
Testing for Teacher Certification

Edited by

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National Evaluation Systems

TESTING FOR TEACHER CERTIFICATION

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and
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PREFACE

Testing for Teacher Certification is a compilation of papers, none of which have been previously published, on a topic that has emerged as one of the most challenging of this decade. The subject matter ranges across the technical and legal issues surrounding teacher certification testing, program administration, and the history and future of certification testing.

The book will be of interest to state education department staff, deans and faculty of colleges and departments of education, state legislators with an interest in educational issues, classroom teachers and school administrators, and boards of education on both the state and district levels.

Testing for Teacher Certification is comprehensive and current. We hope it serves as an introduction to this critical area for those who have not encountered it in the past and as an update of the field for those with more direct experience.

The staff at National Evaluation Systems, Inc. (NES) hope that the book meets its goal of furthering the intelligent discussion of this topic.

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—Michael Chernoff for NES

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INTRODUCTION

Overview of Teacher Certification

Few developments in recent educational history have generated as much interest as the use of tests in the certification process for prospective teachers. By the end of 1984, approximately 38 states had begun using some kind of test as part of their certification procedures. Although a few states remain that do not use tests, it is fair to say that every education department in the country has seriously considered implementing such a program.

The topic is familiar to those in professional education circles, especially those who specialize in teacher education. Among classroom teachers, the use of tests has aroused considerable controversy. Teacher certification testing has also generated interest in the professional measurement community, which follows credentialing programs and techniques regardless of field.

Although the public at large typically does not pay attention to debates on educational policy, the topic of teacher testing has attracted significant public attention. Indeed, it was public pressure that helped launch several teacher certification testing programs. Public concern about teacher skills arose at times because of grammatical and other errors in notes or reports teachers wrote to parents. This concern sparked a demand for stricter standards. Highly visible and well-publicized incidents involving public pressure were not, however, the only incentive for teacher certification testing.

PURPOSE OF THIS BOOK

This volume contains chapters that review teacher certification testing from a number of different perspectives. The discussions include technical, legal, logistical, and administrative views of the topic. The material presented should be of value to several audiences:

1. *State education department staff.* Personnel directly involved in teacher certification issues will find much of interest in this volume, as will personnel at the policy-

making levels. The responsibility for establishing a policy and a set of fundamental guidelines for testing programs often rests with individuals at the state commissioner and associate commissioner levels. This book should prove valuable to those in the testing and evaluation bureau who may or may not have direct responsibility for a certification program, but who often have an opportunity to participate in the design and implementation of such an effort.

2. *Faculty and deans of teacher education institutions.* As one of the chapters in this volume points out, a population most directly affected by teacher certification testing programs is the faculties of colleges and universities that educate prospective teachers. Although the introduction of a testing program in a given state is by no means an indictment of teacher preparation, the testing programs are often viewed as a further incursion into the independent right of schools to certify their graduates to teach in the classroom. On the other hand, there is no doubt that in individual states, a concern for the quality of teacher preparation in at least some institutions has helped convince state policymakers that a statewide testing initiative is required.

Regardless of the reasons for beginning teacher certification testing, these programs have direct effects on teacher educators. And teacher educators have been among the most vocal participants in the discussion about the merits of teacher certification testing.

3. *Professional measurement specialists.* Academicians and others involved in the measurement of mental abilities and knowledge have played a prominent role in designing and providing expert consultation in the development of many teacher certification testing programs. The tests seek to measure some stated characteristics or attributes of individual candidates. This objective brings up the traditional issues of concern in test development: the statistical analyses of results, the validity and reliability of individual items and of tests as a whole, and so on. Members of this professional community should, therefore, find many of the chapters in this book of interest, particularly those dealing with technical issues.

4. *Classroom teachers.* Although the programs covered by this book do not test practicing classroom teachers (indeed, that policy is rare), classroom teachers and their professional organizations (e.g., The American Federation of Teachers, The National Education Association) initially were among the populations most apprehensive about certification testing. Recently, both organizations have discussed the value of a national examination for teachers. And, at least with the customized, criterion-referenced programs that are a focus in this volume, teachers are active participants in both test design and development.
5. *Lay public.* These chapters were not written for the general public. Nonetheless, with rare exception, they are accessible to the interested general reader. Because of the wide range of topics discussed in this book, including the history of certification practices as well as some of the more direct policy issues, citizens can obtain a useful introduction to teacher certification testing. It is ordinary citizens, after all, who pay the taxes that support education in their states and whose children are directly affected by teacher quality.

ACCOUNTABILITY

In general, as accountability in education becomes more important, the impetus for testing prospective teachers grows. There is heightened sensitivity across the country to the results of classroom instruction and to the various components that determine its quality. As a result, there has been a reawakening of interest in student testing as a means of verifying that effective instruction has taken place. All elements of school budgets are receiving greater scrutiny. And teachers, as the critical ingredient in instruction, are the focus of attention to accountability that results from competency testing.

BEYOND REGULATION

It is common to think of teacher certification testing programs as existing primarily for regulatory purposes. State agencies, including departments of education, have an obligation to protect the interests and welfare of the citizens in their jurisdictions. In the case of education, this includes the responsibility to ensure that all teachers in the classroom have the requisite skills and knowledge to perform adequately. The state's responsibility to license teachers

is not in question. The tests are a fairly recent and increasingly important aspect of that licensing process, but they are by no means the only criterion by which prospective teachers are evaluated.

On the other hand, there is much that teacher certification testing programs can do to move beyond simple regulatory functions. In many of the programs discussed in this book, the test development process includes an explicit definition of the content taught in the classrooms of a given state. This content definition process provides personnel in the state education department and teacher training institutions with a tremendous amount of information about the objectives that a curriculum should include in order to prepare teachers for their jobs. By carefully reviewing the content of classroom instruction and the aggregate test results of their graduates, teacher training institutions can bring their own teacher training programs into closer alignment with classroom practices throughout the state. Through the test development process, state education departments have a vehicle for evaluating whether state-mandated curricula are, in fact, being taught in the classroom. In short, the test development process and the scores achieved individually and in aggregate by examinees offer a large amount of detailed information to a state interested in reviewing its educational practices and policies.

This theme is explored in more detail in several of the chapters in this volume, and it reflects a mature attitude toward teacher certification testing, one that extends far beyond the mere classification of candidates into “pass” or “fail” categories.

TRENDS FOR THE FUTURE

Current Options

At present, a state initiating a teacher certification testing program has three options for obtaining the tests.

CUSTOM DEVELOPMENT

An agency can contract to have tests developed on a custom basis. This entails a set of test questions keyed to objectives validated through a job analysis survey conducted in the state. Moreover,

all of the objectives and test items would be written new for that agency. This approach is represented to a large extent by the programs described in the chapters of this book.

OFF-THE-SHELF TESTS

A state agency can make arrangements for an off-the-shelf testing program to be administered to its candidates. In this situation, the agency accepts the tests and test administration policies as given; there is no opportunity for modification or control by the state. The National Teacher Examination (NTE), offered by the Educational Testing Service, is an example of this approach.

MODIFIED CUSTOMIZATION

In this approach, a state agency works with existing test materials but has the ability to modify, adapt, or augment those tests at the item and/or objective level. Also, modified customization typically allows the agency to control the policies governing test administration. The approach combines elements of customization with the use of existing test materials.

The Shift to Modified Customization

Based on a review of states considering teacher certification testing programs, there appears to be increasing interest in the modified customization approach. While the specifics vary from state to state, agency staff cite several reasons.

REGULATORY ISSUES

As licensing examinations, tests for initial certification invoke governmental and professional standards and regulations. To be legally defensible, a test should be based on a job analysis of incumbent teachers in a given state and only those items judged to be content valid should be used. The job analysis identifies those objectives that classroom instruction requires in the state. The modified customization approach often includes a job analysis

whereas the off-the-shelf approach does not. The ability to modify test items can create a more content valid test reflective of the state's certification laws.

IMPROVEMENT OF TEACHING QUALITY

Certification testing occurs in a context of other policies designed to improve education in general. To the extent a program is customized, it is more likely to serve these other policies and goals. Again, this approach is more similar to that taken in fully customized programs as opposed to off-the-shelf products.

FUNDING

The funding issue has two sides.

1. *Initial expense*—Modified customization provides a state with a program at a cost less than that of customized development.
2. *Use of examinees' fees*—Modified customization gives the state control over the fees collected as a part of test administration. In an off-the-shelf program, where all fees go to the vendor, these fees are not available to the agency for other activities. The revenues generated in a modified customization program can be used to fund development in low incidence fields, to create support materials for examinees and teacher education institutions, and to pursue other goals.

POLICY CONTROL

As in a custom program, modified customization gives the agency control over all policies governing the administration of the tests, including dates, size and nature of the fees, sites, score report formats, use of test data for research, and security. This is in contrast to off-the-shelf programs.

There seems to be a trend toward the use of the modified customization approach in testing programs for the initial certification of teachers. The approach appears to be appealing to state education agencies because it includes the several benefits of a fully customized approach but without the initial test development expense.

TCT PROGRAM TYPES

Different states give teacher certification tests at various points in an individual's career. The variety of types of tests given is reflected in the content of this book.

TIMING

Tests are generally required twice in an individual's career. The first is at entry to a teacher education program. Here the test typically is one in the basic skill areas of reading, writing, and mathematics. Second, tests are often required upon completion of one's training but before the award of a certificate. The professional and content area skills and knowledge tests normally fall into this category.

CONTENT MEASURED

The tests used in teacher certification also vary in content. The major categories are as follows:

1. *Basic skills.* Many states test applicants for teacher education programs in the basic skills of reading, writing, and mathematics. Successful performance in these areas is considered a prerequisite to adequate participation in the teacher education program. The writing test usually involves a writing sample and less often multiple-choice questions about writing mechanics. The mathematics and reading tests are normally multiple-choice in format.
2. *Content areas.* Although most observers would agree that knowledge of subject matter alone is not a sufficient prerequisite for effective classroom teaching, it is certainly a necessary one. Therefore, at the point of certification, many states test individuals on their content knowledge of the field for which they seek a certificate.

Typically, the content areas tested reflect the structure of the certificates awarded by a state. This is especially true for those states that have developed their own custom programs. In these states, such as Oklahoma, tests are prepared for certificate areas. Oklahoma currently offers 79 different tests in such areas as elementary education,

science, home economics, industrial arts, and journalism. The program in Oklahoma and the one under development in Texas are among the most extensive.

States that have adopted the National Teacher Examination (offered by the Educational Testing Service) are limited, of course, to the approximately 28 content tests offered in that program.

It should be noted that several states use these content area tests for teachers who are already certified and are seeking additional certificates.

3. *Professional skills.* Teacher education programs convey a set of professional skills that transcend the differences among individual academic areas. Consequently, many states test certification candidates, at the conclusion of their college experience, in the professional skills deemed necessary for classroom performance. These skills include familiarity with standard reference and information sources, lesson planning, classroom management techniques, learning theories, and other general pedagogical topics.
4. *Other (e.g., general knowledge).* A smaller number of states test graduates in their general knowledge and background in the liberal arts. The purpose of these tests is often worded vaguely; for example, the purpose may be presented as trying to ensure that the teacher is a "well-educated" individual. Despite the difficulties in defining the content base for such a test, several states do assess teaching candidates' general knowledge.

The kinds of tests mentioned above are all precertification events, that is, tests to be passed as a part of becoming a licensed teacher. Testing certified, practicing teachers is a very different matter, one that has been attempted in only a handful of states. Some states (e.g., Arkansas) have recently implemented programs to test current teachers in the basic skills of reading, writing, and mathematics. This program is distinguished by the fact that real penalties will occur for teachers who do not eventually pass the examination. A number of other states, notably Texas, are beginning programs with similar characteristics. These highly controversial

initiatives are too new for much, if any, reflective experience to have accumulated. They are therefore only indirectly covered by the chapters in this volume.

A number of states are considering the use of their content tests as a part of career ladder programs for teachers. These programs offer professional advancement opportunities to a teacher who meets a number of criteria, including passing a content test in his or her subject field. Again, since career ladder testing components are so new, they are not dealt with in this book.

CLINICAL ASSESSMENT

States also require student teaching experience as a condition of certification. Moreover, some states have extensive clinical classroom assessment procedures with beginning teachers. The Georgia program, under the direction of Lester Solomon, is quite advanced in this regard. Beginning teachers are closely supervised and provided support and counseling on a regular basis and in a variety of formats. Readers interested in more information should contact the Georgia State Department of Education.

DIFFERENT COMBINATIONS

Individual states vary in the number and types of tests they use in their certification programs. The most common are the basic skills tests used for admission to a teacher training program, the content knowledge tests administered at the point of certification, and the professional skills tests also given at the point of certification. The most common testing scenario includes, therefore, a basic skills test to enter a teacher education program and both a professional skills and content field test at exit, that is, at the point of certification.

SOURCES OF TESTS

From a psychometric perspective, there are two types of tests used in teacher certification programs. The first is norm-referenced tests, which are typically used as a way of comparing one candidate with another in an admission situation. These tests are not normally tied to specific learning objectives and therefore yield only a total test score for examinees. The most widespread example of this type of test is the National Teacher Examination (NTE), a set of tests prepared and administered by the Educational Testing Service (ETS).

The NTE provides no breakdown of test content into subareas of any kind. The tests were prepared by ETS for use on a national basis, and their content reflects the content of teacher training programs across the country. States that adopt the NTE are obliged to validate the tests against state standards and to attempt to establish the job relatedness of the instrument for classroom requirements in the state. The NTE, a “shelf” product, is never altered to reflect the specific concerns or needs of a given state.

In contrast, many states use criterion-referenced instruments, which are most valuable for comparing an individual against a specified standard of performance or knowledge. These tests are tied to specifically defined learning objectives and therefore yield detailed subtest scores and other diagnostic information. Members of both the legal and measurement professions generally agree that criterion-referenced tests are more appropriate for credentialing situations. Indeed, criterion-referenced tests along with their benefits are the themes of many of the chapters in this volume.

Many of the criterion-referenced programs are developed and administered by National Evaluation Systems (NES) of Amherst, Massachusetts. The tests and programs developed by NES are customized to the policies and certificate areas of the individual states. The tests yield detailed subarea scores and diagnostic information for individual examinees and the institutions that train them. In order to establish a valid basis for test development, the test instruments are based on a review of curriculum materials used in classrooms in the state and on job analysis surveys of practicing teachers.

Source of Materials

The chapters in this book were originally presented as papers at two major conferences. The first and more important was a conference entitled “Testing for Teacher Certification,” sponsored by National Evaluation Systems in 1985 and held in Chicago. This presentational conference brought together state education department staff and technical experts in relevant fields. The second conference was a National Council on Measurement in Education