

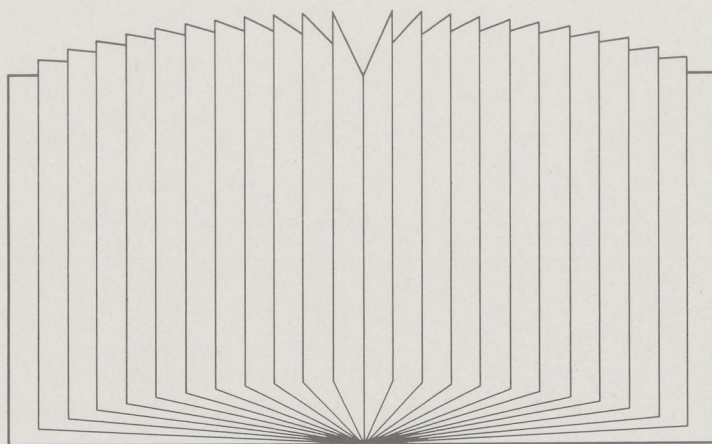
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# EXCELLENCE IN EDUCATION

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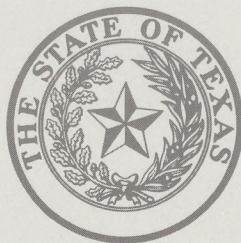
EXAMINATION FOR THE CERTIFICATION OF  
— EDUCATORS IN TEXAS (ExCET) PROGRAM



*Texas Education Agency*

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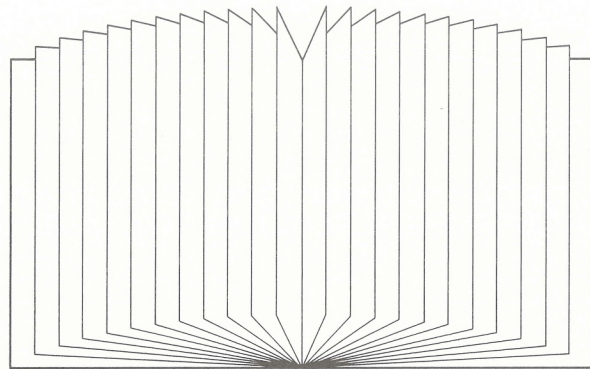
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# EXCELLENCE IN EDUCATION

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EXAMINATION FOR THE CERTIFICATION OF  
EDUCATORS IN TEXAS (ExCET) PROGRAM



*Texas Education Agency  
Office of Teacher Assessment  
Austin, Texas*

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*W. N. Kirby  
State Commissioner of Education*

## PREFACE

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In this document, the Texas Education Agency and National Evaluation Systems, Inc., communicate to interested parties general information about the Texas teacher certification testing program. This program is called the Examination for the Certification of Educators in Texas (ExCET). This publication offers an overview of the test development process, test validation procedures, and test administration policies and procedures and an indication of the benefits realized by examinees, teacher education institutions, and the state.

This document does not provide detail on the aspects of test development and administration. For such information the reader is referred to the registration bulletin, study guides, question and answer brochure, and other materials which can be obtained from the Texas Education Agency. Questions should be addressed to:

Office of Teacher Assessment  
Texas Education Agency  
1701 North Congress  
Austin, Texas 78701  
(512) 463-9525

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# CONTENTS

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READER'S SUMMARY .....	1
Program Scope .....	1
Program Benefits .....	1
Test Development Process .....	4
Test Administration .....	4
Summary .....	5
OVERVIEW .....	7
Nature of the Testing Program .....	7
TEST DEVELOPMENT PROCESS .....	9
Texas Orientation .....	9
Program Goals and Design .....	9
Content Frameworks and Objectives .....	11
Job Analysis and Objective Selection .....	11
Item Specifications .....	13
Test Items .....	13
Field Test .....	13
Bias Review .....	13
Content Validation .....	14
Determination of Passing Scores .....	14
AVOIDANCE OF TEST BIAS .....	15
Bias Review Process .....	15
TEST ADMINISTRATION .....	17
Registration Process .....	17
Test Administration .....	17
Test Scoring .....	17
Score Reporting .....	20
SUPPORT FOR EXAMINEES AND TEACHER PREPARATION INSTITUTIONS .....	21
Before Test Administration .....	21
After Test Administration .....	23
SUMMARY .....	25

## READER'S SUMMARY

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The Texas Education Agency contracted with National Evaluation Systems, Inc., of Amherst, Massachusetts, to design and develop 63 separate tests for the Examination for the Certification of Educators in Texas (ExCET) Program. These tests and their administration procedures have been designed to meet professional standards for certification testing programs. Since program inception, they have been subject to review from both legal and technical standpoints and have won the respect of educators both in and outside the state. Texas's program is one of the most extensive criterion-referenced teacher certification testing programs in the United States and serves as a model for programs in other states.

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### PROGRAM SCOPE

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The ExCET Program is substantial in scope. Each of 60 different certification areas identified by the Texas Education Agency required an individual content test; in addition, three professional development tests were needed (see the tables in this section). Thousands of practicing Texas teachers, teacher educators, and teacher candidates provided information about their actual classroom responsibilities to form a job-related foundation for the tests. In addition, over one thousand Texas educators, including classroom teachers and members of school of education faculties, worked on committees with National Evaluation Systems and the Texas Education Agency to prepare test content, review and revise the more than 14,000 test questions (or test items) that were written for the program, validate test content, and provide recommendations for passing scores.

### PROGRAM BENEFITS

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The program designed and implemented by the Texas Education Agency and National Evaluation Systems offers the state of Texas a number of benefits. Some of these are briefly described below.

- *Consistency with Texas educational policies and practices.* The State Board of Education Rules for Curriculum (TAC 75), State Board of Education Rules for Teacher Education (TAC 137), and adopted textbooks were the foundation of test content. Texas educators were actively involved throughout the development process.
- *Texas control of program policies and requirements.* The Texas State Board of Education determines all policies related to test development and administration.
- *Equity to examinees.* Equity to examinees is a critical guiding principle of the program. The tests have been carefully reviewed to ensure that they are free of bias. The tests have been designed to measure only content knowledge that educators themselves judge to be essential aspects of classroom teaching. Both the test objectives and the test items were reviewed by persons sensitive to equity issues in educational materials. The passing scores were set by the State Board of Education. Furthermore, all policies governing the administration of the program have been designed to provide an equitable opportunity for success to all candidates.

Required Tests by Certificate Area

Certification Area	Required Tests	
	Professional Development Test	Content Specialization Test
A. Elementary	Elementary	Elementary Comprehensive
B. Secondary		
Art	Secondary	Art
Biology	Secondary	Biology
Chemistry	Secondary	Chemistry
Composite Science	Secondary	Composite Science
Composite Social Studies	Secondary	Composite Social Studies
Earth Science	Secondary	Earth Science
Economics	Secondary	Economics
English	Secondary	English
Geography	Secondary	Geography
Government	Secondary	Government
Health Education	Secondary	Health Education
History	Secondary	History
Industrial Arts	Secondary	Industrial Arts
Life/Earth Science	Secondary	Life/Earth Science
Mathematics	Secondary	Mathematics
Music	Secondary	Music
Physical Education	Secondary	Physical Education
Physical Science	Secondary	Physical Science
Physics	Secondary	Physics
Vocational Agriculture: Production	Secondary	Vocational Agriculture: Production
Vocational Agriculture: Horticulture	Secondary	Vocational Agriculture: Horticulture
Vocational Home Economics	Secondary	Vocational Home Economics
Speech Communication	Secondary	Speech Communication
Theatre Arts	Secondary	Theatre Arts
Dance	Secondary	Dance
Reading	Secondary	Reading
Journalism	Secondary	Journalism
Spanish	Secondary	Spanish
French	Secondary	French
German	Secondary	German
Latin	Secondary	Latin
Computer Information Systems	Secondary	Computer Information Systems
Business Composite	Secondary	Business Composite
Basic Business	Secondary	Basic Business
Business Administration	Secondary	Business Administration
Secretarial Business	Secondary	Secretarial Business
Marketing Education	Secondary	Marketing Education
Psychology	Secondary	Psychology
Sociology	Secondary	Sociology
C. All-Level		
Art	All Level	All-Level Art
Music	All Level	All-Level Music
Physical Education	All Level	All-Level Physical Education
Special Education - Speech and Language Therapy	All Level	Special Education - Speech and Language Therapy
Special Education - Hearing Impaired	All Level	Special Education - Hearing Impaired

**Required Tests for Endorsement or Delivery System Certificates**

<b>Endorsement Area</b>	<b>Required Test</b>	<b>Other Requirements</b>
Bilingual Education	Bilingual Education	Elementary Certificate Requirements*
Early Childhood (a.k.a. Teachers of Young Children, Elementary Option IV)	Early Childhood	Elementary Certificate Requirements*
English as a Second Language	English as a Second Language	1) Elementary Certificate Requirements* OR 2) Secondary Certificate Requirements**
Generic Special Education	Generic Special Education	1) Elementary Certificate Requirements* OR 2) Secondary Certificate Requirements**
Kindergarten	Kindergarten	Elementary Certificate Requirements*
Learning Resources	Learning Resources	1) Elementary Certificate Requirements OR 2) Secondary Certificate Requirements
Visually Handicapped	Visually Handicapped	1) Elementary Certificate Requirements* OR Secondary Certificate Requirements** AND 2) Generic Special Education***
Severely and Profoundly Handicapped	Severely and Profoundly Handicapped	1) Elementary Certificate Requirements* OR Secondary Certificate Requirements** AND 2) Generic Special Education***
Severely Emotionally Disturbed and Autistic	Severely Emotionally Disturbed and Autistic	1) Elementary Certificate Requirements* OR Secondary Certificate Requirements** AND 2) Generic Special Education***
<b>Notes:</b>		
* Elementary Certificate Requirements include the Elementary Professional Development test and the Elementary Comprehensive test.		
** Secondary Certificate Requirements include the Secondary Professional Development test and any of the Content Specialization tests.		
*** Special Education Certificate Requirements include the Generic Special Education test and either Elementary Certificate Requirements or Secondary Certificate Requirements.		

**Required Tests for Professional Certificates**

<b>Certification Area</b>	<b>Required Test</b>
Learning Resources Specialist	Learning Resources
Reading Specialist	Reading Specialist
Counselor	Counselor
Educational Diagnostician	Educational Diagnostician
Supervisor	Supervisor
Mid-Management Administrator	Mid-Management Administrator
Superintendent	Superintendent



- *Support for candidates and teacher training institutions.* The program includes many components in addition to the tests. It offers diagnostic score reporting and provides useful additional information (e.g., annotated objectives, study guides, and an instructional guide) to candidates and teacher education institutions both before and after testing.

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## TEST DEVELOPMENT PROCESS

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The test development process incorporates a series of steps to ensure the high quality of the materials. These steps are described below.

1. *Policy review.* Relevant Texas laws, the Texas Essential Elements, teacher education program standards, adopted textbooks, and other instructional policies and documents were reviewed in preparation for test development.
2. *Advisory committees.* In each of the 63 test areas a separate advisory committee, composed of Texas public school teachers and teacher educators, was formed to review materials for content and equity issues, and to assist in setting passing scores for the tests.
3. *Content frameworks.* A content framework (or content outline) was prepared for each content area.
4. *Objectives.* Objectives were created based on the content framework for each content area.
5. *Framework and objective review.* Each advisory committee reviewed and revised the content framework and objectives for its test area.
6. *Objective correlation study.* Each approved test objective was correlated with one or more Texas Essential Elements, teacher education program standards, or adopted textbooks.
7. *Job analysis surveys.* Thousands of Texas classroom teachers and teacher educators completed extensive job analysis surveys in which they rated the importance of each proposed objective to the classroom responsibilities of teachers. In addition, teacher education program students were asked in a separate survey to indicate whether they had had an opportunity to learn the content described by the objectives.
8. *Objective selection.* The results of the job analysis surveys in each content area were reviewed by the advisory committees; using these results, the committees selected the objectives to be tested.
9. *Item specifications.* Test item specifications describing the specific content to be measured by each test objective were written.
10. *Item specifications review.* The advisory committees reviewed and revised the item specifications.
11. *Test items.* A bank of test items was written for each test area based on the approved objectives and the item specifications.
12. *Item review.* The advisory committees reviewed and revised the test items that were prepared.
13. *Field test.* All test items were field tested at colleges and universities throughout the state.
14. *Field test results review.* The advisory committees reviewed the field test results and used them to refine the test items.
15. *Bias review.* All test items were reviewed for potential bias by a panel of minority educators in Texas. Field test results and item statistics were used in flagging items for potential bias.
16. *Content validation.* A second group of Texas classroom teachers and teacher educators was convened to validate further the content of the test items.
17. *Recommended passing scores.* A panel of Texas classroom teachers and teacher educators reviewed the tests and recommended passing scores.
18. *Set passing scores.* Final passing scores were set by the State Board of Education.

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## TEST ADMINISTRATION

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The Texas Education Agency and National Evaluation Systems administer the tests within a policy framework that provides each examinee a convenient and standardized test environment while ensuring the security of the test materials. Moreover, the score reports provide diagnostic information to candidates,

the teacher preparation institutions they attend, and the Texas Education Agency. The score reports are designed to be informative and helpful to the examinees by identifying areas of strength and weakness in their preparation. Score reports also provide useful information to teacher preparation institutions; the institutions can use this information to assess the correspondence between students' instructional programs and test requirements. An instructional guide to the ExCET Program is provided to each institution as a support device in accomplishing this assessment. Examinees may retake the tests as many times as they wish, using diagnostic score information to guide their remedial work.

From the point of initial registration through test administration and receipt of score reports, all

examinees are treated with courtesy and professionalism. Questions and requests are promptly answered.

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## SUMMARY

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The ExCET Program is part of the fabric of educational improvement in Texas. Because it benefited from the extensive input of Texas educators, the testing program reflects the essential content knowledge for a beginning educator in each teaching field. All materials and procedures were designed to be free of bias and were carefully reviewed to ensure they remained so. Moreover, the program is entirely under state control; all policies of the testing program are Texas policies.

## OVERVIEW

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The ExCET tests were designed to be a Texas-controlled testing program. Multiple reviews by National Evaluation Systems, several committees of Texas educators, and Texas Education Agency curriculum specialists addressed the issues of job-relatedness and avoidance of bias. Every test objective and item has been related directly and empirically to actual instructional requirements in Texas classrooms.

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### NATURE OF THE TESTING PROGRAM

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The ExCET Program assists the Texas Education Agency in identifying those candidates for certification who have attained the knowledge required to perform satisfactorily in Texas classrooms. The tests are criterion referenced; that is, they measure a candidate's knowledge and skills in relation to an established standard of competence (criterion). The tests measure a clearly defined set of objectives, all of which were reviewed and approved by Texas educators. Further, job analysis surveys of thousands of practicing Texas educators ensured that the objectives proposed for each field described content knowledge that was appropriate and reasonable to expect of an entry-level educator. Each individual's performance on an ExCET test is evaluated against an established standard of competence derived from information supplied by Texas educators.

**Initial certification.** A candidate for initial certification must pass the appropriate subject-matter certification test and a test of professional development.

**Additional certification.** Individuals seeking to add a certificate must pass the appropriate subject-matter certification test.

**Program support materials.** The Texas program includes a number of documents that are publicly available. These documents are designed to support the program by providing useful information to examinees, schools of education, and policy makers. Materials include the following:

- a registration bulletin;
- a question and answer brochure;
- study guides for each certification area;
- annotated test objectives for each certification area;
- a non-mastered objectives report; and
- an instructional guide to assist teacher preparation faculty.

Requests for materials should be directed to the Texas Education Agency.

# TEST DEVELOPMENT PROCESS

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The test development process incorporates the fundamental goals that characterize all aspects of the Texas program. More than a thousand Texas classroom teachers and teacher educators participated in review activities. Thousands more responded to job analysis surveys that established an empirical link between the test objectives and actual classroom practice. The test development process incorporates the goals of equity and support for all candidates that are central to the Texas program. The resulting 63 tests bear the unique stamp of Texas.

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## TEXAS ORIENTATION

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The Texas Education Agency consistently reviewed plans and procedures, made suggestions, and approved every detail of the test development process. Each advisory committee, which met several times during development, included approximately ten practicing Texas educators and teacher education faculty members knowledgeable in the content area. The Texas Education Agency selected participants based on recommendations from educators within the state, including professional organizations. Diverse geographic regions and cultural and ethnic groups were represented on the committees. The committees and content validation panels worked with content frameworks, objectives, and test items that had been based on Texas materials in order to ensure that the tests accurately reflect practice in Texas schools.

## PROGRAM GOALS AND DESIGN

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National Evaluation Systems worked closely with Texas Education Agency staff to design the program. Every decision reflected several goals, including the following:

- to develop tests specifically for Texas examinees based on the unique needs and requirements of the state;
- to provide the state with the information required to support certification decisions;

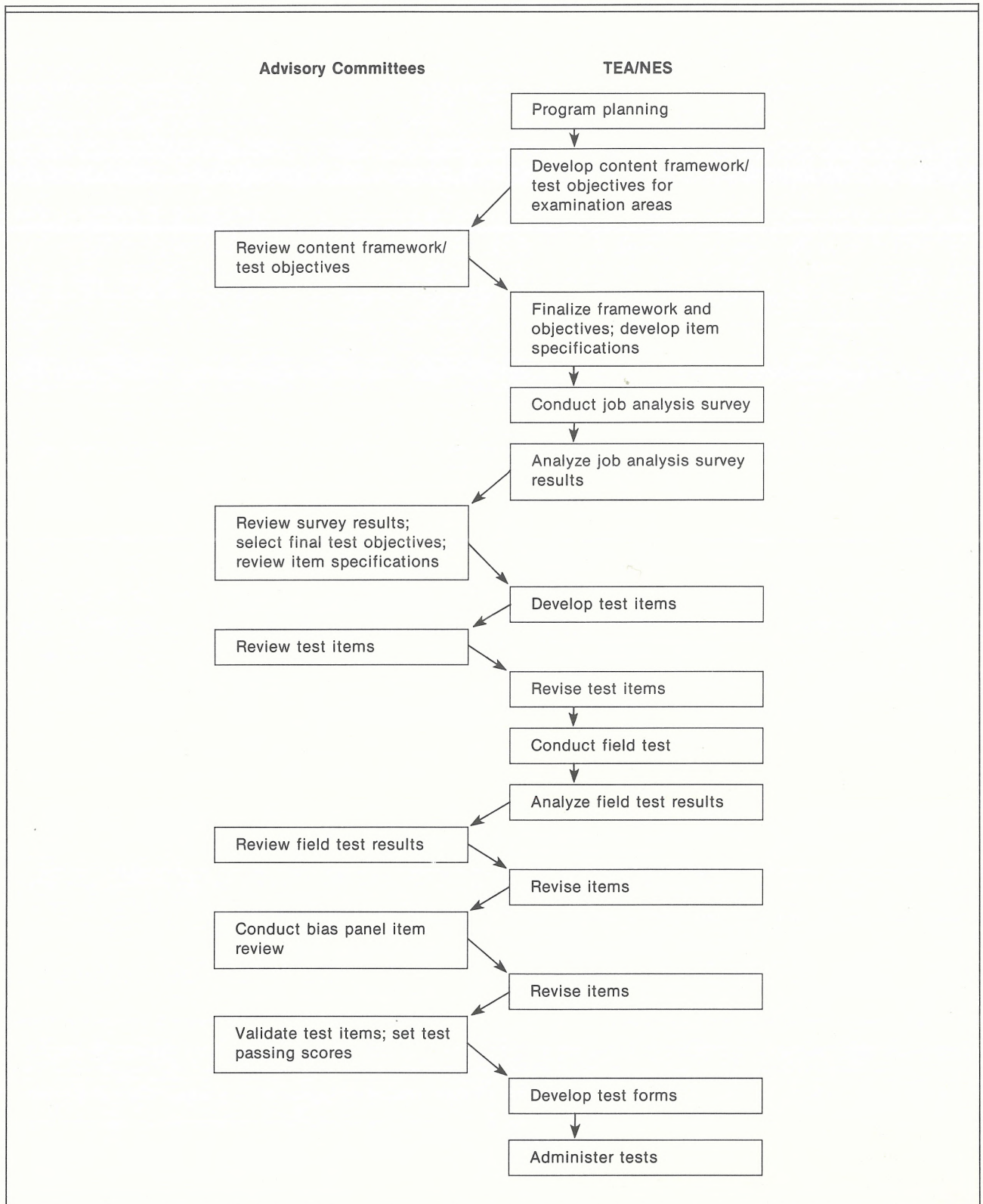
- to support education improvement initiatives by providing the necessary support materials to examinees to help them prepare for the tests and interpret their results and to teacher education programs to help them relate test results to their instructional programs;
- to develop tests that are equitable to all examinees;
- to offer all examinees uniform and positive testing experiences; and
- to provide state policy makers with information to guide program and policy modifications.

Texas Education Agency and National Evaluation Systems staff met to discuss the program in detail and design the test development process; central to the design was the involvement of large numbers of Texas classroom teachers and teacher educators.

The tests were developed in two phases. During the first phase (1984 to 1986) 34 tests were developed; during the second phase (1985 to 1987) 29 tests were developed. Similar procedures were used for both phases of test development.

The ExCET Program includes two types of tests. The first is a test of professional development measuring knowledge of instructional methods (e.g., planning, design, evaluation) and related areas of education. The second measures knowledge of the subject-specific content in each area of certification. The registration bulletin indicates the specific tests that are required in each certification area.

## Examination for the Certification of Educators in Texas (ExCET) Test Development Process



National Evaluation Systems staff collected and studied a wide variety of Texas materials before writing the frameworks and objectives. These included the State Board of Education Rules for Curriculum (TAC 75), State Board of Education Rules for Teacher Education (TAC 137), adopted textbooks used in Texas classrooms, and other Texas curriculum materials.

## CONTENT FRAMEWORKS AND OBJECTIVES

The Texas Education Agency identified the certificate fields for which tests would be prepared. In cooperation with professionals in each content field, National Evaluation Systems constructed content frameworks and objectives to define the content eligible for testing.

**Draft content frameworks.** National Evaluation Systems outlined the major content subareas in each field and defined the major topics within each subarea in order to create a comprehensive content framework. National Evaluation Systems reviewed and edited the frameworks for comprehensiveness, content coverage, organization, level of specificity, clarity, accuracy, and freedom from bias.

**Draft objectives.** National Evaluation Systems prepared objectives to match each topic in the content frameworks. These were reviewed and edited by content experts and National Evaluation Systems editorial staff.

**Advisory committee review.** The Texas advisory committees reviewed the draft frameworks and test objectives. The committees worked on a consensus basis, and the committee chairperson and National Evaluation Systems representative for each committee documented the revisions.

**Objective correlation study.** The final set of advisory committee-approved objectives was reviewed against the Texas Essential Elements, teacher education program standards, and adopted textbooks. Each objective was correlated with one or more of these materials to ensure that all proposed test objectives had a foundation in Texas educational practice.

## JOB ANALYSIS AND OBJECTIVE SELECTION

Certification tests should be designed to reflect the performance activities required of incumbents; i.e., such tests should be job related.

**Teacher survey.** The ExCET Program met this goal by surveying certified, practicing Texas educators in each field. National Evaluation Systems constructed survey forms containing the approved objectives. Survey respondents indicated whether they taught or used the given objectives and, if so, how **important** they thought each one was to the job and how much **time** they spent teaching or using it.

The survey group in each certificate area was a statistically selected sample of approximately 200 Texas educators from all those certified and practicing in that field in Texas. Each sample was selected to reflect the diversity of ethnic and racial groups and geographic regions in the state. The response rate for the job analysis was nearly 80 percent, extraordinarily high for mailed survey instruments.

**Teacher educator and student surveys.** National Evaluation Systems also surveyed both teacher educators and students in teacher education programs throughout the state. Teacher educators reviewed the objectives and indicated whether they taught the content or expected students to know the content and how important the content was for educators to know. Students indicated whether they had had an opportunity to learn the content.

**Review of job analysis and selection of objectives.** National Evaluation Systems analyzed the job analysis survey results statistically and produced, by subarea within each field, a list of objectives judged by Texas educators to be job related. The advisory committees reviewed the results of the job analysis survey and formulated recommendations regarding the objectives eligible for testing in each field. These recommendations were submitted to the Texas Education Agency for approval. The complete final set of approved objectives in each test field is made available to candidates and to teacher education institutions before administration of the tests.

Examination for the Certification of Educators in Texas (ExCET)  
Sample Objectives

FIELD 717: SECONDARY MATHEMATICS OBJECTIVES

SUBAREAS

Basic Principles of Mathematics  
Algebra and Advanced Mathematics  
Geometry and Trigonometry  
Applications

BASIC PRINCIPLES OF MATHEMATICS

- 717--001 **Understand characteristics and properties of real numbers.**  
Includes properties of natural numbers, whole numbers, integers, rational numbers, and irrational numbers; mathematical operations; the order of operations; and properties of real numbers.
- 717--002 **Understand characteristics and properties of complex numbers.**  
Includes the properties and use of basic operations with complex numbers.
- 717--003 **Identify the graphic representation of numbers.**  
Includes line, polar coordinate, and coordinate graphs (on the Cartesian or complex plane).
- 717--004 **Understand equivalent forms of expressing value.**  
Includes equivalent forms of fractions, mixed numbers, percents, decimals, scientific notation, and Roman numerals, and expanded forms of whole numbers and decimals.
- 717--005 **Understand principles of measurement and approximation.**  
Includes basic principles and units of measurement systems; measurement problems; and problems involving estimation, precision, and accuracy.
- 717--006 **Understand the basic concepts of number theory.**  
Includes the fundamental theorem of arithmetic, the division algorithm, and concepts of factors and multiples.
- 717--007 **Understand the propositional calculus.**  
Includes the validity of logical statements, propositions using logical connectives, and problems involving truth tables or conditional statements.
- 717--008 **Apply principles of inductive reasoning.**  
Includes terms and characteristics of inductive reasoning, and the use of inductive reasoning in proofs.
- 717--009 **Apply principles of deductive reasoning.**  
Includes terms and characteristics of deductive reasoning, and the use of deductive reasoning in proofs.

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## ITEM SPECIFICATIONS

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To provide a definition of the content to be measured within each objective selected for testing, National Evaluation Systems developed item specifications. The item specifications provide information to guide test item writers in selecting the particular content to be tested for each objective.

**Draft item specifications.** Using the Texas Essential Elements, teacher education program standards, and adopted textbooks, National Evaluation Systems developed item specifications that describe the specific content to be tested for each objective and the areas of the objective to be emphasized. The draft specifications were reviewed by National Evaluation Systems for content accuracy, editorial quality, and freedom from bias.

**Committee review.** The Texas advisory committees met to review the item specifications in their fields. The committees reviewed and revised the specifications to make sure they matched the objectives, reflected important content that educators should know on the job in Texas, were accurate, and were free from bias.

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## TEST ITEMS

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National Evaluation Systems staff used the selected objectives and corresponding item specifications as a "blueprint" for developing test items for each field. This process ensures that the tests cover important content elements in a certificate field; each test measures a representative sample of the content knowledge required on the job.

**Technical writing.** National Evaluation Systems editorial and test development experts applied relevant criteria such as item-objective match, significance of content, accuracy of content, freedom from bias, editorial style and consistency, and psychometric quality in training professionals in each field to write the items and in reviewing and editing each item. From 200 to 400 items were written for each field.

**Committee review.** At their third meeting, the Texas advisory committees reviewed the draft items in their individual fields. National Evaluation Systems revised the items based on a consensus of committee judgments.

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## FIELD TEST

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**Field test administration.** National Evaluation Systems conducted a field test of all the tests. The tests were administered to juniors, seniors, and graduate students in Texas teacher preparation programs and to some first-year classroom teachers and interns in alternative certification programs in the state. National Evaluation Systems analyzed the field test results statistically to identify test items that might require revision. National Evaluation Systems also conducted a statistical analysis of test items for potential bias.

**Review of field test results.** The Texas advisory committees met for a fourth time to review the results of the field test and refine test questions as necessary. Test questions with certain specified field test results were flagged for review by the committee.

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## BIAS REVIEW

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Steps were taken throughout the test development process to eliminate potential bias in the tests. National Evaluation Systems staff received an orientation in bias prevention techniques and draft materials were reviewed for potential bias. The Texas test development advisory committees reviewed the objectives, item specifications, and test questions for potential bias. As an additional measure to eliminate potential bias, a bias review was conducted by a panel of minority educators in Texas.

**Statistical potential bias analysis.** Following the field test, National Evaluation Systems analyzed the results using a statistical procedure for identifying potential bias. This procedure compares the performance of examinee groups on each item and flags items with significant differences for further review.

**Bias review meeting.** The Texas Education Agency selected more than 100 minority educators in Texas to review for potential bias all items in the 63 test



areas. Panel members reviewed all items, including those flagged based on the statistical analysis; items were reviewed for potential language and content bias, representativeness of content, and absence of stereotypes.

### CONTENT VALIDATION

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The Texas Education Agency selected content validation panels of approximately ten educators in each field, similar in composition to the original advisory committees, for a validation of each item. The new panels reviewed each test item and rated it on several criteria, including potential bias and importance to the job. Because the objectives had been selected on the basis of job analysis results and

the items measured those objectives, independent panel validation helped ensure that the test items were directly related to content knowledge required by Texas classroom teachers.

### DETERMINATION OF PASSING SCORES

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**Panel recommendations.** The validation panels also helped to provide information upon which to set passing scores. The panel members who performed this task independently reviewed the items and provided ratings to be used in establishing passing scores. National Evaluation Systems analyzed these ratings statistically and calculated preliminary passing scores. The Texas State Board of Education considered the preliminary information and established the final passing scores for the tests.

## AVOIDANCE OF TEST BIAS

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Fairness to all examinees is of concern in the Texas program. To reflect an examinee's knowledge of the content of a teaching field, the wording of individual test items should not mislead any examinee, and the content measured by the test should reflect the overall content of the teaching field. Test items should contain neither wording nor content that may offend or disadvantage any examinee because of gender, race, ethnicity, age, religion, handicapping conditions, or cultural, economic, or geographic background. To this end, sources of potential bias were guarded against in designing the testing program for Texas.

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### BIAS REVIEW PROCESS

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Test development incorporated repeated reviews by experts in the content measured by the tests. To identify potential bias, reliance was not placed solely on mathematical formulas; these cannot substitute for professional judgments. Statistics calculated for test questions and total test content were used to support and inform professional judgments; by indicating test items that might require professional review, the statistics pointed reviewers toward areas of potential bias.

Under the supervision of the Texas Education Agency, National Evaluation Systems took the following steps, among others, to eliminate bias from the 63 tests used in the ExCET Program.

- The test development process incorporated multiple checks and reviews by qualified experts.
- The Texas advisory committees and validation panels were constituted to reflect racial, sexual, ethnic, and regional diversity.
- The Texas Education Agency continually reviewed development procedures to identify issues of potential concern to groups in the population.
- The primary sources of information in defining the content of each test were the Essential Elements, teacher education program standards, adopted textbooks, and curriculum materials used

in Texas classrooms. These sources were used to establish a link between test content and job content for all examinees.

- Publicly available written objectives explicitly define the content of each test. All objectives were reviewed for potential bias by Texas educators.
- Incumbent teachers in each certificate field participated in job analysis surveys. The surveyed population was statistically sampled in order to represent diverse Texas constituencies.
- For each teaching field, Texas advisory committees reviewed the results of the job analysis surveys and used these data to select test objectives that reflect critical elements of a teacher's responsibilities in Texas.
- Every item for each of the 63 tests was written and edited by individuals oriented to avoid bias in testing.
- Advisory committees of Texas content experts reviewed every item in each teaching field for potential bias.
- A panel of minority educators reviewed each test item specifically for potential bias.
- A validation panel of Texas educators in each teaching field assessed every item as a further step in establishing the validity of the test. Panels specifically reviewed every test item for bias.

- Each item was field tested to identify any that might need additional review and revision.
- National Evaluation Systems conducted statistical analyses of potential bias in test items during the development process and continues these analyses on a regular basis to identify for review any items with potential bias.
- National Evaluation Systems solicits and follows up on comments by examinees concerning the wording of individual test items.
- Objectives and study guides containing sample items are published and made available to all examinees before the exam.
- All examinees receive detailed diagnostic reports of their performance on the test.
- The Texas Education Agency makes study guides available to all examinees so that they can focus their preparation for the test.
- All schools of education receive reports describing the performance of their candidates in each field.
- Policies relating to administration of the ExCET tests are designed to ensure uniform and bias-free procedures for all examinees.
- Examinees are permitted to retake the tests at regularly scheduled administrations as often as they wish. Feedback from prior tests can be used to focus test preparation activities.
- During test administrations, all examinees are permitted to use as much time as reasonably needed to finish the test.

## TEST ADMINISTRATION

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The goals of test administration are security, fairness, and convenience. The ExCET Program is designed to meet these requirements in its registration process, test administration, test scoring, and score reporting.

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### REGISTRATION PROCESS

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All examinees and teacher education faculty members have available to them advance information regarding the testing program. The ExCET registration bulletin helps to accomplish this task by describing the test and by providing all necessary information to candidates. The bulletin is updated annually to include new test dates and any changes in policy or procedures.

After examinees complete the registration form and submit it to National Evaluation Systems, they receive a letter acknowledging the receipt of their registration form. One to two weeks before the administration, registered examinees receive an admission ticket that provides information on the location of the test site, a seat number, and the exact time of the test session.

Two to three weeks before the administration, each college or school of education receives a roster of those of its examinees who are registered to take the test. The school or college is asked to review the roster to verify that all registered candidates are eligible to take the test and are associated with their institution. This procedure is used so that only examinees who are eligible for the test are permitted to take it. This also helps to ensure that the list of students for each school is accurate.

### TEST ADMINISTRATION

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National Evaluation Systems administers the test at least three times a year at approximately 20 sites in Texas. At all sites and for all administrations, examinees receive identical instructions for taking the test. They are permitted ample time to complete the test. Representatives from National Evaluation Systems monitor each test administration and train test administrators.

### TEST SCORING

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National Evaluation Systems staff check all answer sheets before scoring them by computer to make sure they are complete and free from stray marks. The statistical results for each item on each test is generated before score reports are produced. National Evaluation Systems checks the computer-generated scores against a sample of hand-scored answer sheets to verify the accuracy of the computer scores. The Texas Education Agency and National Evaluation Systems review items with specific statistical results; any action necessary to ensure fairness is taken. Only after these steps have been taken are examinees' score reports printed.

## Examination for the Certification of Educators in Texas (ExCET) Teacher Training Institution Score Report

EXAMINEE PERFORMANCE SUMMARY REPORT: TEXAS UNIVERSITY **(A)**

DATE TEST TAKEN: MAY 24, 1986  
TEST TAKEN: (04) ELEMENTARY COMPREHENSIVE

THE SUBAREAS ON THE TEST ARE AS FOLLOWS:  
**(B)** +++++ 1 = LANGUAGE ARTS  
 +++++ 2 = MATHEMATICS  
 +++ 3 = SCIENCE  
 +++++ 4 = SOCIAL SCIENCE  
 ++ 5 = FINE ARTS  
 + 6 = HEALTH AND PHYSICAL EDUCATION

**(C)** + = 11-20    ++ = 21-30    +++ = 31-40    +++++ = 41 OR MORE QUESTIONS PER SUBAREA

INSTITUTION: **(D)** 4 EXAMINEES TOOK THE TEST 3 PASSED ( 75%) 1 FAILED ( 25%)  
 STATEWIDE: **(D)** 585 EXAMINEES TOOK THE TEST 422 PASSED ( 72%) 163 FAILED ( 28%)

SSN	EXAMINEE NAMES	PASS/ FAIL	TOTAL TEST	SUBAREA					
				1	2	3	4	5	6
<b>(E)</b> 044481901	ARVANITIS	d PASS	93	89	97	93	100	69	100
255254402	COLLINS	TONY E FAIL	66	66	60	83	75	100	50
258760934	DE HUJOS	JERRY T PASS	93	94	97	79	100	69	100
<b>(F)</b> 587803772	LAKSEN	MINA A PASS	89	84	93	79	92	69	100
<b>(G)</b> INSTITUTION AVERAGE			85	83	87	84	92	77	88
STATEWIDE AVERAGE			76	71	75	73	83	65	83

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TOTAL TEST AND SUBAREA SCORE DESCRIPTION AND CAUTIONS

QUESTIONS ON THE TEST ARE GROUPED INTO MAJOR CONTENT SUBAREAS. BOTH TOTAL TEST AND SUBAREA SCORES ARE REPORTED HERE. ALL RESULTS ARE REPORTED AS SCALED SCORES. A TOTAL TEST SCALED SCORE OF 70 IS REQUIRED TO PASS THE TEST. PASS/FAIL STATUS IS DETERMINED ONLY BY THE TOTAL TEST SCORE, NOT BY THE SUBAREA SCORES.

CAUTIONS:

- RESULTS REPORTED FOR ONLY A SMALL NUMBER OF EXAMINEES MAY NOT PROVIDE A VALID INDICATION OF HOW EXAMINEES AT AN INSTITUTION TYPICALLY PERFORM.
- BECAUSE RAW SCORES ON THE SUBAREAS ARE SCALED SCORES BASED ON DIFFERING NUMBERS OF QUESTIONS, THE AVERAGE OF THE SUBAREA SCORES MAY NOT EQUAL THE TOTAL TEST SCORE.
- SUBAREA SCORES ARE BASED ON FEWER QUESTIONS THAN THE TOTAL TEST SCORE AND MAY BE LESS RELIABLE AS INDICATORS OF PERFORMANCE.
- INDIVIDUAL EXAMINEE RESULTS ARE CONFIDENTIAL AND ARE TO BE USED ONLY FOR THE PURPOSE OF DETERMINING ELIGIBILITY FOR CERTIFICATION. USE OF THE TESTS TO COMPARE CANDIDATES FOR HIRING OR PROMOTION DECISIONS IS INAPPROPRIATE.

FOR FURTHER INFORMATION, CONSULT THE EXCET INSTRUCTIONAL GUIDE OR CALL THE TEXAS EDUCATION AGENCY OR NATIONAL EVALUATION SYSTEMS.

- (A)** This is the summary report for examinees from Texas University who took the Elementary Comprehensive Test on May 24, 1986.
- (B)** There are six subareas on the Elementary Comprehensive Test.
- (C)** Subareas 1, 2, and 4 are given the most emphasis on the test; each of these subareas includes more than 41 test questions.
- (D)** Three of the four examinees who took the test at this institution passed. Of the 585 examinees in the state who took the test, 422, or 72%, passed and 163, or 28%, failed.
- (E)** Tony Collins did not pass the test with a score of 66. Subareas in which performance was weak were Language Arts (66), Mathematics (60), and Health and Physical Education (50).
- (F)** Mina Larsen passed the test with a total test score of 89.
- (G)** On the average, students at this institution received a passing score of about 85. This score is higher than the score of students statewide.

## Examination for the Certification of Educators in Texas (ExCET) Individual Examinee Score Report

**"DID NOT PASS" LETTER**

**EXAMINATION FOR THE CERTIFICATION OF EDUCATORS IN TEXAS**  
INDIVIDUAL EXAMINEE REPORT

**PAT A. BAILEY**  
301 FAIRVIEW ST  
HOUSTON TX 77027

Examinee Number: 7046219  
Report Date: July 19, 1986

Dear Examinee:

You did not pass the Elementary Comprehensive test on May 24, 1986. Your score on the test was 68. The passing score is 70. test that you took

Questions on the test you took are grouped into primary content subareas corresponding to the list of objectives for your field. Your performance in each subarea is presented in the table below. Your total test performance is also shown. Because the number of test items in each subarea is not equal, the average of the subarea scores may not equal the total test score. See the back of this score report for further explanation of how to interpret your scores.

# OF ITEMS	SUBAREA NAME	YOUR SCORE	PERFORMANCE GRAPH
+++	Language Arts.....	66	*****
+++	Mathematics.....	70	*****
++	Science.....	100	*****
+++	Social Science.....	57	*****
++	Fine Arts.....	76	*****
+	Health and Physical Education.....	66	*****
<b>TOTAL TEST.....</b>		<b>68</b>	<b>*****</b>
+ = 11 to 20 items		++ = 21 to 30 items	: = 31 to 40 items
+++ = 41 or more items		**** = 41 or more items	***** = 70 100

You may retake the test as many times as you wish. The next test will be given in October. The deadline for registration is September 6, 1986. Registration information is available from the State Board of Education, Publications Office, 1701 North Congress Ave., Austin, TX 78701. Consult the study guide for this field for further information on how to prepare for the test. Contact your college advisor for recommended resources to consult in preparing for the test. Certification is granted only when all requirements have been met.

**"PASS" LETTER**

**EXAMINATION FOR THE CERTIFICATION OF EDUCATORS IN TEXAS**  
INDIVIDUAL EXAMINEE REPORT

**PAT A. BAILEY**  
301 FAIRVIEW ST  
HOUSTON TX 77027

Examinee Number: 7046219  
Report Date: July 19, 1986

Dear Examinee:

You have passed the Elementary Comprehensive test on May 24, 1986. Your score on the test was 72. The passing score is 70. test that you took

Questions on the test you took are grouped into primary content subareas corresponding to the list of objectives for your field. Your performance in each subarea is presented in the table below. Your total test performance is also shown. Because the number of test items in each subarea is not equal, the average of the subarea scores may not equal the total test score. See the back of this score report for further explanation of how to interpret your scores.

# OF ITEMS	SUBAREA NAME	YOUR SCORE	PERFORMANCE GRAPH
+++	Language Arts.....	76	*****
+++	Mathematics.....	70	*****
++	Science.....	100	*****
+++	Social Science.....	57	*****
++	Fine Arts.....	66	*****
+	Health and Physical Education.....	66	*****
<b>TOTAL TEST.....</b>		<b>72</b>	<b>*****</b>
+ = 11 to 20 items		++ = 21 to 30 items	: = 31 to 40 items
+++ = 41 or more items		**** = 41 or more items	***** = 70 100

If you do not currently hold a Texas teacher certificate, you must apply through the Certificate Office at your college or university. If you are already an out-of-state certificate holder, you must obtain an application from the Texas Education Agency, Teacher Certification Division. If you currently hold a Texas teacher certificate in one field, and wish to add another certificate or endorsement, you must have a deficiency plan from a Texas college or university; upon completion of the deficiencies, you must file an application through that college or university. All applicants for a Texas teacher certificate must complete Form TEA-3009. Certification is granted when all requirements have been met. For more information, contact the Texas Education Agency, Teacher Certification Division, Austin, TX 78701, (512) 463-8976.

## SCORE REPORTING

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Extensive and clear reporting of test results is a hallmark of the ExCET Program. Certification testing contributes to the improvement of education in Texas by providing examinees and teacher educators with clearly presented, useful information. The score reports incorporate diagnostic information for identifying areas of strength and weakness.

**Reports to individual examinees.** Each examinee receives a letter that indicates his or her pass/fail status, describes performance in each of the major content subareas of the test, and shows the approximate number of test items in each subarea (see sample). The subareas are the same as those listed in the published objectives. This information is invaluable to individual examinees for determining areas in which they may require further study.

**Reports to teacher education institutions.** National Evaluation Systems reports test results to teacher education institutions within six weeks after the test administration. The institutions receive rosters of their examinees for each test; the roster lists student performance in subareas of the examination as well as on the total test (see sample). Average scores for examinees on each test aggregated for the institution and for the entire state are provided for comparative reference. This summary information helps teacher education programs assist examinees in improving their performance in areas of weakness and serves as a basis for program review.

**Reports to the Texas Education Agency.** After each administration, the Texas Education Agency receives a series of score reports aggregating and summarizing

performance across the state. These reports include a roster of examinees who took the examination in each test area and their total test and subarea performance. National Evaluation Systems also reports the average score on each test and in each subarea for examinees throughout the state. The Texas Education Agency certification office receives only a list of passing candidates.

In addition, National Evaluation Systems provides the Texas Education Agency several other summary reports, including the following:

- a statewide summary report listing pass/fail rates by field;
- an alphabetical roster of all examinees tested that indicates their pass/fail status and total test scores;
- a data tape listing all passing candidates for use by the Texas Education Agency certification office;
- a summary of pass rates for each test area by institution; and
- a summary of pass/fail rates by sex and race.

**End-of-year summary reports to institutions and the Texas Education Agency.** At the close of each school year, National Evaluation Systems forwards to institutions and the Texas Education Agency a variety of reports summarizing information for all test administrations during the year. These reports are disseminated to institutions throughout Texas for use in curriculum review and program planning.

**Non-mastered objectives report.** This report is among the most useful provided as a part of the ExCET Program. The report lists those objectives with which examinees statewide encountered the most difficulty.

## SUPPORT FOR EXAMINEES AND TEACHER PREPARATION INSTITUTIONS

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The examinee is the center of attention in the ExCET Program. Through sensitivity to examinee needs and administrative procedures that are efficient, fair, and professional, the program supports this interest.

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### BEFORE TEST ADMINISTRATION

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**Texas-based development.** A fair and job-relevant test is the greatest service to examinees. The candidate can be confident that the ExCET tests are based on a job analysis conducted among Texas educators. Test content reflects the job content that the candidates will need to practice in Texas.

**Support publications.** One major benefit of a test program based on stated objectives is the support it can provide both the examinees and the teacher education institutions that are helping them prepare for careers in education. Several program publications provide information and direct assistance to examinees and their institutions.

- *Question and answer brochure.* This brochure describes the basic parameters of the testing program and answers the questions most commonly asked about it. Tens of thousands of copies have been distributed throughout the state.
- *Annotated objectives.* Lists of the objectives upon which each test is based are available through the Texas Education Agency or the teacher preparation institutions. The lists are organized by subarea and contain all objectives eligible for testing, as well as a summary of the content covered under each objective. The examinee, thus aware of the domain of content for the test, may identify areas requiring further study or

coursework and may focus preparation for the examinations.

- *Non-mastered objectives report.* This document assists examinees by indicating to them in advance the objectives that have traditionally proven the most difficult for other candidates. It may be used to target areas of content for special emphasis during preparation.
- *Study guides.* Candidates for certification have access to test study guides through departments and schools of education and the Texas Education Agency. Study guides are available for each test field; they include information on how to prepare for the test, a list of the test objectives for the field, and sample questions with explanations of the correct answers.
- *Instructional guide.* National Evaluation Systems prepares and distributes to each college and university a guide to the ExCET Program. This guide assists teacher educators to interpret ExCET score reports and to help students prepare for the ExCET tests.
- *Registration bulletin.* Before actually taking a test, a candidate generally has many questions about the test development process, state education policies, administration policies and procedures, and even about which specific tests to take to acquire a teaching certificate. The ExCET registration bulletin provides complete information on these matters.



Examination for the Certification of Educators in Texas (ExCET)  
Non-Mastered Objectives Report

## FIELD 99: CONSUMER ECONOMICS\*

<u>AVERAGE SCORE</u>	<u>OBJECTIVE</u>
	I. FUNDAMENTAL MATHEMATICS
58	004 Understand concepts of numbers in a job-related context (e.g., place value, conversions, rounding).
59	007 Apply basic knowledge of measurement and measurement units in a job-related context.
49	008 Solve job-related problems involving integers, including whole numbers and negative numbers.
53	011 Solve job-related problems involving fractions, decimals, and percents.
55	017 Solve job-related problems involving measurement (including metric measurements).
59	018 Apply basic knowledge of algebra to solve job-related problems.
58	022 Apply basic knowledge of statistics in a job-related context.

\*These data are fictitious.

**Fair, well-managed administration procedures.** A successful test administration is a well-managed, structured event that provides the same opportunities for performance to each candidate across all sites. Administration conditions must also be comfortable for the candidates and enhance, rather than obstruct, performance.

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## AFTER TEST ADMINISTRATION

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**Diagnostic information.** An examinee for certification deserves more than a simple pass/fail designation. Each examinee in the ExCET Program receives a detailed score report containing diagnostic information on the examinee's strengths and weaknesses in

the specific subareas of the test. The score report is directly related to the objectives on which the test is based and therefore further integrates test results with the overall structure of the program.

**Test Retakes.** Texas permits unlimited retakes on its certification tests. The interval before retaking a test is decided by the examinee, facilitated by information on the individual score report.

**Rescoring.** Examinees with questions about their performance may ask to have their tests rescored; National Evaluation Systems provides this service promptly for a service fee.

## SUMMARY

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The ExCET Program is a Texas testing program. Test development and administration procedures reflect Texas State Board of Education policy. Thousands of Texas educators actively participated in creating the tests. Eliminating potential test bias has been a concern in the development and administration of the tests. Examinees are offered several forms of support in preparing for the tests and are sent diagnostic information on their scores. Schools of education likewise receive reports and analyses designed to assist them in preparing educators for Texas classrooms.

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