for the care with which he constructs various studies. Garth, really I didn't know that you were from Utah originally, with a Baccalaureate degree from the University of Utah, with a Master's degree from the University of Utah, and a Ph.D. from that same institution. He has been a counselor and a teacher in the Utah State Industrial School. He was a psychiatric social worker with the Veterans Hospital in Salt Lake City; an Assistant Professor of Educational Psychology; and Head Counselor and Director of the Guidance Center at the University of Utah. He came to the School of Education at UCLA as an Assistant Professor of Education. He is now an Associate Professor of Education and Assistant Dean. Garth, I am delighted personally to have the opportunity to present you to the group.

An Exploration of Teacher Role Expectations

A. GARTH SORENSON

For a long time I have felt that some new kinds of tests are needed for use in teacher selection and teacher training programs. Before these new tests can be constructed we must rethink the question of what it is that a teacher examination ought to examine. What I have to say today relates directly or indirectly, to that question.

In 1960, after a comprehensive survey of educational research, Richard L. Turner and Nicholas A. Fattu (1960) were led to conclude that 70 years of research on teacher effectiveness had not added much to our systematic knowledge, and that if the same procedures were followed, another 70 years would add little more. It seems unlikely that anything that has happened since 1960 would make them modify their conclusion.

I personally feel that while there have been *a few* very important studies, Turner and Fattu are right, and I believe therefore that we must ask why it is that so much effort, over such a long period of time, by so many people, has produced so few positive results.

No doubt there are a number of reasons why investigators of teacher effectiveness have not been very effective. I would like to

suggest that one major cause of failure has been the way in which the problem has been conceptualized. I believe that the investigators have been asking the wrong questions, and that they have been making a number of unwarranted assumptions. Most investigators have either implicitly or explicitly assumed the existence of some single set of behaviors or traits which constitute the good teacher. Moreover, they have assumed that those behaviors and traits exist as an absolute, independent of any observer. It has been generally assumed that the dimensions of this absolute were in some way known to all experienced people, and that they could be clearly and immediately recognized. The judgment of experts has been considered to be valid and criticism needless.

For example, at the TEPS Conference at Ohio State University last June, a school superintendent in one of the work sessions asserted that he could tell, within a few minutes after entering a school building, who the good teachers were. When I asked what specific observations he would make, he advised me, rather testily, that it was a matter of intuition, and furthermore that any school administrator who lacked this intuition did not deserve to be an administrator. Most of the people in the room were on his side—not mine.

Having taken it for granted that experienced educators are able to recognize if not describe the good teacher, investigators have concentrated their efforts on the building of better instruments for observing, rating, and evaluating an instructor in order to estimate the degree to which he approximates the ideal.

It is a basic tenet of this paper that an approach to the problem of predicting teaching success which is formulated in terms of some single fixed teacher-ideal is highly inappropriate; it is my contention that there can be no such thing as a single set of behaviors or characteristics defining the good teacher. For in our pluralistic society there are too many conflicting views about what the teacher ought to be doing. These differing views about the objectives of public education are reflected in the continuing debate about the effectiveness of the schools, about how teachers ought to be trained, in efforts to unionize or prevent unionization of teachers, and in books on the philosophy of education. Differing philosophies of education mean differing objectives, and those who set different objectives for the public schools will inevitably differ in what they expect of teachers. It is my position that the goodness of a teacher can be defined only

in terms of someone's expectation, and in our society people do and should differ in their expectations of teachers.

If we cannot assume that the "good" teacher is something "real" out there, but is relative to the values, expectancies and perceptions of the person evaluating him, then what needs to be predicted, following Stern, Stein, and Bloom (1951), is not the way an individual will behave as a teacher, but the way his behavior will be seen by the particular persons evaluating him.

What usually gets reported on a teacher rating scale is not an objective account of the subject's behavior, but the *observer's* feeling, interpretations and evaluation of what he has observed. For example, Ryans (1960) found that two observers watching the same teacher simultaneously tend to see and to respond to quite different aspects of the total teaching situation. It required considerable training before two observers who had been watching the same teacher simultaneously could agree on what they had seen. And with some observers it seemed that he could never get agreement even after training.

If on any single occasion observers note different events in the classroom and evaluate the same teacher differently, largely because of their different beliefs about what is appropriate teacher behavior, then the nature of the role expectations which determine the responses of teacher evaluators will have to be clearly spelled out. When this has been done the relationship between the teacher role expectancies of observers and their ratings of teacher behavior can be systematically scrutinized, and predicted.

This is a hard but not impossible job. Admittedly, the teaching role is extremely complex. The teacher engages in a wide variety of activities. Still, from the research on "halo effect" (Bruner and Tagiuri, 1954), it may be inferred that in his evaluations, each judge probably takes into account only a relatively small number of variables. Furthermore, it is possible to categorize the evaluative biases of groups of educators. Studies at UCLA have demonstrated that experienced and potential teachers alike possess different concepts of the teaching role. Teachers vary in their opinions about the kind of action which is suitable in dealing with the problem situations they commonly face. It appears that these different teacher role expectations can be meaningfully described in terms of a relatively few variables. I would like, during the next few minutes, to propose

a logical framework by means of which teacher expectancies can be categorized, and to present some preliminary data regarding the usefulness of this framework.

The Theoretical Framework

A logical framework for conceptualizing teacher role expectations should be both comprehensive and simple, and it must be related to the real world. That is, it must include the expectations of those who influence teacher selection, teacher training, and teacher practice. It must reflect the judgments of school administrators and other policy makers, teacher educators, teachers themselves, parents, and students.

An examination of the current educational dispute seemed to provide leads on some plausible dimensions to be included in the conceptual framework. But the process of analysis seemed surprisingly difficult and lengthy, in view of what finally emerged. Without trying to reproduce the details of the reasoning process, what gradually became obvious is that in "the great educational debate" people are quarreling bitterly about two major topics. They are disagreeing about either the ends of education or the means by which the ends are to be accomplished, or both.

Surveying what has been written about the ends of education suggests that there are three different classes of objectives. Some persons put an emphasis on subject matter. For them knowing a subject is an end in itself. A second group tends to state educational goals in terms of the student—his welfare and individual growth. The difference between these groups is that the subject-oriented teacher feels he has accomplished his job if he has taught the student arithmetic, let us say. With the second or student-oriented group, the teacher never regards the subject as an end in itself, but only as a means to the end of developing the student as an individual. Educators of a third group are concerned with the social norms, conventions, and laws that they feel are important for responsible participating citizenship in the school and in the larger society. To them the schools are intended primarily to serve as the agents of the culture and the transmitter of its values to youth so that they can take their places as adult members in their turn.

The problem of classifying differences with regard to means appears to be somewhat more difficult than that of classifying ends. There is a plethora of learning theories, a vast folklore on how best

to manage children, and a body of instructional lore that gets passed from one generation of teachers to the next without critical examination. However, there is one major difference among educators with regard to teaching method under which these other differences may be subsumed. This difference concerning the means of education parallels the traditional philosophical divergence between the rationalist and the empiricist viewpoints. To the rationalist, truth is an absolute arrived at through human reason or revealed by authority. To the empiricist, truth is an approximation or a probability statement arrived at through the more or less direct examination and weighing of objective data. Similarly, some educators would rely on didactic methods of instruction in which the teacher or expert tells the student what the truth is, or presents to the student the content which he is to learn. Other educators, equally interested in the child's learning, are convinced that instruction is more effective when youngsters are themselves led to explore, analyze, and examine in order to discover or arrive at the concepts and generalizations which constitute the discipline being taught.

Given three sets of assumptions about the ends of education and two sets of assumptions about the means of achieving educational ends, a six-fold classification of teacher role expectations emerges as shown in Figure 1. As we contemplated this logically derived theoretical model and recalled the teachers we have known, it became possible to describe in some detail the following teacher arch-types:

(1A) *Content Didactic*. Teachers in this category have a strong sense of their responsibility as preservers, custodians, and transmitters of the wisdom of the human race. They regard themselves as scholars, experts in learning and, as such, founts of wisdom for the community. They value correct speech, appearance and manners. While they are not especially interested in conventional morality

FIGURE 1. Categories of Teacher Roles

Means	E N D S		
	I Content	II Student	III Social Norms
A. Traditional -didactic			
B. Experimental -discovery			

per se, regarding themselves often as sophisticated and worldly, they place strong emphasis on polish, charm, deft courtesy, and fluency in others. They feel that the pupils are in school to learn from *them* and that committee work and discussion are time wasters, with the children merely airing their own ignorance. On the other hand, they do not object to the Socratic approach so long as there is no doubt who is Socrates. They prefer formal, impersonal relationships with pupils. While they enjoy the sensation of inspiring sensitive young souls to higher things, they really don't want to be in on the grubby aspects of their pupils' lives. They tend to have little patience with a consideration of the factors underlying disruptive problems, feeling that these considerations are sentimental and outside the province of the school. They stress the necessity of hard work, self-discipline, and intrinsic rewards. They are not organization minded but are very individualistic and tend to see administration for the most part as a clerical and public relations function, and not really an educational function.

(1B) *Content Discovery*. The educators who fit this category are oriented to a scientific and relativistic view of truth and knowledge. They present past knowledge as an essential tool in facilitating the discovery, constant revision, and extension of what is currently believed to be truth. They take a strong interest in the cognitive aspect of learning. Thus, they will work hard on ingenious and effective methods of presenting material that will evoke interest and reinforce learning but they are not really interested in dealing with the emotional or motivational problems that may be barriers to learning within an individual child.

The members of this group regard themselves as professional teachers and they are interested in improving their skill and enlarging their repertoire of technique. They feel themselves to be experts regarding children and their intellectual development. A teacher in this group may be receptive to what a parent has to say about his child, but he regards himself as knowing an aspect of a child which the parent cannot know and as being uniquely qualified to give information about the ways in which the parents can contribute to the child's learning. These teachers tend to regard disciplinary problems as a challenge to their skill in timing, modifying reinforcements, relating material to student interests, taking into account length of attention span, etc. While they enjoy bright, docile pupils because of their responsiveness, they find slower-learning youngsters, too, an

agreeably stimulating challenge. Beyond minimal cleanliness, they do not give much heed to a youngster's appearance or manner; they care most about his mastery of concepts and his intellectual growth.

(2A) *Student Didactic*. 2A's educational goals are mental-hygiene type goals. That is to say, 2A educators are interested in helping youngsters to develop *all* of their socially acceptable potentialities and are concerned about their psychological well-being. These teachers are likely to express strong liking for kids in general, and they tend to become highly curious about and emotionally involved in the personalities and problems of individual youngsters. Their view of human behavior is strongly influenced by psychoanalytical and clinical concepts, and they freely verbalize their interpretations even when the interpretations are disturbing or unflattering. They want children to like them and they are distressed and feel rebuffed when they do not get a personal response. They are proud of being non-judgmental, accepting, warm, and accurately perceptive beyond the ordinary. They feel that pupils learn best in an atmosphere of acceptance and trust, and they use praise freely in order to enhance students' self-esteem. They prefer to evaluate pupils' work on the basis of individual improvement rather than group norms and to reward effort, lest children's feelings of self-worth be impaired. They regard "disciplinary problems" as indicative of underlying psychological difficulty within the pupil. These teachers regard themselves as interpreters of children to parents and other adults. They tend to be dismayed at what they see as insensitivity on the part of administrators, teachers, and parents whom they regard as unaware of what is really going on psychologically inside the child.

(2B) *Student Discovery*. The members of this group have as their educational goals, autonomy, self-actualization, and self-determination. They define self-actualization in terms of the individual's potentialities, his personal interests, and other sources of satisfaction. They want to help children learn to become problem-solvers and to evaluate their personal decisions by becoming aware of the consequences of those decisions. These teachers see themselves as rigorous, tough-minded, and sophisticated in the behavioral sciences; they are sceptics and interested in new methods and in the empirical validation of their methods. They are concerned about the effectiveness of their communication of concepts to students and evaluate effectiveness in terms of the receiver, not the sender. They stress understanding and cognition, respect the power of reason, and are committed to help-

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ing students learn to solve problems by more rational rather than less rational means. They have no fixed expectancies regarding their interpersonal relationships with students; they assume a wider range of psychological needs than members of the 2A group and they endorse a flexible social and political system that embraces a diversity of values. Within a framework of emphasis upon the individual, they are more tentative in their formulations of both the ends and means of education than the 2A teachers.

(3A) *Social Norms Didactic*. The teachers in all of these groups are more identifiable by what they do than by what they say but the members of this group are harder to characterize because they are very sensitive to the demands of a particular community or a particular school system; they are flexible and adaptable and consequently their behavior is more outer determined and less inner determined. They are highly practical folk and tend to focus on the immediate and everyday problems in the school. Because of their preoccupation with immediate problems and with the rules and regulations which are needed to keep so complex a structure as a school operating, they are in effect more concerned with means than with ends. To them, a responsible person is one who is sensitive to the demands of the situation, particularly as the demands are interpreted by superordinates and by those in school and community who are in a position to make crucial decisions. Highly important in their eyes is the development in students of the traits of mannerliness, decorum and responsibility. Members of this group stress classroom management, good public relations, and the routines which have been worked out in order to deal with large and diverse groups of students in an efficient and orderly manner. They feel it necessary and proper to be especially responsive to the pressure and criticism of parents and other people in the community whose influence can affect the welfare of the school. Consequently they are less interested in innovation and more concerned about satisfying the expectations of important adults with whom they come into contact.

(3B) *Social Norms Discovery*. The members of this group feel that the school is a crucial force in the growth and maintenance of a democratic society. They are interested in developing citizens who can participate effectively both in small committees and in larger groups for the purpose of bringing about community action and social change. They believe in structuring pupil school experience in such a way as to provide opportunities for participation in working in

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cooperative effort. Sensitive to the dynamics of interpersonal relations, they draw upon the study of group dynamics and sensitivity training for many of their most basic concepts and emphasize the need for recognizing that feelings as well as words are critical in effective communication. They are empirically oriented, drawing from the experiments of Lewin and his followers in their approach to group process, the clarification of group goals, the resolution of group conflict, etc. In some respects, they are more fascinated with process than with product, but beyond that, they hold the conviction that many minds are ultimately more effective than one. They regard the classroom as a tiny society whose integration, task-orientedness, cohesiveness, and openness to change, rest upon the increasing skill, willingness to assume responsibility, and mutual respect of its members. They consider it the teacher's role to serve as a model and resource, rather than as a provider of tasks or solutions, or as an arbiter of right and wrong.

The Instrument

Assuming that people can be differentiated as falling predominantly, if only roughly, into one of these six categories, we tried to build an instrument to identify teacher role expectations which would take the form of a series of ten descriptive statements or dimensions for each cell. We tried to spell out dimensions which each of these types would regard as significant in judging teachers. Within each scale, we tried to build items which gave an impression of psychological consistency and yet were independent of one another. Also, we tried to word each item in the idiom of the particular category of *J*. Samples of the items in their present form appear in Table 1.

Validation Studies

In order to find out whether the conceptual framework and the 60 dimensions which presently define it would be considered useful and important by anyone other than ourselves, we conducted exploratory studies with groups of teacher educators, school administrators, prospective and experienced teachers (Total $N = 285$) as well as a few subjects from such related professions as psychiatry, clinical psychology and social work. In general the approach was to ask each subject in an individual interview to indicate which if any of the 60 statements he considered descriptive of a good teacher, which described a poor teacher, and which items were ambiguous

TABLE 1. Validation Studies

Subject Didactic	Subject Discovery	Student Didactic	Student Discovery	Social Norms Didactic	Social Norms Discovery
1. He is broadly trained in the humanities.	13. He deliberately experiments in order to develop more effective ways to present course materials.	21. He handles antisocial behavior, not by punishing but by attempting to understand and deal with the psychological causes.	33. While expecting and tolerating inevitable mistakes he encourages pupils to try new ways of doing things in making their personal decisions.	43. He is skillful in maintaining classroom control—pupils respond quickly to his directions.	53. He encourages pupil participation and criticism in the development of class regulations.
3. He speaks fluently, explaining his ideas logically and precisely.	16. He checks periodically to discover failures to learn material already covered and provides exercises that correct deficiencies.	24. Pupils find him willing to give advice on personal problems.	35. He handles discipline problems by assisting pupils to find alternative and less dangerous means of satisfying their needs.	44. He inculcates firm precepts of right and wrong.	55. By the nature of his assignments and by other techniques, he encourages cooperative group effort instead of competitiveness among students.
7. He is highly trained in the subject he teaches.	19. He tends to regard disciplinary problems as a challenge to his skill in timing, in modifying reinforcements, and in relating material to pupil interests.	29. He makes use of conferences with parents to advise them on their children's problems.	40. He encourages each pupil to analyze his personal goals and the obstacles blocking him.	47. He provides pupils with a clear set of rules and procedures so that they will know at all times what is expected of them.	58. He develops the leadership ability of pupils by providing them with opportunities to take responsibility.

or unimportant. After this step was completed, each subject was asked to Q-sort the items to describe the good teacher. These studies are still going on. However, four significant trends appear with sufficient persistence to warrant mention at this time.

1. **Cognitive Differences.** We found adherents of all of our archetypes represented in our sample. Obviously, we did not anticipate that we would be able to identify pure examples of our Content Didactic, Content Experimental, etc., arch-types. But we did find that most of our subjects tended to favor one or two scales markedly above the rest.

We found that each of the 60 dimensions was endorsed by a substantial number of subjects and that each was also rejected by a substantial number of subjects.

We found some interesting and suggestive group differences. For example, some of the same dimensions which a large majority of our teacher educators rejected or said should *not* be considered in evaluating teachers were said to be *most* important by our group of experienced teachers. Clinical psychologists rejected dimensions which have often been regarded as essential to the teacher's mental hygiene function and which were considered to be very important by those members of our sample who were especially interested in elementary and special education. Professors who teach methods courses (e.g., methods of teaching arithmetic) were often apparently at odds with educational psychologists.

While our groups tended to differ from one another, we also found divergencies *within* groups of educational psychologists, school administrators, science teachers, etc., that seem to be as great. A person's professional role appears to be an insufficient predictor of his preferred ideal.

In sum, we found strong support for the proposition that there are wide differences in belief among interested individuals about the essential characteristics of good teachers. Our data also indicate that those who train teachers are frequently and unknowingly working at cross-purposes with those who employ teachers, with experienced teachers, and with one another as well.

2. **Problems in Semantics.** The semantic problems in discussing and building an instrument by which to describe good teachers are formidable. Although in writing the dimensions we attempted to use simple language and to avoid educational verbiage, we did aim for the particular idiom as well as the particular ideology of our six

model educators. Our basic assumption was that people differ in their educational values. Thus we anticipated that few of the words in our items would have a common meaning to all our subjects. As we expected the same item which seemed especially meaningful and well expressed to one subject was regarded as nonsense by another. For example, an item said by an educational psychologist to be significant and specific was called "empty jargon" by a teacher educator.

What we had not expected was the strength of the reaction to the words themselves. A sociologist, cooperative and friendly, protested all the while that the items were not couched in his own language, that he felt uneasy and not at home with them. In the case of some subjects, discomfort at the wording of the items clearly interfered with the task.

Again and again, highly interested subjects asked, "Do you really *mean* what these words say?" and recommended alternative wordings that would express the meanings of a not fully endorsed dimension the better—*from the point of view of their own value system*. A professor of business administration failed to complete the Q-sort, rejecting the items as an array of ego-building, back-slapping descriptions of educators by themselves.

3. Emotional Reactions to Value Differences. The proposition that different concepts of the good teacher are not only tenable but required by the nature of our society appeared to arouse strong feelings of anxiety and even of hostility in many of our subjects. Among some groups of subjects, particularly the graduate students and the experienced teachers, a number anxiously rejected the concept of relativism and insisted on a single set of absolute dimensions defining the good teacher. It was as though the surrender of the concept of a single ideal standard represented the imminent anarchy of no standards of competence at all. On the other hand, a professor of the philosophy of education declined to be a respondent, expressing his belief that there are no principles of evaluation which are appropriate to teachers in general, that each teacher must be evaluated individually.

Two additional sources of anxiety were expressed. One had to do with dismay at being confronted with the fact of major differences—or resemblances—between a particular subject's point of view and the point of view of other persons whom he knew. To differ from a respected colleague or to find that in significant ways one's views agreed with those of a disliked colleague was obviously upsetting.

Also, it became clear that the obligation to expose beliefs which were possibly contrary to those approved by significant others was highly threatening to some of our subjects.

4. Evaluative Dimensions Non-Specific to the Teacher Role. A number of persons told us we had insufficiently emphasized or failed to include some of the most significant dimensions defining effective teachers. A school principal pointed out that those who hire teachers make their decisions largely on the basis of personality as revealed in interviews and that they rarely have an opportunity to observe candidates teaching. Likewise, administrators and parents seldom see teachers' actual on-the-job behavior. Indeed there is some reason to believe that most judgments about teachers are based on their non-teaching behavior, and that the possession of personableness and above-average social and political skills is of major importance.

I have argued that 'here is not and cannot be any valid way of describing the good teacher which does not take into account the values of those who judge teachers. Our early studies provide support for the hypothesis that the people whose business it is to select, train, certify and employ teachers do in fact differ greatly in their concepts of the good teacher—that they are frequently working at cross purposes with one another.

Taking a large jump in logic to the implications of my argument for those interested in tests for use in selecting and appraising teacher candidates, I believe, one, we need a better rationale for teacher examinations than presently exists to tell us what kinds of examinations to develop, and two, when we have developed a better rationale, and the examinations that will be suggested by that rationale, most of those examinations will be quite different from the ones which exist today.

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■ **CHAIRMAN LARSON:** This afternoon we are going to continue the program as printed. The first presentation is by Robert E. Stake, who is now with the Center for Instructional Research and Curriculum Evaluation at the University of Illinois. Mr. Stake was an undergraduate at the University of Nebraska with a major in mathematics. He received a Bachelor's degree in 1950. He did graduate work at the University of Nebraska, majoring in educational psychology and measurement and earned his Master's degree in 1955. His Ph.D. is from Princeton University in psychology. He has held numerous positions starting with an instructor of mathematics at the United States Naval Academy Preparatory School in Maryland, and numerous others, which I will not detail. I did tell you that he was now with the Stanford Research Curriculum at the University of Illinois. His presentation is:

The Unreconstructed Teacher: Tomorrow's Roadblock

ROBERT E. STAKE

I recognize that I have a distinguished place in this program. I am the only speaker of which an introduction is necessary.

I will attempt to vilify the unreconstructed teacher by describing the reconstructed teacher, a specific reconstructed teacher. I will talk about the reconstructed teacher in an automated educational system. Twenty-five minutes from now, I hope, we will have gone from here, by Robin Hood's barn, to our destination, a roadblock.

Whenever man has a job to do, he expends some of his energy looking for an easier way, a more effective way, of doing that job. Whether it's building a fire, catching a tiger, or teaching a child the creed by which his elders live, man seeks ways of extending his reach and his impact. These efforts result in a technology, an array of tools, a set of short cuts, a phalanx of machines, which make his operations more routine, less capricious, and more reliable.

There are those who are saddened or offended or frightened by these machines. But our concern about overmechanization will not deter man from mechanizing his environment. This is his natural bent, and our concerns are better spent on assuring ourselves that our goals remain humanistic goals rather than that our labors remain manual labors.

Man's quest for efficiency is sometimes unsuccessful and some-

times successful at all too high a price. Technology is put to evil use as well as good, of course. A belief that technological progress is human progress is not warranted—but the opposite—that technological progress is contrary to human welfare, is not warranted either. Each development requires separate scrutiny.

Sometimes scrutiny is rewarded with a bit of humor. This delightful example I found in a recent issue of the *American Psychologist*:

When a British electric substation broke down, a robot dialed the telephone operator and released the recorded message: "There is a fault at this power station. Please send repair men."

Nobody had told the robot the operator's dial number had been changed, however, so all day long a second robot at the other end kept instructing the first robot: "You no longer dial 'O' for operator. Please replace your receiver and dial '100.'"

I consider it a reasonable certainty that the public school of the future will be identified as an automated educational system.

When I speak of an automated educational system, I do not mean a school system by which all observations, efforts, and decisions are mechanical and automatic. I am talking about a school system in which routine observation, teaching, and curricular decision making are planned and programmed more deliberately and more openly than they are today, with technological innovation utilized to relieve school personnel of functions that are grossly mechanical or detailed.

To describe the state of automation I foresee, I will need to speak of three technologies. As I see it, there have been two modern technological revolutions in education already, and a third revolution seems sure to come. Oddly enough, these three revolutions have occurred in a backward way—as if we were working on the last part of the production line first.

Three major responsibilities of education are associated with Curricula, Instruction, and Evaluation. And aren't these the three *main* questions, once an educational commitment has been made? "What to teach them?" "How to teach?" "What was learned?"

The first major technological advancement, as I see it, was the standardization of testing. In a period of a very few years, educational evaluation became relatively precise. This revolution began over fifty years ago, well before many of the objectives and methods of instruction were properly specified.

For the second revolution I point to the current technological

reformation in instructional method, with its several new media and many new devices. If I had twice the time I have today, I would talk about some of these innovations: teaching machines, tab tests, team teaching, television, the inquiry techniques. All of these seem to have potential, but the success of any one medium or any one device is not crucial to my point. Some forms of instructional technology, perhaps those still to be invented, will have a considerable impact on the role behaviors of most teachers.

The third major technological reformation, the Ghost of Christmas Yet to Come, will be a reformation in the realm of curricula. You and I are aware that there is a curriculum reformation of magnitude in the country right now; but except for an involvement in instructional technology, the curriculum projects of 1964 bring changes in concepts rather than changes in technology.

The technological change with curricula will be such that materials will be selected and scheduled for an individual student according to an explicit decision-making technique. Someday such decisions will flow almost continuously, but at first they will be merely assignments of the student to classes according to schoolwide requirements, preferences for electives, and availability of space and teachers. Such technological steps are already appearing in Newton, Massachusetts; in New Brunswick, New Jersey; and in several schools here in California—perhaps in your communities. Your system qualifies as a prototype, whether or not you have access to a computer, if the emphasis is on curriculum planning at your school based on explicit, public rules for the resolution of goal conflicts. Rules for these decision-making processes will be rules devised by school administrators; but the implementation of these rules eventually will depend on a large-memory, high-speed computer facility.

In Dean Sorenson's terms, I personally am an advocate of scholastic goals identified with personal maturation and competence; but I believe that that effective confrontation with subject matter and enlightenment of the society, the alternate goal orientations, all three are likely to be better served by an automated system. Regardless of goal, curricular decisions are too many to be handled manually and too important to be handled extemporaneously. The automated system can extend the reach of the teacher, speed the flow of information and increase the impact of the learning experience.

In the remaining part of this paper I will speak of the teacher who reconstructs his functions and responsibilities. I will refer to

several roles which a teacher plays. I am not speaking of role expectancies, as was Dean Sorenson, but of a role as a cluster of functions which can be identified by reference to some stereotypical worker, such as the counselor, the examiner, or the clerk. I will indicate how a restructuring of roles can extend the teacher's effectiveness and, hopefully, bypass his ineffectiveness.

The teacher is not a stranger to role changes. Every once in a while a boundary gets changed, and some role is modified or even eliminated. As an example, refer to an untrue story. In the back pages of a recent journal for teachers appeared the following ad:

King James, Standard Revised Versions, Holy Bibles.
We mail to teachers in plain, brown paper.

Teacher Roles	Approximate Time	
1. Planner-Organizer	20%	10%
2. Manager-Manipulator	30%	15%
3. Informer	30%	10%
4. Observer-Recorder	10%	40%
5. Counselor	4%	15%
6. Motivator-Model	5%	10%

In this table I have listed six roles. I also have indicated some percentages of time spent in each role. Suggestions for role categories came from the writings of Dan Lortie of Harvard and David Ryans of System Development Corporation, but the list is merely illustrative of how one teacher may operate. Of course, we expect the percents to vary from subject matter to subject matter, from level to level, and from teacher to teacher. My purpose in showing this breakdown is not to show how a typical teacher spends his day but to illustrate the changes which may come with automation.

The first role reflects the most demanding responsibility of today's teacher, that of planning the school day. Guidepost curriculum decisions have been made: his professors and his books have indicated what seems most important to teach and, sometimes, how it should be taught; his colleagues and his professional groups have had a say; the school officials, the parents, and the students have expressed some ideas. But the course—by precedent, by default, or by choice—the course has belonged to the teacher.

Each day the teacher makes many decisions: not only what topics to cover; but what strategies of introduction, instruction, and evaluation; what teaching aids; when to do this and when to do that. And what side effects to strive for and which to avoid.

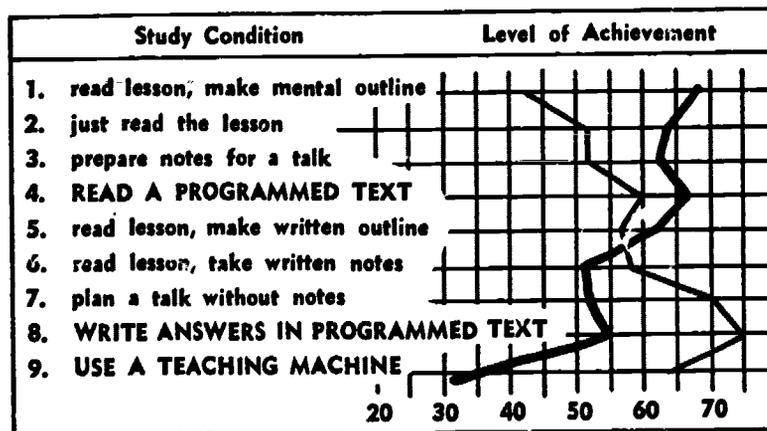
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There are thousands of decisions to be made. In lesson planning, the teacher anticipates a few decisions. A few commitments are made before classtime. Thousands of decisions are made during classtime. Often this decision-making performance is spontaneous, intuitive, nearly instinctive. In many instances it is beautifully done.

But in many instances it is done poorly. Done, it seems, without a thread of concern for individual differences. Done without the slightest comprehension of how a child learns. Or done with no awareness of the generality of the concepts or the pervasive structure of the subject matter.

Let me give you an example of some of the information I believe should be considered in curriculum planning. At Illinois I am on the staff of the Center for Instructional Research and Curriculum Evaluation. In a recent project we found some individual differences in achievement related to how much the study materials were organized for the learners. Let me show you results for two students.

FIGURE I



Here Miss M.H., represented by the heavier line on Figure I, a college freshman, studied equated materials ten different ways. Each study period was ninety minutes. The level of achievement is indicated by the distance to the right for each study condition. Please take a look at the list of study conditions. These at the top are conditions in which the student can approach his study quite passively. He doesn't have to write anything. If he is to study the lesson well, it appears that he must set his own pace, plan his own way.

These study conditions toward the bottom, except for #7 which seems out of place, require more active responding on the part of the learner. The materials can be digested in a perfunctory way; with an industrious student, perhaps like Miss M.H., doing all that is assigned but not learning very well. Miss M.H. appears to be a student who does her best when she can sit back and soak the material in, when she can organize the study operation herself.

Now take a look at the record of Miss C.R., represented by the lighter line on the same Figure. Here is a college freshman who does not do so well on the quizzes when she has been studying on-her-own, so to speak; but when provided with programmed material or when told to take a complete set of notes, she does better.

We did not pursue the matter further than nine sessions with these two students, but I believe we found two students who have different talents for study. Of course, we know quite a number of other ways in which students differ. Even on the same subject matter, it should be useful to assign different tasks to students who have different styles, different strategies, different perceptions, and different objectives.

The lesson planners of the future will consider differences in content, differences in aptitude, differences in interest, differences in experience. Ah, experience. Most teachers of today believe in enrichment, but how many can continue the development of a special topic assigned by another teacher? Last year Jonathan Beezley learned about Boolean algebra. Who is going to exploit this competence this year? If Jonathan Beezley is going to profit from his work with Boolean algebra, he must have opportunities to review it, to practice it, to adapt it to new circumstances, this year, next year, and the year after. Five minutes of review per month will keep a considerable body of Jonathan's knowledge accessible.

Most teachers are not able to provide this kind of curriculum service. I believe the automated system can. Though the teacher will plan and organize some activities in the future, I believe that this role will drop in prominence, and I have indicated a drop from 20% to 10%.

This second role, the manager-manipulator role, is the role the teacher plays while directing traffic, conducting routine recitations, drills, and repetitive demonstrations, showing movies, disciplining—in short, controlling the learning environment. I understand that it is the fear of the American Federation of Teachers that this is what

the teacher would do all of the time if teaching machines become widely used. As you can see, I believe that tomorrow's teacher will spend considerably less time manipulating equipment and herding students about. There will be more equipment and more traffic, but I believe the students and the system will be able to relieve the teacher from much of this duty.

Today's teacher sees himself as a carrier of knowledge, and so he is. My guess, as you see here, is that some spend a third of their time dispensing information: names, facts, relationships, sequences, analyses, syntheses, judgments; and a most important kind of information—feedback. The teacher is a veritable storehouse, and those who avail themselves can share in this wealth.

But is the teacher a good enough informer to justify the time a class now spends in lecture sessions, in classtime group guidance, and in classtime correction of misinformation? I think not. I am persuaded that at any one time no two pupils need the same information. It seems unreasonable to suppose that a single major source of information is the most efficient source of information that we can provide.

I predict that a future teacher may spend as much time in the informer role. He will be hard-pressed just to keep in touch with each student if the goals of individualized instruction are pursued. The responsibility for leading students in each new conquest of knowledge is too much to expect of every teacher.

The fourth role on the list is the observer-recorder role. I have estimated the time spent in this role as 10%; and I am aware that a teacher carries an immense record, mostly in memory, in this time. But, in the past, the emphasis on the teacher-as-observer has been slight. This surely will change. The teacher's most valuable assets, as far as an automated system is concerned, are as its eyes. Programmed instruction and current tests have too many blind spots. The teacher should be freed of many other jobs in order to evaluate how the system is working each day for each child. Though it may not be the teacher's job to amend the system, feedback from the teacher is essential information for it to be amended and revitalized. Observing, recording, judging, general trouble-shooting may take even half of the teacher's school day in tomorrow's school.

The last two roles are minor roles at the present, but roles that will become more prominent. A counselor is a perceptibly neutral party, available when a student faces an important dilemma or decision. The counselor may offer information or opinions, or may just listen,

but the value of his service is in terms of how well the issues come to be perceived. The teacher will probably be expected to take a more active part in counseling, with full realization, I hope, of the availability and value of highly trained colleagues to whom referrals can be made.

The psychologist and the educator differ on definitions of motivation. To the psychologist, to motivate is to activate. To the educator, to motivate is to inspire. The teacher does both, but I associate action-initiating with the manager role which has already been discussed. I am pointing now to a stirring of enthusiasm and personal commitment or, in a word, passion. I suppose that some of you may shudder at the thought of doubling the amount of passion in our schools. The point is, rather, that the teacher may spend double time sublimating more of that passion.

From research studies we learn that few students respond positively to moralizations and direct invitations to excellence. Yet teachers do succeed in stimulating young people. We need to learn more about the phenomena of aspiration and identification. We need to help individual teachers find those indirect acts which contribute to the social and moral maturity of students.

I have commented briefly on six changes which may come with increased educational technology, changes in emphasis on teacher activities. I have not been specific in several regards because I am quite unsure about what methods and machines to anticipate. In arriving at estimates of time to be spent in different roles I have made four assumptions:

1. That master teachers will be in at least as short supply as they are today.
2. That some automated procedures will be adopted to reduce our reliance on less competent teachers.
3. That the goals of education, whatever they may be, will be more effectively pursued if the decision-making process is based on explicit statements of priorities and alternatives.
4. That the goals of education, whatever they may be, will be more effectively pursued if the exchange of student information between educators is greatly increased.

It is a new spring at my home in Illinois. The burst of spring, where winter is long, is exciting to behold. Across the land, in education, too, there are exciting awakenings. Some of the most vibrant ideas today are coming from the curriculum projects: Project English,

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Beberman's work, PSSC physics.

It is surprising how many people think of these projects as remedial, projects for catching up, projects to provide a solid new course of study, projects to set the curriculum for the future. There is no catching up. Education is on the run. We won't want to teach tomorrow much of what we were proud to have learned yesterday and what we taught today. We will want to teach what we learned today.

Except for the unreconstructed teacher. The unreconstructed teacher will anchor himself in eternal verities, stretch himself before the onrushing innovators, block the road to any ideal but the ideal of the self-contained classroom. The unreconstructed teacher has the strength to block the effective use of our educational technologies. And he may succeed.

■ CHAIRMAN LARSON: The next presentation is titled "The Role of Testing in the Selection of Teachers of English." This presentation will be by Dr. Edward S. Noyes. You know this is really a special occasion that we are in for today, and maybe this is why he was placed last on the program. Dr. Noyes is seventy-two years old today and this makes this conference a birthday party. If I had the nerve I think I'd suggest that we sing happy birthday to him. Let's do it. (The group sang Happy Birthday.)

Dr. Noyes is a graduate of Yale University. He earned both his Master's degree and Ph.D. at Yale. He started his career in the educational world as a master in Greek, Latin, and English, at Morris Heights School for Boys, Providence, Rhode Island. He was a master in Latin and German at the Adirondack-Florida School. He was assistant in Instruction in English at Yale University and according to the next note, he was a private and sergeant in the United States Army Medical Corps in 1918 and 1919. He taught at Yale in a number of capacities. He, at the present time, is Vice-President of the College Entrance Examination Board in New York. I think without any more ado it is my pleasure to present Dr. Noyes.

MR. NOYES: Thank you very much Mr. Chairman. The real reason for putting me last on this program was the notion that a great many people would have gone by this time in the afternoon and that, as to the rest, we should live up to the words of one of our greatest modern poets that our world of this conference would end not with a bang, but a whimper.

A great many years ago, when I started reading comprehensive English examinations for the College Entrance Examination Board, one of the joys was the occasional discovery of what we call boners, or howlers. One that I met early in the game, I have treasured ever since. A young man wrote on his essay that Tennyson shows us, in his *Idylls of the King*, that if you have a purpose in youth, you can withstand the temptations of senility. Anyone celebrating the birthday that I am supposed to be celebrating today is obviously a prey to those temptations, and the greatest of these for the old, old, man is to keep on talking long after he has said everything that he has to say and so I have written out what I did plan to say. I want to warn you that it is not a scholarly job. I did no research for it. Had I done so, as I should have done, the speech would have been quite different. The program that I am proposing I now find was made in a somewhat different form to be sure, in May of 1959, only five years ago. It was replied to in *College English* for November 1960 by Mr. Benson, whom you heard this morning and Mr. Godshalk, also of Educational Testing Service. I have to claim, on the honor of aging gentlemen, that my idea came out of the blue so far as I am concerned. The mere fact that these two eminent gentlemen had thoughts of it earlier takes nothing away from this moment, so far as I am concerned. And it has occurred to me, also, that perhaps in the course of this talk I may be treading on some toes. I hope that you will all remember that a septuagenarian does not carry too much weight.

The Role of Testing in the Selection of Teachers of English

EDWARD S. NOYES

Three weeks ago, in the Virgin Islands, where I had gone as an Overseer of the new College to witness the installation of its president, I had a telephone call from my office to the effect that I must immediately propose a title for the talk I am to give today. Off the cuff—though not without some previous meditation—I said: The Role of Testing in the Selection of Teachers of English—and the die was cast. After all, I have either taught English or done something in the way of testing for most of my life, and I knew from reading last year's papers of the Western Conference on Testing Problems that it was fairly standard procedure for speakers at this gathering to depend a good deal on their own experiences. In the interest of brevity, I did not insert the limiting phrase "Secondary School" before the word Teachers in the title, but I intend so to limit my discourse. To what extent the remarks may be applicable to college teachers, I refuse to state, on the grounds that an answer might incriminate me.

This title, however—The Role of Testing in the Selection of Teachers of English—implies several assumptions, each of which is debatable. I propose to examine these assumptions first of all, in the hope that such examination will make it almost unnecessary to say anything about the topic itself except for a brief statement. Since this is the last of a series of papers, you may prefer picking out plums to the pudding as a whole.

The first assumption, obviously, is that testing *has* a role in the selection of English teachers. But is this true? One's answer depends upon one's definition of testing. Presumably, all teachers have gone through school and college; for sixteen years or more they have been exposed to tests of one kind or another. Even if the teacher-training institution they attended required no standardized tests for admission, they could not have escaped from examinations in their various courses, including English. Most of these they must have passed to have accumulated credit hours for their ultimate certification. In this sense, testing has a role, of an indirect kind, in the selection of all teachers, including those in English.

But we talk of teaching as a profession. In comparison with other

professions, such as law and medicine, there exists, to the best of my knowledge, almost no state-wide testing under professional supervision to determine the competence, prior to certification, of teachers, like the bar examinations in law or their counterpart in medicine. Instead, certification is based on securing credit hours in specified courses up to a required number. Though these courses all, presumably, have examinations, the examinations themselves, from institution to institution or even in the same institution, have not much in common. In my prejudiced opinion, the licensing of teachers in most states rests on certain premises that are palpably false: that passing a certain number of credit hours in a given subject denotes mastery of the subject as a whole; that courses in widely differing institutions, as long as they are all accredited, are of equal value, whatever grade in course was achieved; and that competence in a subject cannot be acquired except by passing a course therein so that credentials technicians can add up hours from a transcript. At this point, I raise the question whether testing, on a state-wide basis, ought not to have a role in selection which it now lacks. More of this, later.

A second assumption hidden in my title is that we know the characteristics that make a good teacher and can somehow assess an individual's possession of these qualities by tests. This assumption is as full of holes as the first one. I quote from the latest issue of the NASSP bulletin called *Spotlight*, No. 62, for March-April, 1964.

The best evidence is that there is no one set of practices that adds up to "good teaching"—no one set of competencies every teacher must possess.

That conclusion has put some researchers on a new tack—studying the teacher himself more than his practices. A massive research project in this direction was the *Teacher Characteristics Study*. (Published as *Characteristics of Teachers: Their Description, Comparison, and Appraisal*, by David G. Ryans.) Ryans and his staff finally found that the characteristics that mattered most could be grouped along three major scales:

1. From warm, understanding, friendly teacher behavior toward aloof, egocentric, restricted behavior.
2. From systematic, responsible, businesslike behavior toward evading, unplanned, slipshod behavior.
3. From stimulating, imaginative, surgent behavior toward routine, dull behavior.

They did not propose these three to comprise a "rating scale" but some schoolmen are adapting them to this purpose. There are

advantages: the three elements are fairly independent variables, each measuring something distinctive. And they avoid something of "good-bad" evaluation in favor of clinical description.

These three scales I find very interesting. I believe that personality tests exist which could establish with some accuracy the degree to which an individual is warm and friendly, at one end of the first scale, or aloof and authoritative, at the other end. Perhaps ETS's study of executive behavior will—or already has—come up with measures for the second scale—from systematic and businesslike to unplanned and slipshod behavior. The third scale, running from stimulating to dull, seems less likely to be testable except by direct observation of classroom performance, with all the hazards for accuracy of such subjective evaluation.

Let us assume for the moment, however, that tests exist by which teachers can be fairly placed along these scales. Where are we then? I think back, to the teachers I had in secondary school. The one from whom I learned most, as far as subject matter is concerned, was a Latin teacher named Miss Minerva Toland, long since gathered to her fathers. She was aloof, sarcastic, and routine in her behavior—very low, I think, on scales one and three—but eminently businesslike and systematic, near the top of scale 2. For two solid years I was terrified of her; after one searing experience, I worked like the dickens to avoid further tongue-lashing; as a result, I still know my first-year Latin and Caesar. In high school I also started Greek; my teacher, Mr. Davis, whom I loved as a person, would rate very high on scales one and two; a perfect gentleman, courteous, patient, friendly, and as systematic as all get out. On scale three, he would rate not above the middle: how stimulating can one be who tries to drill a class on the aorist tense or the middle voice of Greek verbs? Well, I continued Greek, but not Latin, in college; at present, the Greek has gone completely, the Latin is still with me.

My point is that even if we had tests as tools for locating people along these interesting scales we would not be sure what to do with the scores. A half century ago I would have ranked Mr. Davis as a good teacher, and Miss Toland far below him. I was not alone in this estimate; my class, with the cruelty and inaccuracy of schoolboys, was accustomed to chant "Tollo, Tollere, Topstory wanting" when we were out of Tollo's ear-shot. But if retention of what they taught is any criterion, I would now have to reverse my ranking. And I cannot

help being skeptical of the value of personality tests in the selection of teachers, whether of English or of any subject.

A third assumption latent in my title is that there exists a definable subject which we can call English. We cannot build tests until we know what we are testing. But this assumption, too, needs some examination. Under the umbrella of "English" huddle an amazing number of courses—upwards of 120, I am told, in California schools alone. In literature there are all sorts of types: by genres, like the novel, by periods, by themes, to say nothing of English, American, World, and Comparative literature. In composition, anything goes, from remedial work and business letters to creative writing. In grammar, there are several conflicting varieties, from traditional to transformational. And then, besides, there are speech, dramatics, debating, journalism, whether as courses for credit or as extracurricular activities; all are likely to be under the aegis of the Department of English. How in the world can such a heterogeneous assemblage be defined?

Efforts at definition are being made, and by a number of organizations. I have time to mention only two. Project English, in the Office of Education, is now sponsoring eleven English Curriculum Development Centers at as many colleges and universities. Some of these are quite specialized: for example, the Georgia center deals only with composition in kindergarten and elementary school. At the University of Wisconsin, however, Professor Robert C. Pooley directs a state-wide program to develop a sequential curriculum in English from kindergarten through grade 12, including the following elements: linguistics, logic, semantics, rhetoric, composition, literary analysis, and criticism. In order to come up with this package, it is clear that Professor Pooley and his colleagues have made a definition of English as, in their view, it should be in the schools; how acceptable that definition will be to others will depend upon the success of his program.

The College Board's Commission on English has also been working toward a definition of English for college-bound students. The Commission's final report is not yet completed, but judging from the courses of the twenty Institutes in English it sponsored in the summer of 1962, its definition will be deceptively simple: a combination, throughout the school years, of language, literature, and composition. I might point out that Professor Pooley's program, though far more detailed, can also be divided under these same three heads. There has been chaos in this area of what English is for so long that order

will not be restored for years; in fact, no rigid prescription of what is and what is not English is ever likely to be adopted nationally; it would be a grievous error if it were. No single, iron-bound program can possibly be equally useful to schools all over the country. And yet, I suspect that, with considerable variation among localities, there may come a general agreement that the three principal elements which the Commission has broadly identified should be represented throughout the elementary and secondary school curriculum in English. This will mean that teachers competent in all three—language, literature, and composition—must be found, and that their degree of competency should be assessed.

Here it may be worth recalling that the National Council of Teachers of English, after exhaustive investigation, found that many present teachers of English had not majored in English in college; that college majors usually required no courses in the history of the language or in linguistics, and none in composition after Freshman English, and in literature it was possible for an English major to have many gaps in his knowledge of either English or American literature or both. The Council's book, *The Teaching of English and the National Interest*, gives a distressing picture of inadequate preparation for teaching English in the secondary schools of even English majors in good colleges, and when one realizes that a third of those now teaching the subject had even less preparation, one is hardly surprised at the continuing complaints that undergraduate and graduate students don't know how to read effectively or write with clarity. I take these complaints with considerable salt: numbers do both, superbly.

For secondary school teachers, one year beyond the four of an undergraduate course is now required in many states. An increasing number of universities offer this fifth year in a program called Master of Arts in Teaching. At Harvard, the oldest and largest of these programs, and at several other universities the number of applicants considerably exceeds the number of places available. In such places, testing does play a role in the selection of English, as well as of other teachers. The tests used are sometimes the Miller Analogies, more often the GRE Aptitude Test, with special attention to the Verbal score, and occasionally (for prospective English teachers), the GRE test in Literature. But nowhere that I know of are the test scores the determining factor in selection; indeed, an MAT Director has written recently that he rejects candidates, no matter how high their GRE scores, if there is anything dubious in their college records.

A combination of such test scores and college records has proved to be a good predictor of grades in the MAT programs. To date, this is as far as we can go. Mr. Harvey, Assistant to the Dean, Harvard Graduate School of Education, writes as follows: "Lacking valid and reliable measures of success in a career, the admissions committee's implicit assumption seems to be that those persons most successful in the preparatory program (the MAT) will also be the most successful on the job."

Here is another assumption that needs to be examined carefully, even though I realize how difficult, if not impossible, it will be to secure adequate criteria. There is this empirical evidence: that principals and superintendents come in increasing numbers to offer jobs to MAT graduates.

And so, at long last, we come back to the topic as a whole. In the course of examining its assumptions, we have found that testing beyond the walls of a particular institution plays almost no role at present in the selection of teachers. The various MAT programs, or at least some of them, are exceptions to this rule when they use GRE or other nationally standardized tests, but they provide a very small proportion of the new teachers entering the schools each fall. Moreover, we are not quite sure of the ultimate value of testing even in the MAT programs. The Harvard admissions committee assumes that those who do best in the preparatory program will do best on the job; from my own experience with the Yale MAT I would accept this as a very broad generalization, but would expect many exceptions. Are we to conclude, then, that large-scale, standardized testing can never have a serious role to play?

I quote from Mr. Conant's 1963 book entitled *The Education of American Teachers*, especially from Chapter V. He is talking about the academic preparation of teachers of English.

In the field of literature there are essentially no stepping stones in a necessary order. The student can be introduced to the literary traditions, to genres, and to individual authors in many patterns. . . . Therefore the test of his total performance cannot rest . . . on his performance in individual course examinations, which can do no more than measure his assemblage of facts and his grasp of a circumscribed area. . . . Instead, the test should be a comprehensive examination, written or oral or both, occupying as many as 6 to 12 hours over two or more days, which will assess not only the student's storehouse of information but—what is more important—his grasp of the whole with its interrelated parts. . . . Such exami-

nations can be adequately framed and reliably judged. They are given successfully in many honors programs, and are required of all A.B. candidates in some institutions.

Matthew Arnold wrote of Sophocles that "he saw life steadily and saw it whole." I take it that Mr. Conant is asking prospective teachers of English to do the same thing in their own special field. I should make clear that in the passage quoted, Mr. Conant was putting the responsibility for such comprehensive examinations directly on the separate institutions. Rushing in where angels fear to tread, I suggest that such examinations could be constructed by committees of school and college English teachers in each state, and could be used at least as an alternative to the accumulation of courses and grades for certification. To avoid additional and unnecessary testing, applicants who had already in their own institutions passed comprehensive papers acceptable to the state committees would be excused.

There are any number of objections which such a scheme would raise. For one thing, there would probably be a considerable difference, from state to state, in the difficulty of such examinations. It could, however, hardly be wider than the differences which now exist among college transcripts. There would be the old cry against too much emphasis on tests, but this could be met by stressing the use of the college and practice teaching records in any final decisions. And there would be the cry that the "scholar"—the student making a high score on such an examination—might prove ineffective in the classroom. Like Mr. Conant, I would still lay great weight on practice teaching, prior to certification.

At the same time, there are possible advantages in such a program. It should help colleges and universities to look more realistically at their so-called teaching majors than they have hitherto looked. There is a kind of precedent in the Modern Language Association's series of tests of seven competencies for teachers of modern foreign languages. Results on this battery, I believe, are already accepted in some states for partial accreditation, in lieu of the computation of course credit hours. Very important, in my view, is the chance this scheme would give to the able student who has come to know Burns and Shelley and Keats because he loves them, not because he took a course in Romantic Poetry. The chances are good, I think, that some one with this kind of enthusiasm would communicate it to his class. I hasten to add that I do not intend to downgrade courses in Romantic Poetry—I once taught one—but to plead that there are other ways of

securing knowledge, both first hand and critical, which most certification procedures do not now recognize.

That such a plan of a comprehensive state-wide examination, embracing literature, language, and composition, would bring in the millennium in the teaching of English overnight I am not so naïve as to believe. There are still some poor lawyers who passed the bar examinations. This scheme would, at best, safeguard our schools and students from having too many teachers of English who know very little about English. From all I have read, it seems to me that a step of this kind towards professionalizing the teaching of English through giving to testing a somewhat more important role than it has hitherto played could well be a step in the right direction.

Conference List • 1964

- Douglas K. Allen, *Test Officer*, Fresno State College, Fresno, California
Harold Allison, *Principal*, Sir Francis Drake High School, San Anselmo, California
Earl B. Andersen, *Psychologist*, Belmont School District, Belmont, California
Melvin A. Angell, *Associate Dean of Students (Counseling and Testing)*, Fresno State College, Fresno, California
C. Denny Auchard, *Professor of Education*, San Jose State College, San Jose, California
Alden W. Badal, *Assistant in Research*, Oakland Public Schools, Oakland, California
John A. Barr, *Professor of Guidance*, San Jose State College, San Jose, California
Herschel Beahm, *Guidance Director*, Fort Bragg High School, Fort Bragg, California
Talcott Bates, Mrs., *Member, State Board of Education*, California State Department of Education, Sacramento, California
Paul E. Bender, *Director, General Services*, Western Office, Educational Testing Service, Berkeley, California
Arthur Benson, *Director, Teacher Examinations*, Educational Testing Service, Princeton, New Jersey
Richard Bissell, *Testing Coordinator*, Sequoia High School, Redwood City, California
Edward W. Bowes, *Coordinator of Statistical Studies*, Office of Educational Relations, University of California, Berkeley, California.
Edith Bowman, Mrs., *Guidance Supervisor*, South District, Los Angeles City Schools, Los Angeles, California
Howard A. Bowman, *Director, Evaluation and Research*, Los Angeles City Schools, Los Angeles, California
C. Weldon Bramlett, *Assistant Principal*, Monte Vista High School, Whittier, California
Robert A. Braund, *Assistant Professor*, Department of Education, University of California, Davis, California
Edward Brignall, *Counselor*, Roosevelt Junior High School, Oakland, California

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- Katherine Brownlie, *Personnel Director*, Western Office, Educational Testing Service, Berkeley, California
- Charles W. Bursch, II, *Associate Professor of Educational Psychology*, Portland State College, Portland, Oregon
- Cathleen Caffrey, Western Office, Educational Testing Service, Berkeley, California
- Robert G. Cameron, *Director*, Western Regional Office, College Entrance Examination Board, Palo Alto, California
- Richard W. Carey, *Consultant*, California State Department of Education, Sacramento, California
- Brother U. Cassian, *Dean of Men*, St. Mary's College, St. Mary's College, California
- Joan Chambers, *Coordinator of Guidance*, Hayward Unified School District, Hayward, California
- Marshall Chatwin, *Counselor*, Monterey Peninsula College, Monterey, California
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- Arvel Clark, *Administrative Assistant*, Instructional Services, East Side Union High School District, San Jose, California
- Edwin C. Clark, *Director of Research*, Burbank Schools, Burbank, California
- Arthur Coladarci, *Professor of Education and Psychology*, Stanford University, Stanford, California
- Dorice Conway, *Testing Specialist*, Palo Alto Unified School District, Palo Alto, California
- Margaret Crowley, *Supervisor of Guidance*, Los Angeles City Schools, Los Angeles, California
- Roger W. Cummings, *Test Officer*, Chico State College, Chico, California
- J. R. Cunningham, *Test Officer*, Counseling Center, Humboldt State College, Arcata, California
- William P. Cunningham, *Headmaster*, Menlo School, Menlo Park, California
- Gordon F. Davies, *Associate Professor of Education*, California State College, Hayward, California
- Fred M. DeBruler, *Northwest Regional Representative*, Educational Testing Service, Seattle, Washington
- Mrs. Clinton Dickison, *Teacher Education Chairman*, California Congress of Parents and Teachers, Los Angeles, California
- Marvin N. Dillon, *Dean of Counseling and Testing*, Sonoma State College, Rohnert Park, California

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- Melvin Dunn, *Psychologist*, Chula Vista City School District, Chula Vista, California
- Arnold J. Edman, *Director of Counseling*, Monterey Peninsula College, Monterey, California
- Rev. Wade Egbert, San Rafael Military Academy, San Rafael, California
- Charles R. Farrar, *Chairman*, Division of Education, Stanislaus State College, Turlock, California
- T. J. Fitzgibbon, Carmel, California
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- Richard O. Fortna, *Professional Associate*, Advisory Services, Western Office, Educational Testing Service, Berkeley, California
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- Phyllis Goldman, *Psychometrist*, Contra Costa College, San Pablo, California
- Garford G. Gordon, *Research Executive*, California Teachers Association, Burlingame, California
- Charles E. Godshall, *Assistant Principal of Guidance*, La Serna High School, Whittier, California
- Lois Guernsey, *Director of Testing*, Simpson Bible College, San Francisco, California
- Helen C. Gunter, *Coordinator of Testing Research and Publications*, San Mateo City Schools, San Mateo, California
- J. Richard Harsh, *Southern California Representative*, Educational Testing Service, Los Angeles, California
- Harrison F. Heath, *Test Officer*, San Jose State College, San Jose, California
- Robert W. Heath, *Director of Research*, Western Office, Educational Testing Service, Berkeley, California
- John S. Helmick, *Vice President*, Educational Testing Service, Princeton, New Jersey
- Fred Humiston, *Counselor*, City College of San Francisco, San Francisco, California
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