

DOCUMENT RESUME

ED 328 498

SO 030 328

TITLE North Carolina Test of U.S. History. Technical Characteristics. Forms A-J.

INSTITUTION North Carolina State Dept. of Public Instruction, Raleigh. Div. of Accountability Services/Research.

PUB DATE 90

NOTE 62p.

PUB TYPE Reports - Research/Technical (143) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS Academic Achievement; Educational Research; Public Schools; Secondary Education; \*Standardized Tests; Statistical Data; \*Testing Programs; Test Manuals; Test Validity; \*United States History

IDENTIFIERS \*North Carolina

ABSTRACT

One in a series of technical manuals describing the curricular and psychometric characteristics of tests administered by the State of North Carolina, this manual contains a description of the U.S. history test given to high school students. It is designed to facilitate the proper technical use of the test scores obtained from the administration of the test. The manual contains the following sections: description; validity; method for deriving score; reliability and other statistics; curricular assessment; content of the test; and norms. Two appendices cover goals and objectives and new goals and objectives. Tables and figures appear throughout the manual presenting statistical data. (DB)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

Forms A - J

ED328498

# Technical Characteristics of the North Carolina Test of U.S. History

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

E.  
BRUMBACK

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

NCTests

North Carolina Department of Public Instruction  
Division of Accountability Services/Research  
Raleigh, NC 27603-1332

Published 1990

030 328



---

Forms A – J

Technical Characteristics of the  
North Carolina Test of  
U.S. History

NCTests

---

North Carolina Department of Public Instruction  
Division of Accountability Services/Research  
Raleigh, NC 27603-1332

Published 1990

## FOREWORD

The NCDPI Division of Accountability Services/Research, in cooperation with the NCDPI Division of Curriculum and Instruction Services, has developed diagnostic achievement tests of basic skills for public school students in Grades 3, 6, and 8; survey achievement tests of Science and Social Studies for students in Grades 3, 6, and 8; and high-school course achievement tests for students taking Algebra I, Algebra II, Biology, Chemistry, English I, Geometry, Physics, and U.S. History. Physical Science and Economic, Legal, and Political Systems will be added in 1991, and other tests are being planned.<sup>a</sup>

To facilitate the proper technical use of the test scores obtained from the administration of the tests, the curricular and psychometric characteristics of the tests are described in a series of technical manuals. This manual, the sixth in the series, contains a description of the characteristics of the North Carolina Test of U.S. History.

<sup>a</sup>Readers who have an interest in the origins of the test development program are referred to the North Carolina Elementary and Secondary Reform Act of 1984, the North Carolina Basic Education Program, the North Carolina Standard Course of Study, and the *Teacher Handbook*.

# Table of Contents

Foreword .....	ii
List of Tables .....	iv
List of Figures .....	v
Description .....	1
Validity .....	2
Curricular Validity .....	2
Instructional Validity .....	3
Content Validity .....	3
Concurrent Validity .....	8
Method for Deriving Score.....	11
Reliability and Other Statistics .....	12
Curricular Assessment .....	22
Content of the Test .....	23
Norms.....	30
Appendices	
A: Goals and Objectives .....	33
B: New Goals and Objectives .....	44

## List of Tables

1	Organization of the North Carolina Test of U.S. History .....	1
2	Core Development of the North Carolina Test of U.S. History .....	8
3	Descriptive Statistics of the North Carolina Test of U.S. History .....	12
4-1	Item Difficulty by Item Number of the 1988 NCT-US History—Core 1 .....	24
4-2	Item Difficulty by Item Number of the 1988 NCT-US History— Variables A, B, & C .....	25
5-1	Item Difficulty by Item Number of the 1989 NCT-US History—Core 2 .....	26
5-2	Item Difficulty by Item Number of the 1989 NCT-US History— Variables E, F, & G .....	27
6-1	Item Difficulty by Item Number of the 1990 NCT-US History—Core 3 .....	28
6-2	Item Difficulty by Item Number of the 1990 NCT-US History— Variables H, I, & J .....	29
7	Norms for Student Scores on the North Carolina Test of U.S. History .....	31

# List of Figures

- 1 Comparison of letter grades teachers expected students to receive and scores subsequently earned on the 60-item 1988 North Carolina Test of U.S. History (N = 70,508 students) .....9
- 2 Comparison of letter grades teachers expected students to receive and scores subsequently earned on the 60-item 1989 North Carolina Test of U.S. History (N = 65,767 students) .....10
- 3 Frequency distribution of scores on the 60-item 1988 North Carolina Test of U.S. History—Core 1/Forms A–C (N = 72,824 students) .....13
- 4 Frequency distribution of scores on the 60-item 1989 North Carolina Test of U.S. History—Core 2/Forms E–G (N = 66,862 students) .....14
- 5 Item p-value distributions of the 1988 North Carolina Test of U.S. History Core 1 and the 1988 Field Test Core 2 (unadjusted) .....16
- 6 Item p-value distributions of the 1988 North Carolina Test of U.S. History Core 1 and the 1988 Field Test Core 2 (equated) .....17
- 7 Item p-value distributions of the 1988 North Carolina Test of U.S. History Core 1 and the 1988 Field Test Core 3 (unadjusted) .....18
- 8 Item p-value distributions of the 1988 North Carolina Test of U.S. History Core 1 and the 1988 Field Test Core 3 (equated) .....19
- 9 Equipercntile comparison of the 1988 North Carolina Test of U.S. History—Core 1/Forms A–C and the 1989 North Carolina Test of U.S. History—Core 2/Forms E–G. ....20

# Description

The North Carolina Test of U.S. History (NCT-US History) was developed for use as an achievement test following the completion of the U.S. History course of study. Its design serves a dual purpose: that of a normative measurement of student achievement and of an objective-based measurement of curriculum coverage.

The measurement of student achievement is attained by administering a basic core of 60 items and a civic literacy core of 20 items to all students. The measurement of curriculum is met by an additional 40 items that vary across three forms of the test. All three forms of the test, each form containing the same 60 core items, the same 20 civic literacy core items, and 40 variable items, are administered in each classroom, one form per student. Under this system, a third of the students in a classroom will take Form 1 of the test, a third will take Form 2, and a third will take Form 3 (see Table 1).

Table 1 Organization of the North Carolina Test of U.S. History		
60 Basic Core Items		
-----		
20 Civic Literacy Core Items		
-----		
40 Variable Items	40 Variable Items	40 Variable Items
120 Items Form 1	120 Items Form 2	120 Items Form 3

The two normative student scores are based on the 60 basic core items and the 20 civic literacy items that all forms have in common. Curriculum assessment is achieved by combining the results from all three forms, which provide an assessment based on the 60 basic core items + 20 civic literacy core items + 3(40 variable items), or 200 items in all.



# Validity

The development of a U.S. History achievement test has two purposes. The first is to obtain scores from which inferences may be drawn concerning the degree of success a particular student, classroom, school, or school district has had in mastering the U.S. History curriculum. The second is to assess the degree to which the curriculum has been mastered by students in the aggregate. To the extent this can be done meaningfully, test scores may be said to be valid. Thus, one inference drawn from a test score may be valid, while another may not.

Theoreticians state that only inferences concerning test scores can be said to have validity. Generally, readers understand this, and this report will employ the convenient shorthand of speaking about "test validity" rather than "inferences about achievement drawn from scores obtained from tests."

Test validity is a predominant theme in test development, from the time the idea for a test is conceived until the final test scores have been analyzed and interpreted. For convenience, the various components of test validity will be described as if they were unique, independent components rather than interrelated parts. The first component of test validity to be described will be curricular validity.

## Curricular validity

If a test is to be used to measure the degree to which a course of study has been mastered, the first step is to define the curriculum. In the case of U.S. History, that was done through a cooperative effort, led by the NCDPI Program Services/Division of Curriculum and Instruction Services, involving curriculum specialists, teachers, administrators, university professors, and others. The result was a list of 18 goals encompassing 106 objectives. Supported by expert opinion and a statewide consensus, these goals and objectives were approved by the State Board of Education in 1985 as the basis for instruction in U.S. History. Curricular validity, the first step in establishing construct validity, was established by this method.

In 1989, the General Assembly passed the Civic Literacy Bill, which established that certain objectives were to be added to the social studies curriculum. These objectives are to deal with the founding documents, including the Declaration of Independence, the United States Constitution, and the most important of *The Federalist Papers*. The passage of this bill resulted in the addition of nine objectives to the U.S. History curriculum (see Appendix B). These objectives will be addressed beginning with the 1991 forms of the North Carolina Test of U.S. History. Also in January 1989, the State Board of Education set policy specifying that the influence of religion on American history be explicitly included in the U.S. History curriculum. This policy resulted in the addition of one goal and four objectives to the U.S. History curriculum (see Appendix B).

## Instructional validity

A basic course of study may not include all of the objectives taught under various circumstances in U.S. History. For example, some advanced classes may cover material that would be beyond the reach of 95% of all U.S. History students. For this reason and several others, it becomes important to know just what is being taught in the majority of U.S. History courses in the state. To determine this, all U.S. History teachers in North Carolina were surveyed in May 1986 (N = 1,168 teachers). The analysis of results was based on 846 responses, or 72% of all possible responses.

The U.S. History teachers examined the original 106 objectives and noted whether they taught each objective every year and was basic to instruction. 88 out of the 106 objectives were judged as basic by a majority of the teachers. After deliberation by curriculum specialists, however, it was determined that the 18 goals and all of the 106 objectives formed the essential curriculum for U.S. History and should be tested. The objectives are given in Appendix A together with the proportion of teachers judging each one to be basic.

Instructional validity, the second step in defining construct validity, was established by these procedures. It defines the inferences that can be drawn from U.S. History test scores.

In summary, it was concluded that curricular and instructional validity depended jointly on the 18 goals and the 106 objectives under which they were collected, and that the U.S. History test should be built on that foundation.

## Content validity

Content validity—the degree to which test items reflect the basic instructional program—is a quality commonly referenced in evaluating achievement tests. Content validity is built into a test from the beginning, and the procedures relating to the content validation of the North Carolina Test of U.S. History are described below.

Content validity of the item pool (Phase One). The initial content validity of the item pool was defined through a number of operations:

First, the item pool for the U.S. History test was created in 1986. It was specified that the pool would have 1298 items, with 4 to 40 items per objective (generally 4 to 12 items for objectives prior to the 20th century and 10 to 20 items for objectives covering the 20th century). The items were developed by 11 North Carolina U.S. History teachers trained in the technical aspects of item-writing. The use of classroom teachers from across the state helped to insure that instructional validity was maintained, since the items would be drawn from their classroom experiences. A total of 1288 items were actually written for the U.S. History item pool.

Second, the item pool was edited for grammar, syntax, psychometric form, and linguistic bias. 145 items were deleted from the U.S. History item pool at this time.

Third, the item pool was analyzed by curriculum specialists and classroom teachers to assure that the items were valid representations of the objectives for which they were written. Each item was reviewed by at least four classroom teachers from different educational regions across the state. The criteria for evaluating each item included the following:

- curriculum match—objective, difficulty level, thinking skills level, and vocabulary
- format—familiarity, print size/style, and mechanics
- art—clarity, accuracy, and labeling
- item bias—gender, ethnicity, SES/location, or other
- stem—accuracy, ambiguity, single problem, wordiness, and complete statement
- answer choices—one best, homogeneity, logical order, and clues/cues.

155 items were deleted from the U.S. History item pool at this time.

Fourth, the items were collected into 11 test forms for field testing. Although the forms were not the final forms of the North Carolina Test of U.S. History, they were organized in such a way that the objectives were represented equitably across all forms. Each form contained 98 to 100 items, 10 of which were common across all forms for the purpose of ability equating should that become necessary.

Fifth, test administration instructions were written, distribution procedures were organized, and administrators were trained to conduct the test administration. The test administration organization used to administer statewide tests in North Carolina was employed to do the field testing. The administration of the test forms followed the routine eventually expected to be used when the test of record was given.

Sixth, a sample of 7,474 students was selected to take the 11 field test forms containing a total of 997 items. To insure broad representation, schools were selected from each of the eight North Carolina educational regions. The 11 field tests were interleaved in all student samples, and this produced an even spread of ability across all of the tests. Consequently, each item was answered by approximately 679 students (the number of students per field test form ranged from 663 to 690).

Seventh, the field test data were analyzed using both the classical psychometric model and the one-parameter Rasch model (results were generated from the BICAL computer program). Sixteen statistics were assembled for each item, i.e., p-value, Rasch difficulty index, adjusted Rasch difficulty index, standard error of the mean, fit mean-square, item validity (point-biserial correlation) and the item characteristic curve groupings. Item bias due to gender or ethnicity was examined by computing the partial correlation between the item score and gender/ethnic while controlling for total score. The item statistics were visually scanned and items were "flagged" for possible deletion where the item statistics were not psychometrically appropriate for future test development.

This information was placed on an item record, which became the basic document to which all other records were referred. The item record contains the goal, objective, historical information, a copy of the item itself, the item field-test statistics, and the psychometric and curricular decisions concerning the item's adequacy. Each item has a separate item record.

Of the 997 items field tested in 1987, 282 (28.5%) exhibited a p-value below .30, were classified as "too difficult", and were deleted from the item pool. Usually, the items were "too difficult" because of defective foils or imprecisely worded stems. This left 715 items (71.5%) in the U.S. History item pool for future test development.

Content validity of the item pool (Phase II). Due to the large number of items that were deleted from the item pool in 1987, it became necessary to develop additional items for the item pool. The greatest need was for items in the higher range of p's.

First, the number of items needed per objective was determined from the existing item pool. The number needed per objective ranged from 1 to 20 for a total of 631 items. 597 new items were written by ten North Carolina U.S. History teachers, and 34 previously deleted items were revised by curriculum specialists.

Second, the additional item pool was edited for grammar, syntax, psychometric form, and linguistic bias. 22 items were deleted from the additional item pool at this time.

Third, the item pool was analyzed by curriculum specialists and classroom teachers to assure that the items were valid representations of the objectives for which they were written. Each item was reviewed by one classroom teacher in each of the eight educational regions of North Carolina. The expanded criteria for evaluating each item included the following:

- conceptual—objective match, fair representation, lack of cultural bias, clear statement, single problem, one best answer, common context in foils, each foil credible
- language—appropriate for age; correct punctuation, spelling, and grammar; lack of excess words; no stem/foil clues; no negatives in foils
- format—logical order of foils; familiar presentation style, print size, and type; correct mechanics and appearance; equal length foils
- diagram—necessary, clean, relevant, unbiased.

118 items were deleted from the additional item pool at this time.

Fourth, the items were collected into 13 sets of 40 items each. The sets were used as variable items during the 1988 statewide administration, and the field-test forms were interleaved with the statewide forms to insure an even spread of ability levels. The field test forms of the 1988 North Carolina Test of U.S. History were administered to 16,587 students. Consequently, each new item was answered by approximately 1,276 students (the number of students per field test form ranged from 925 to 1,604).

Fifth, the field test data were analyzed using procedures similar to those described above. Eighteen statistics were assembled for each item (estimates of gender and ethnic bias were also obtained at this time).

The item statistics were submitted to computer analysis using a program designed to scan the statistics for an item and print out an appropriate decision based on the criteria that had been

built into the program specifically for U.S. History. An item was classified as "too hard" if the p-value was less than .30. An item was said to have "weak prediction" if the point-biserial correlation was less than .18. An item was said to have an "entrapment choice", a "marginal top group", or an "inverted ICC" if the item characteristic curve groupings displayed certain irregularities. A item was said to exhibit "gender" bias if the partial correlation with gender was more extreme than  $\pm .13$ , and to exhibit "ethnic" bias if the partial correlation with ethnic was more extreme than  $\pm .12$ .

The content of U.S. History cannot be represented by a single factor. Therefore, the maximization of item-total (point-biserial) correlations was not a goal of item development. Once an item was shown to have at least a modest correlation with a corrected total score (.18 or greater) and was judged to measure an objective, it was included in the item pool. While this may have reduced the potential internal reliability as measured by coefficient alpha, it increased the validity of the test by allowing for an objective factor structure that was not expected to be unitary.

This information was then placed on the item record, which became the basic document to which all other records are referred. The psychometric notations were reviewed and decisions were made about the adequacy of the items. The decisions were then conveyed to curriculum specialists, who also reviewed the items and reached a decision about their curricular adequacy.

Of the 491 items field-tested in 1988, 61 (12.4%) were deleted from the additional item pool. The remaining 430 were merged with the original item pool for a total of 1143 items available for test development.

Content validity of the item pool (Phase III). Due to the passage of the Civic Literacy Bill in 1989 by the North Carolina General Assembly, nine objectives were added to the U.S. History curriculum and, consequently, items were needed for future test development.

First, 12 to 26 items were created for each of the nine civic literacy objectives for a total of 162 items. Where the existing item pool was insufficient, 28 items were written for existing objectives and 22 existing items were revised.

Second, the additional item pool was edited for grammar, syntax, psychometric form, and linguistic bias. Eight items were deleted from the item pool at this time.

Third, the additional item pool was analyzed by curriculum specialists and classroom teachers to insure that the items were valid representations of the objectives for which they were written using the procedures previously described in Phase II of the item pool development. Seven items were deleted from the additional item pool at this time.

Fourth, the items were collected into 6 sets of 20 items each. Due to the limited number of items that could be field-tested at this time, 73 items were held for field testing at a later time. Two sets were added to each of the three existing 1990 test forms, creating six 120-item tests. The data from these field tests will be analyzed in 1990 and used in constructing the 1991 NCT-US History.

Content validity of the test. After a consideration of the logistics involved, it was decided to prepare one complete test (60 core items and three sets of 40 variable items) for administration in May 1988, and to develop two additional core tests of 60 items each for use in succeeding years. Core tests were based on a random selection of the objectives within each part of the U.S. History curriculum (pre-20th century and 20th century), for a total of 60 items (30 items covering pre-20th century and 30 items covering the 20th century) randomly chosen from the approved item pool. Thus, the content of the test cores directly reflected all of the decisions that had been made earlier.

This method of item selection is a modified domain sampling model, with the various forms and cores randomly equivalent. The domain sampling model in its pure form is highly inefficient because it allows the entry of items that are grossly inappropriate for normative measurement—items that no one can answer or that everyone can answer, or that have psychometric deficiencies of a more complex form. In the modification used here, the domain of items was limited to those items that had satisfactory psychometric characteristics. This was determined by the analyses of the item field-test data, which was used to verify the psychometric adequacy of the item pool and to direct where item revisions should be made.

After the test was assembled into forms (60-item core plus a 40-item variable set), the forms were reviewed by one curriculum supervisor and two teachers in each of the eight educational regions. The criteria for evaluating each form of the test included the following:

- that the content of the test should reflect the goals and objectives taught
- that the items should be clearly and concisely written, and the vocabulary is appropriate to the target age level
- that the content should be balanced in relation to ethnicity, sex, socioeconomic status, and geographic district of the state
- that each item should have one and only one answer that is best; however, the distracters appear plausible for someone who has not achieved mastery of the represented objective

The ratings for the 1988, 1989, and 1990 North Carolina Test of U.S. History were average to superior on all of the criteria.

Although the initial equating of the core tests depended upon random selection of items from the item pool, the final equating was based on the statistics obtained at the time the first test of record was administered (see Table 2). This second psychometric analysis, described next, was used to eliminate random differences among the cores and thus facilitate the precision of measurement from one year to another.

Standardization sample. The first North Carolina Test of U.S. History consisted of three forms (A–C), each form containing the same 60 core items and a unique set of 40 variable items. This test was administered to 72,824 North Carolina U.S. History students in May 1988. The state norm population comprises these 72,824 students.

The two additional cores that were developed were used as variable items for this first test of record. Each of the 120 items was answered by approximately 24,300 students and was randomly distributed across the three variable sets. The agreement of the mean core scores (sum across all item p-values on the core) supported the view that the initial equating process described above was successful (see Table 2).

Table 2  
Core Development of the North Carolina Test of U.S. History

Core	Process	Mean of P-values for All Items	SD of P-values for All Items	Sum of P-values for All Items
1	Design <sup>a</sup>	0.622	0.115	37.30
	Administer <sup>b</sup>	0.666	0.120	39.98
2	Design <sup>a</sup>	0.619	0.112	37.54
	Administer <sup>b</sup>	0.665	0.110	39.89
	Equate <sup>c</sup>	0.666	0.117	39.98
3	Design <sup>a</sup>	0.619	0.110	37.16
	Administer <sup>b</sup>	0.651	0.119	39.03
	Equate <sup>c</sup>	0.666	0.122	39.95

<sup>a</sup> Based on 1987 Field Test item p-values.

<sup>b</sup> Administered statewide in May 1988: Core 1—core items; Cores 2 and 3—variable items.

<sup>c</sup> Equated to Core 1 by matching the distributions of item p-values obtained during the 1988 statewide administration.

### Concurrent validity of the test

When the 1988 and 1989 North Carolina Tests of U.S. History were administered, U.S. History teachers were asked to indicate the expected final letter grade for each student in their classes. Figures 1 and 2 display a comparison of letter grades and the mean U.S. History core score corresponding to each letter grade for the overall student populations. The figures are consistent and add to the evidence concerning the equivalence of the core tests.

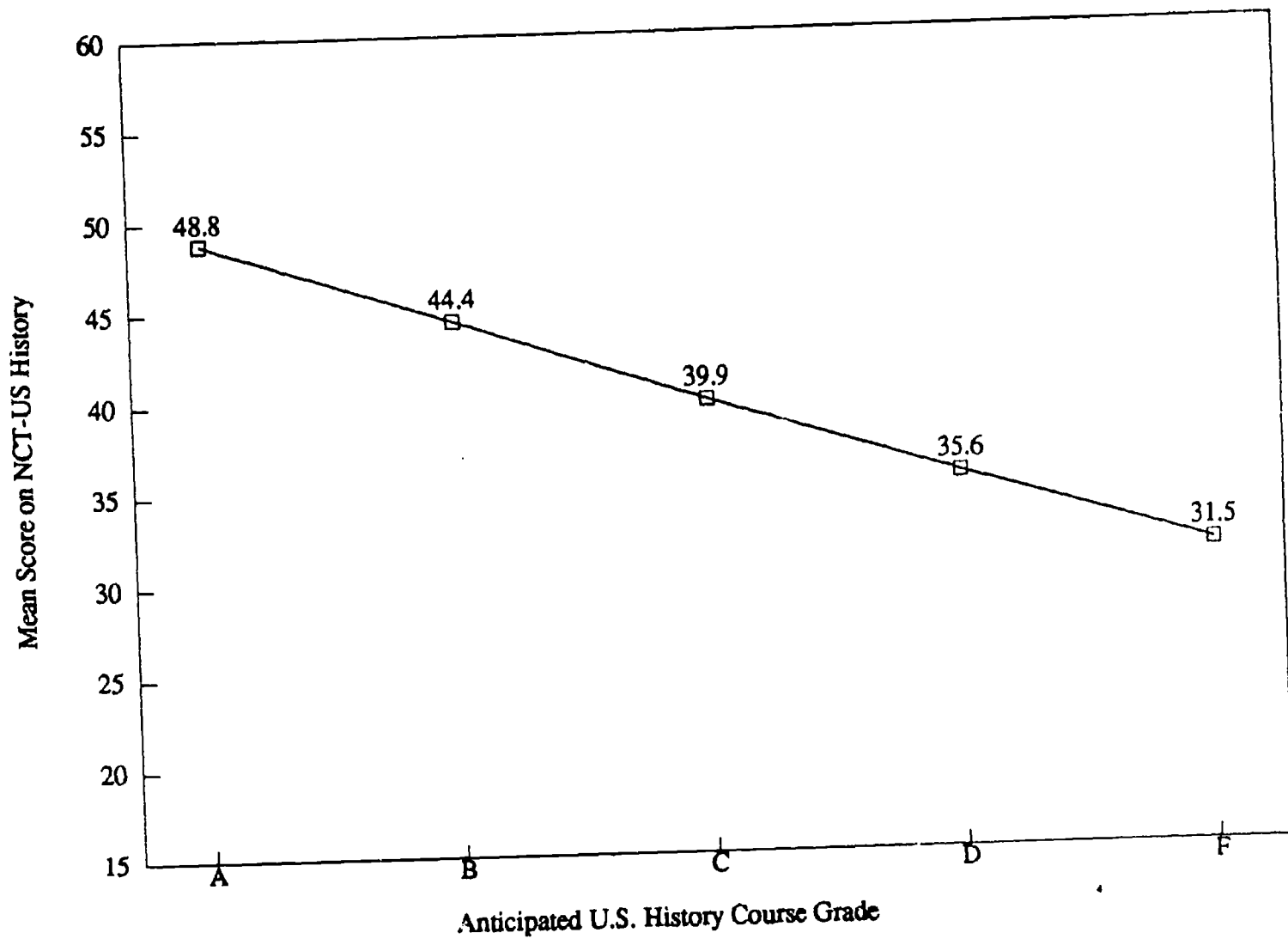


Figure 1. Comparison of letter grades teachers expected students to receive and scores subsequently earned on the 60-item 1983 North Carolina Test of U.S. History (N = 70,508 students).



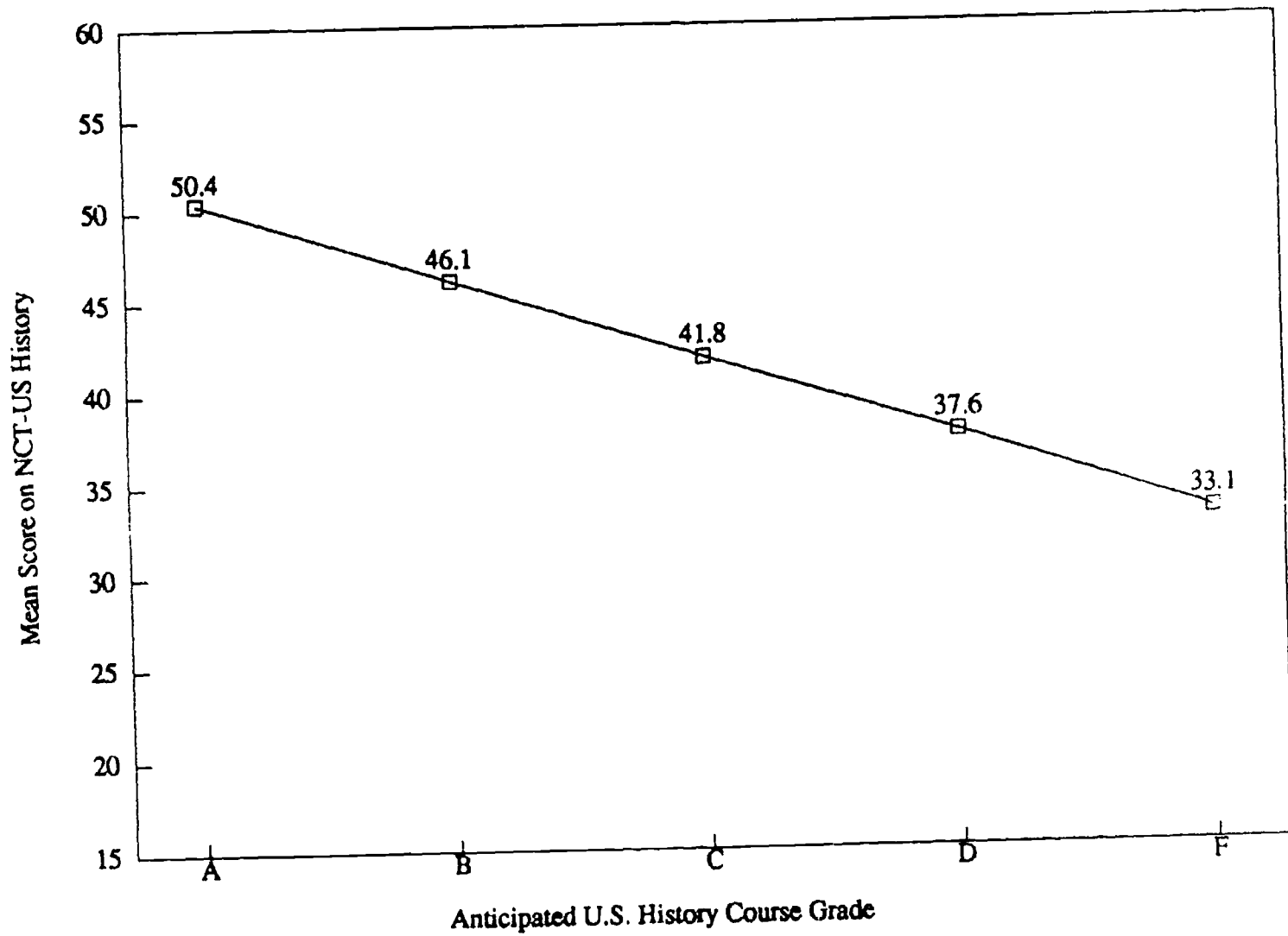


Figure 2. Comparison of letter grades teachers expected students to receive and scores subsequently earned on the 60-item 1989 North Carolina Test of U.S. History (N = 65,767 students).

## Method for Deriving Test Scores

Item information was available to support the classical scoring model and the Rasch scoring model. The classical scoring model gives a unitary weight to each item; a correct choice adds 1 to the total score, an incorrect choices adds 0. The one-parameter Rasch model also uses unitary weighting. (The two- and three-parameter item response models give more credit for answering some items correctly and less credit for answering other items correctly. These models assume that each item has a fundamental, unchanging difficulty level.)

The classical scoring model was utilized to score the North Carolina Test of U.S. History because it is fundamentally sound, simple to use, and easy to interpret. Each student's basic total core score consists of the sum of right answers to the 60 basic core items. Each student's civic literacy core score consists of the sum of the right answers to the 20 civic literacy core items (beginning in 1991).

## Reliability and Other Statistics

The descriptive statistics, the standard errors of measurement, the alpha reliability coefficients, and the alternate form reliability estimates (correlation between the second statewide core test and the other two cores field-tested in 1989) for the first statewide administration of the North Carolina Test of U.S. History in May 1988 (Core 1/Forms A–C), the second statewide administration in May 1989 (Core 2/Forms E–G), and the cores field-tested in May 1989 (Cores 1 and 3) are given in Table 3.

Core	N	Mean	SD	Median	se <sub>meas</sub>	Reliability	
						Alternate Form	Coefficient Alpha
1/A–C	72,824	39.9	10.09	41	3.32		.89 (A-C)
1 <sup>b</sup>	711	39.02	9.85	40	3.41	.81	.88
2 <sup>a</sup>		39.98	7.02				
2 <sup>a,b</sup> (1)	711	41.58	9.26	43	3.21	.81	.88
(3)	719	41.89	9.43	44	3.13	.79	.89
2 <sup>a</sup> /E–G	66,862	42.0	9.63	44			
3 <sup>b</sup>	719	38.97	10.45	41	3.30	.79	.90
3 <sup>a</sup>		39.95	7.32				

<sup>a</sup>Equated to Core 1 by matching the distributions of p-values from the statewide administrations of Cores 1, 2, and 3 in May 1988.

<sup>b</sup>Based on matched samples of students taking the statewide core (2) and one of the field cores (1 or 3). The sample sizes are as follows: Core 1, N = 749; and Core 3, N = 736.

The 1988 basic core scores are distributed about a median of 41, or 68% correct (see Figure 3) and the 1989 basic core scores are distributed about a median of 44, or 73% correct (see Figure 4). The alpha reliability estimates have a mean value of .89; and the alternate form reliability estimates have a mean value of .80.

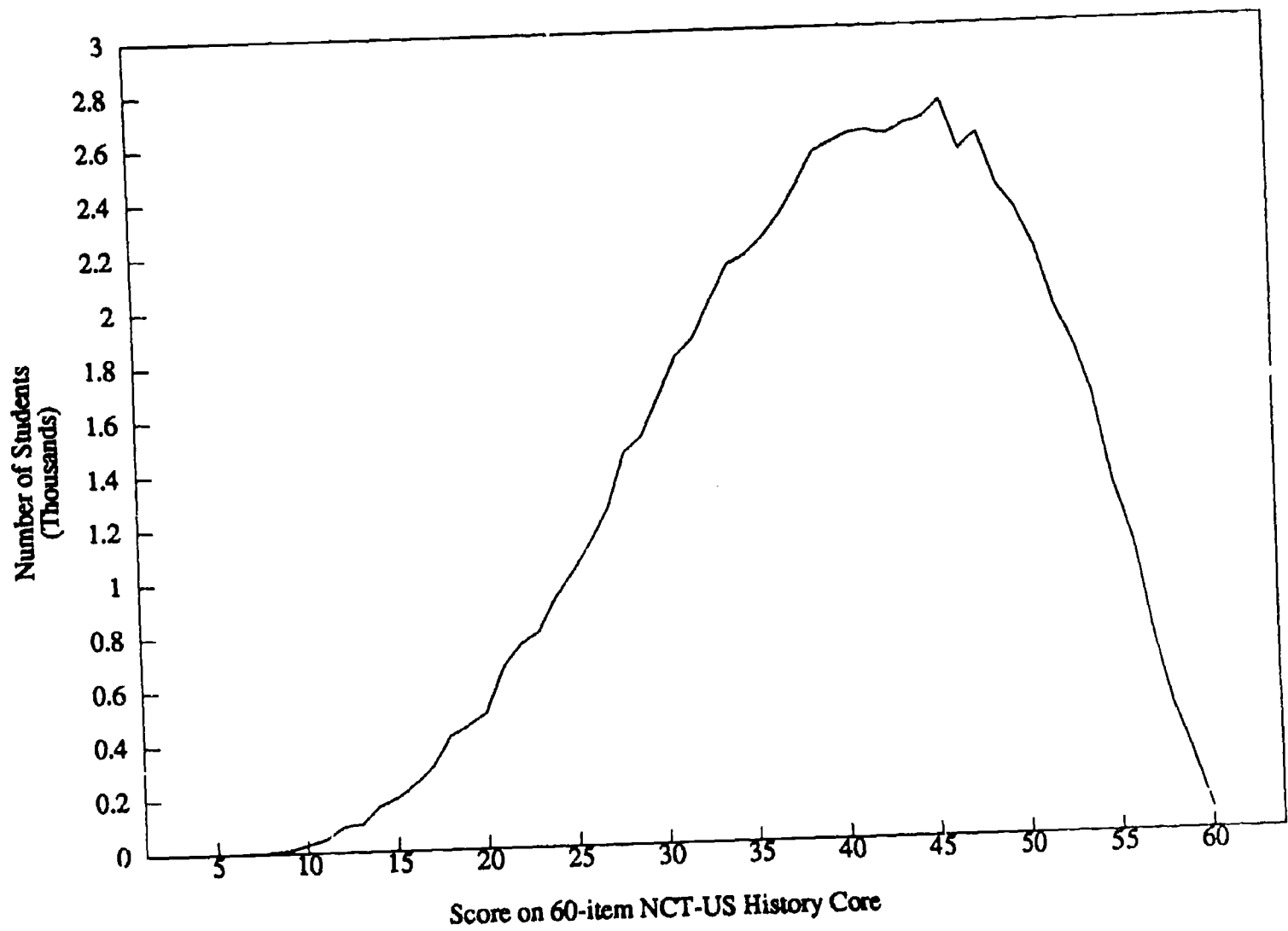


Figure 3. Frequency distribution of scores on the 60-item 1988 North Carolina Test of U.S. History—Core 1/Forms A–C (N = 72,824 students).

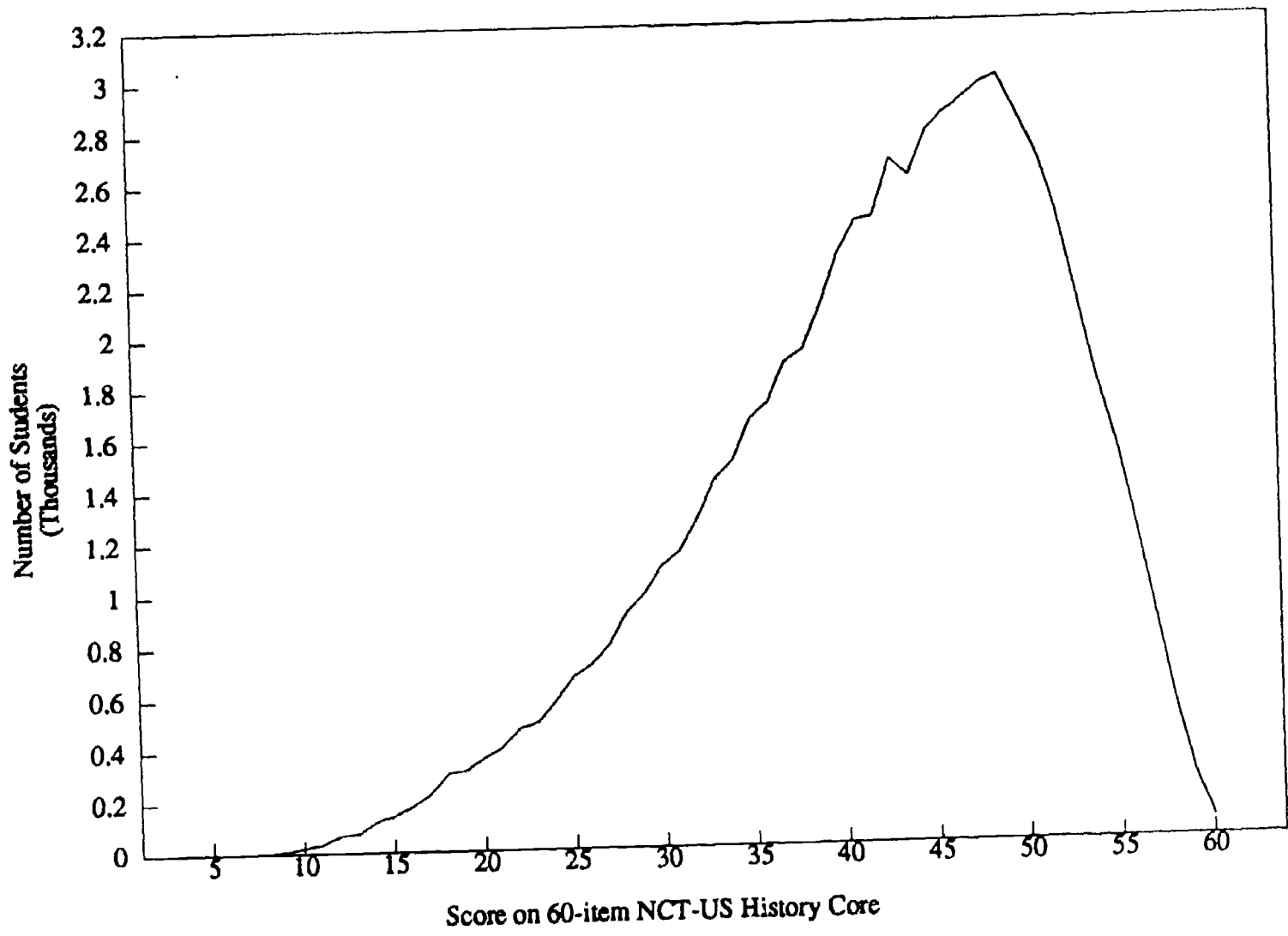


Figure 4. Frequency distribution of scores on the 60-item 1989 North Carolina Test of U.S. History—Core 2/Forms E-G (N = 66,862 students).

For practical purposes, the proper measure of reliability is the alternate form reliability. The calculation of this statistic requires that two or more equivalent test forms be developed. The older alternate form reliability procedure required the development of one form, which was then "cloned" to obtain a second, alternate form of the test. A judicious selection of alternate items was recommended to prevent direct memory transfer from the administration of one test to its alternate form. But the possibility remained that errors of selection in the first form would be duplicated in the second form. A newer procedure requires that the tests be truly equivalent—that is, that two or more tests be developed in exactly the same way, but independently of one another. This permits the reliability coefficient to reflect any random errors of selection made in the development of either of the test forms.

The alternate forms developed for the North Carolina Test of U.S. History reflect this newer procedure. That is, each test form is developed from the domain of items in exactly the same manner. Any failure of the alternate form reliability to be 1.00 reflects:

- trait instability not following from maturation or instruction
- instrument instability resulting from fallible test development procedures
- administrative instability reflecting different testing occasions.

The square of the alternate form reliability coefficient accurately reflects the maximum proportion of variance one can legitimately expect to predict from the administration of the North Carolina Test of U.S. History ( $r^2 = .80^2 = .64$ ) when test scores are compared across time or with other measures of student abilities or personality traits that have similar reliabilities. In brief, the alternate form reliability correlation coefficient is the statistic to use when correcting for attenuation.

Of special significance to the comparison of students scores across time is the equivalence of the two future core tests (Cores 2 and 3) to the first core test of record (Core 1 administered May 1988). Due to the fact that no one student was administered two entire cores, the distribution of the p-values of the Core 1 items was compared to the distributions of the p-values of the Core 2 and Core 3 items to examine the equivalence of Cores 2 and 3 to Core 1. Figures 5 and 7 show the results of the p-value distribution comparisons.

In Figures 5 and 7, the differences between the curves (p-value distributions) are small. These differences could be adjusted statistically by providing a separate set of norms for each core. A simple and efficient alternative is to redevelop the cores slightly so that even small differences disappear. With this technique, a single norms table can be used for all cores. To accomplish this transformation, the test developer had available the 60 items on the core test of record (Core 1) for which comparable psychometric data was available for items on Cores 2 and 3.

The results of the adjustments for Core 2 and Core 3, employed in 1989 and 1990, are given in Table 2 and Figures 6 and 8. The required changes were minimal (2 items on Core 2 and 5 items on Core 3).

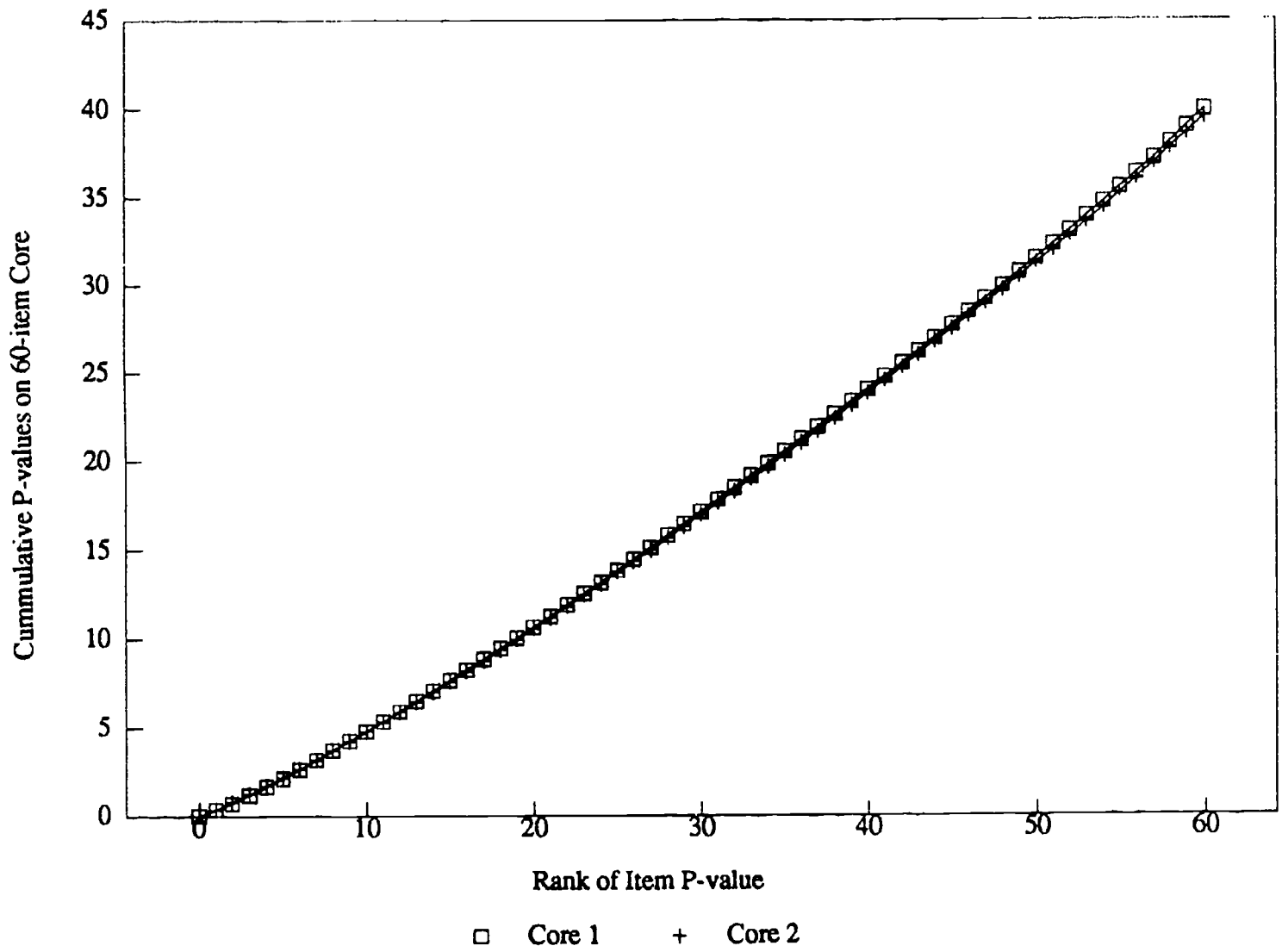


Figure 5. Item p-value distributions of the 1988 North Carolina Test of U.S. History Core 1 and the 1988 Field Test Core 2 (unadjusted).

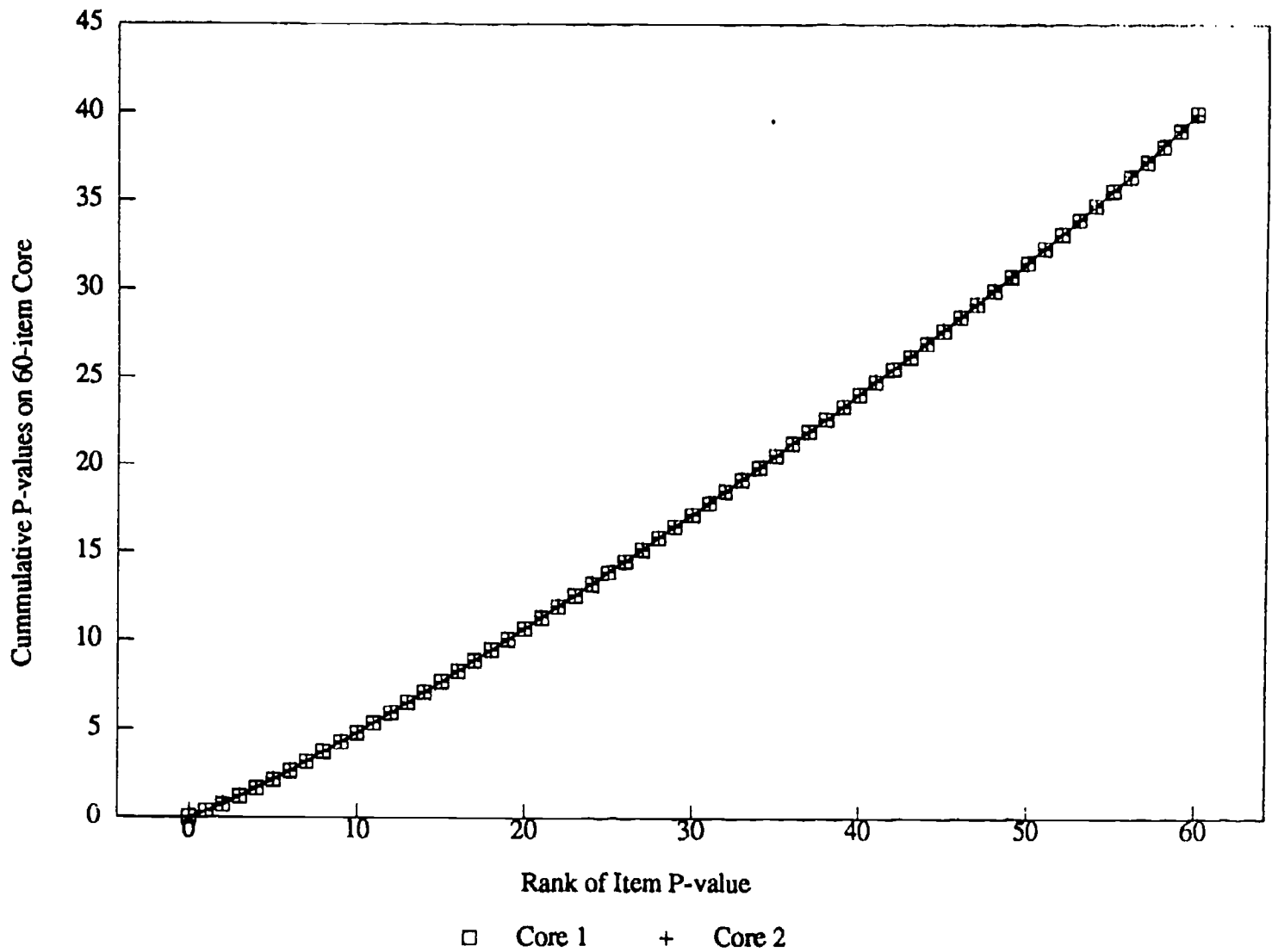


Figure 6. Item p-value distributions of the 1988 North Carolina Test of U.S. History Core 1 and the 1988 Field Test Core 2 (equated).



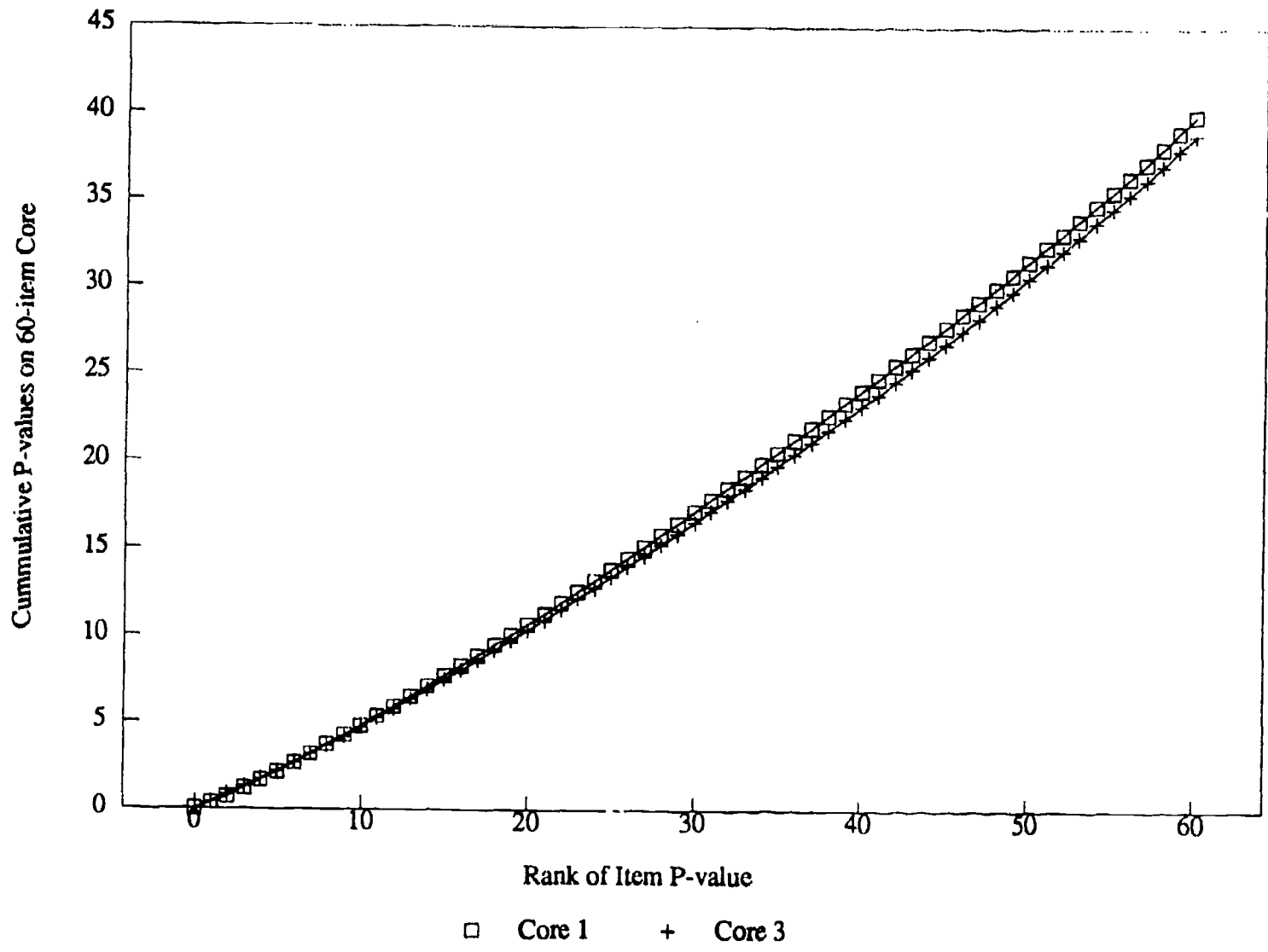


Figure 7. Item p-value distributions of the 1988 North Carolina Test of U.S. History Core 1 and the 1988 Field Test Core 3 (unadjusted).

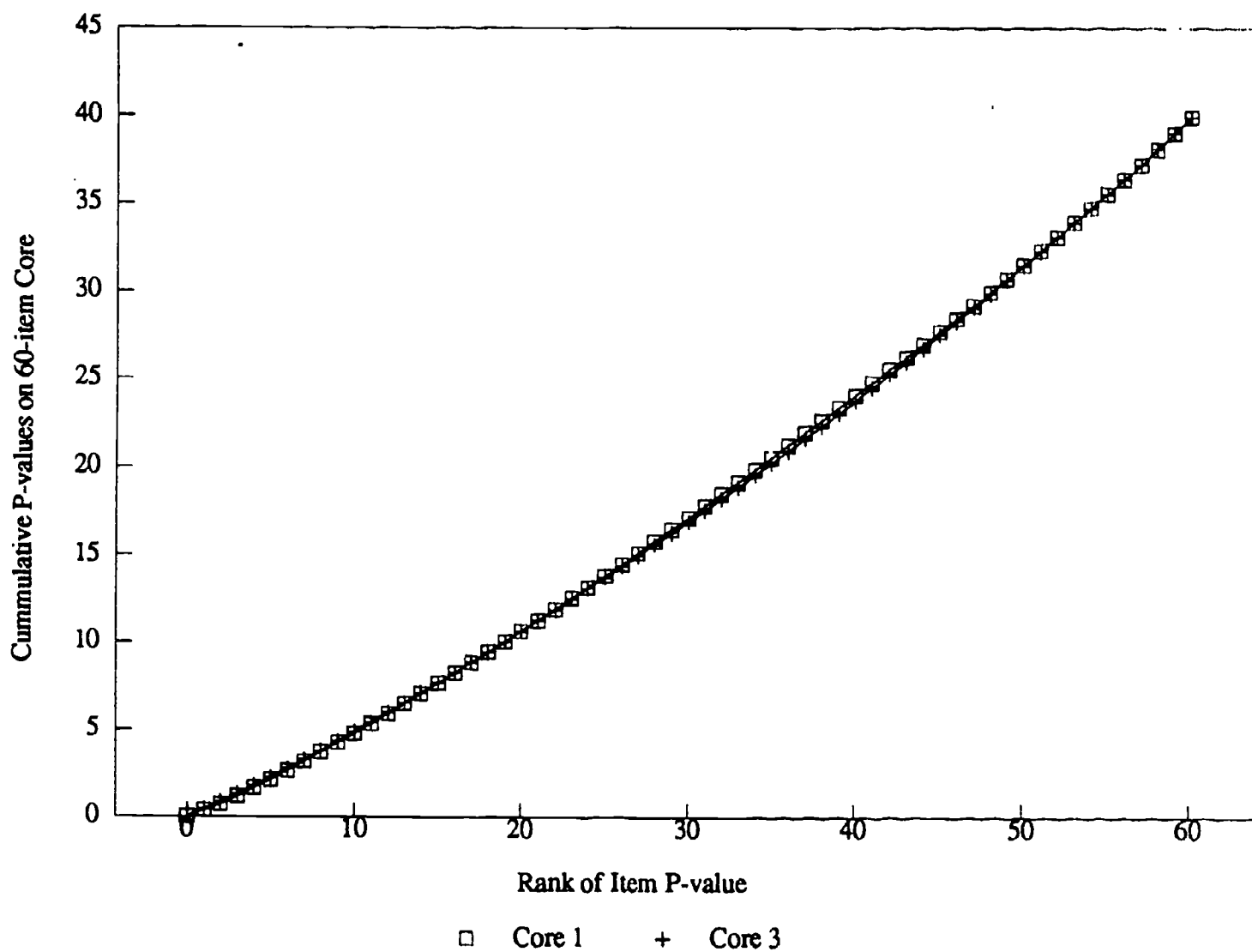


Figure 8. Item p-value distributions of the 1988 North Carolina Test of U.S. History Core 1 and the 1988 Field Test Core 3 (equated).

To examine the success of the equating technique described above, an equipercentile comparison of Core 1 with Core 2 was conducted using the results from the 1988 Core 1 administration and the 1989 Core 2 administration. The scores from a random sample of 2,179 students that took the 1988 NCT-US History and a random sample of 2,034 students that took the 1989 NCT-US History were selected. To make this comparison, the mean of a block of scores on Core 1 within successive five percentile points was taken to compare with the mean of a block of scores on Core 2 within the same five percentile points. This yielded twenty reasonably reliable points of comparison which are displayed graphically in Figure 9. The distributions of both sets of scores are similar, with Core 2 higher. These results are consistent with previous research on other achievement tests (Algebra I, Algebra II, and Biology) where the scores from the second year of administration increase.

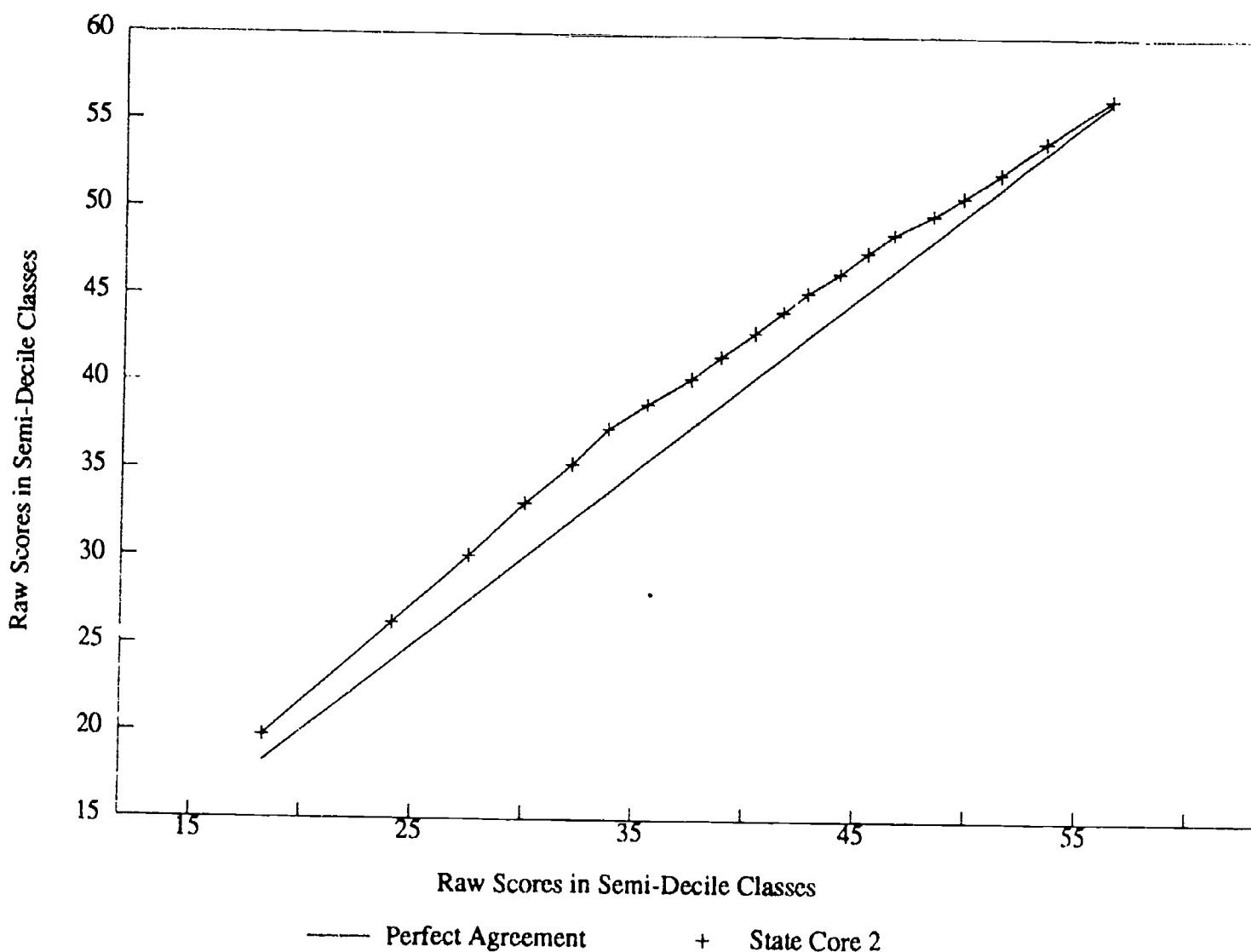


Figure 9. Equipercentile comparison of the 1988 North Carolina Test of U.S. History—Core 1/Forms A-C and the 1989 North Carolina Test of U.S. History—Core 2(equated)/Forms E-G.

While the procedure of matched p-value distributions was satisfactory to equate Core 1 with Core 2, it is not recommended as a replacement for the equipercentile procedure. Generally, consistent linear relationships between test forms are obtained when the equipercentile procedure is employed. For the NCT-US History, the distribution of Core 2 semidecile scores was not exactly linear compared with the Core 1 semidecile scores.

The adjustments to the core tests assure the continuity of the norms table for future years while providing new test items each year. The new test items prevent the loss of confidentiality, and therefore validity, that occurs with the continued use of the same items. Student scores have a common reference point from 1988 onward, barring changes in the definition of the basic instructional program.

## Curricular Assessment

Thus far in this manual the 60-item core test has been discussed as if it made up the entire test. In actuality, the 1988, 1989, and 1990 North Carolina Test of U.S. History consisted of a 60-item core and 40 additional items that varied across the three forms. (See Table 1. The civic literacy core will be a part of the test beginning in 1991.) The variable items were not intended to contribute to individual student scores, but rather to curriculum assessment. Each variable item was answered by one-third of the students.

At the classroom level, 180 [200 beginning in 1991] items are answered during each test administration by an average of three students. This procedure provides a database of one to three items per objective across three students. From this database of information, estimates of how various portions of the curriculum are being mastered in the classroom may be drawn. At the school, school district, and state level, the 180 items are answered by a much larger number of students: up to 24,300 students per item. This assures a more stable measurement, but does not include a larger number of objectives or items. The accumulation of item and objective information depends upon measurement across successive years.

The measurement afforded by the 120 variable items is critical to assessing curriculum mastery at the classroom, school, school district, and state levels. Each year of test administration adds to the database and gives a more detailed and comprehensive picture of curriculum success.

# Content of The Test

The North Carolina Test of U.S History is objective-referenced; that is, its reference is to a domain of objectives. This domain is mapped over a domain of items, where the items reflect the objectives, equal in kind and number except for random fluctuations. The U.S. History tests were designed to achieve an even assessment across all objectives within time-period specifications; in short, each objective was to be represented by the same number of items. This design is consistent with the concept of a domain of objectives mapped over by a domain of items. Although the objectives have unit weighting, the goals are weighted by the number of objectives assigned to them. From empirical analyses, this is a traditional aspect of curriculum development: the more important a goal is considered to be, the greater the number of objectives that will be developed for it. Thus, an underlying system of weights exists for the curricular goals.

Appendix A lists each goal and objective and the numerical item representation for each objective as it appears on the 1988, 1989, and 1990 North Carolina Test of U.S. History (Forms A-J). In addition, the proportion of teachers rating each objective as basic to instruction in the U.S. History curriculum is listed.

Tables 4 through 6 list the difficulty level for all items on the 1988, 1989, and 1990 North Carolina Test of U.S. History (Forms A-J) in terms of p-values (proportion of all students answering the item correctly).

Table 4-1  
 Item Difficulty by Item Number for the 1988 NCT-US History—Core 1

Item #	P-value	Item #	P-value	Item #	P-value
1	.51	21	.54	41	.66
2	.48	22	.57	42	.81
3	.68	23	.67	43	.56
4	.70	24	.67	44	.37
5	.90	25	.62	45	.50
6	.64	26	.75	46	.53
7	.64	27	.78	47	.44
8	.76	28	.56	48	.60
9	.78	29	.59	49	.61
10	.58	30	.49	50	.47
11	.70	31	.61	51	.59
12	.69	32	.72	52	.55
13	.62	33	.53	53	.38
14	.71	34	.43	54	.52
15	.71	35	.62	55	.60
16	.64	36	.60	56	.49
17	.54	37	.75	57	.74
18	.91	38	.61	58	.48
19	.60	39	.64	59	.71
20	.65	40	.82	60	.68

**Table 4-2**  
**Item Difficulty by Item Number for the 1988 NCT-US History—Variables A, B, & C**

Item #	P-value	Item #	P-value	Item #	P-value
A1	.47	B1	.58	C1	.69
A2	.64	B2	.67	C2	.85
A3	.84	B3	.65	C3	.61
A4	.57	B4	.73	C4	.61
A5	.64	B5	.51	C5	.61
A6	.82	B6	.56	C6	.53
A7	.48	B7	.61	C7	.61
A8	.69	B8	.82	C8	.40
A9	.57	B9	.50	C9	.69
A10	.78	B10	.65	C10	.59
A11	.61	B11	.75	C11	.75
A12	.63	B12	.55	C12	.64
A13	.56	B13	.46	C13	.68
A14	.51	B14	.57	C14	.75
A15	.72	B15	.77	C15	.45
A16	.70	B16	.45	C16	.58
A17	.55	B17	.53	C17	.43
A18	.58	B18	.52	C18	.32
A19	.68	B19	.75	C19	.61
A20	.57	B20	.62	C20	.77
A21	.65	B21	.72	C21	.79
A22	.51	B22	.69	C22	.89
A23	.57	B23	.38	C23	.52
A24	.80	B24	.65	C24	.57
A25	.62	B25	.65	C25	.67
A26	.80	B26	.65	C26	.56
A27	.66	B27	.63	C27	.87
A28	.71	B28	.61	C28	.59
A29	.66	B29	.77	C29	.68
A30	.57	B30	.68	C30	.63
A31	.56	B31	.56	C31	.70
A32	.70	B32	.76	C32	.55
A33	.75	B33	.56	C33	.57
A34	.57	B34	.46	C34	.49
A35	.44	B35	.52	C35	.65
A36	.49	B36	.75	C36	.50
A37	.58	B37	.50	C37	.60
A38	.55	B38	.79	C38	.59
A39	.42	B39	.66	C39	.65
A40	.52	B40	.51	C40	.54



Table 5-1  
Item Difficulty by Item Number for the 1989 NCT-US History—Core 2

Item #	P-value	Item #	P-value	Item #	P-value
1	.47	21	.56	41	.70
2	.58	22	.78	42	.55
3	.85	23	.82	43	.44
4	.79	24	.40	44	.46
5	.72	25	.61	45	.58
6	.89	26	.65	46	.58
7	.57	27	.75	47	.52
8	.73	28	.70	48	.65
9	.61	29	.75	49	.43
10	.64	30	.63	50	.50
11	.69	31	.59	51	.49
12	.38	32	.68	52	.53
13	.62	33	.64	53	.58
14	.57	34	.46	54	.55
15	.65	35	.56	55	.59
16	.61	36	.75	56	.54
17	.80	37	.77	57	.66
18	.75	38	.70	58	.57
19	.66	39	.76	59	.67
20	.63	40	.57	60	.61

Table 5-2

Item Difficulty by Item Number for the 1989 NCT-US History—Variables E, F, &amp; G

Item #	P-value	Item #	P-value	Item #	P-value
E1	.69	F1	.91	G1	.80
E2	.42	F2	.42	G2	.47
E3	.39	F3	.50	G3	.47
E4	.60	F4	.60	G4	.45
E5	.70	F5	.41	G5	.54
E6	.40	F6	.46	G6	.53
E7	.51	F7	.46	G7	.80
E8	.52	F8	.75	G8	.50
E9	.83	F9	.48	G9	.47
E10	.50	F10	.78	G10	.67
E11	.69	F11	.66	G11	.53
E12	.54	F12	.51	G12	.30
E13	.91	F13	.38	G13	.84
E14	.54	F14	.88	G14	.39
E15	.57	F15	.68	G15	.82
E16	.59	F16	.85	G16	.60
E17	.58	F17	.78	G17	.73
E18	.55	F18	.57	G18	.85
E19	.50	F19	.80	G19	.91
E20	.49	F20	.50	G20	.54
E21	.61	F21	.71	G21	.52
E22	.73	F22	.73	G22	.78
E23	.68	F23	.43	G23	.70
E24	.62	F24	.67	G24	.76
E25	.81	F25	.64	G25	.53
E26	.46	F26	.56	G26	.69
E27	.50	F27	.74	G27	.58
E28	.50	F28	.44	G28	.55
E29	.93	F29	.64	G29	.72
E30	.50	F30	.56	G30	.72
E31	.52	F31	.85	G31	.90
E32	.63	F32	.78	G32	.34
E33	.88	F33	.49	G33	.62
E34	.80	F34	.87	G34	.58
E35	.77	F35	.45	G35	.85
E36	.65	F36	.66	G36	.48
E37	.81	F37	.36	G37	.73
E38	.60	F38	.56	G38	.53
E39	.75	F39	.59	G39	.42
E40	.39	F40	.54	G40	.44

Table 6-1  
Item Difficulty by Item Number for the 1990 NCT-US History—Core 3

Item #	P-value	Item #	P-value	Item #	P-value
1	.64	21	.67	41	.81
2	.67	22	.57	42	.56
3	.69	23	.87	43	.57
4	.84	24	.50	44	.57
5	.61	25	.71	45	.45
6	.65	26	.61	46	.55
7	.65	27	.69	47	.52
8	.76	28	.56	48	.49
9	.61	29	.77	49	.75
10	.78	30	.59	50	.50
11	.51	31	.57	51	.60
12	.57	32	.55	52	.32
13	.82	33	.68	53	.42
14	.62	34	.56	54	.79
15	.56	35	.51	55	.52
16	.80	36	.63	56	.65
17	.65	37	.75	57	.51
18	.53	38	.72	58	.68
19	.91	39	.68	59	.77
20	.69	40	.75	60	.63

Table 6-2  
Item Difficulty by Item Number for the 1990 NCT-US History—Variables H, I, & J

Item #	P-value	Item #	P-value	Item #	P-value
H1	.36	I1	.51	J1	.53
H2	.60	I2	.39	J2	.47
H3	.51	I3	.56	J3	.77
H4	.54	I4	.88	J4	.57
H5	.82	I5	.66	J5	.40
H6	.66	I6	.70	J6	.82
H7	.52	I7	.51	J7	.46
H8	.81	I8	.68	J8	.59
H9	.83	I9	.65	J9	.56
H10	.49	I10	.80	J10	.51
H11	.46	I11	.53	J11	.26
H12	.49	I12	.41	J12	.57
H13	.53	I13	.48	J13	.45
H14	.79	I14	.74	J14	.82
H15	.67	I15	.38	J15	.70
H16	.63	I16	.41	J16	.76
H17	.82	I17	.67	J17	.56
H18	.54	I18	.79	J18	.60
H19	.51	I19	.39	J19	.57
H20	.50	I20	.89	J20	.38
H21	.52	I21	.36	J21	.47
H22	.45	I22	.57	J22	.54
H23	.46	I23	.51	J23	.78
H24	.38	I24	.55	J24	.51
H25	.53	I25	.74	J25	.69
H26	.78	I26	.34	J26	.68
H27	.55	I27	.79	J27	.68
H28	.78	I28	.42	J28	.47
H29	.64	I29	.89	J29	.61
H30	.56	I30	.63	J30	.79
H31	.40	I31	.69	J31	.69
H32	.56	I32	.75	J32	.50
H33	.57	I33	.81	J33	.84
H34	.58	I34	.23	J34	.43
H35	.47	I35	.57	J35	.81
H36	.66	I36	.64	J36	.38
H37	.74	I37	.57	J37	.76
H38	.87	I38	.65	J38	.53
H39	.70	I39	.66	J39	.88
H40	.82	I40	.69	J40	.69

## Test Norms

Students who answer all 60 of the U.S. History basic core items correctly could be assumed to be excellent U.S. History students. If everyone answered all of the items correctly, however, a different interpretation would have to be placed on the scores. At some point, scores must have a reference group grounded in the experience of all students. In some respect, at least, everything is good or bad by comparison. Norms tables provide that reference. Given a norms table, a student's score can be compared with other students' scores.

Norms tables commonly have two points of reference: a scale of percentiles and a scale of standard scores. The former permits the location of a score within percentile ranks; thus a student is said to have exceeded the performance of 80% of the students in the norm group (in this case, U.S. History students taking the North Carolina Test of U.S. History in May 1988). The latter, standard scores, permits the location of a score within normally-distributed standard scores. This reference is appropriate if the student abilities are believed to be normally distributed. In a normal distribution, raw scores are given greater and greater weight as they diverge from the mean in either direction.

The choice of a metric for the standard score is arbitrary. To avoid inappropriate and confusing comparisons with some of the more common metrics, such as those employed in IQ scores or NCE scores, a metric having a mean of 50 and a standard deviation of 10 was chosen. Most curriculum research studies involving the summation of scores will find the standard score to be the statistic of choice.

The norms table for student scores on the North Carolina Test of U.S. History is given in Table 7. These scores set a baseline of comparison for present and future achievement in U.S. History. Thus, a student score in 1988, 1989, and future years can be referenced to the scores of all 1988 U.S. History students in North Carolina.

In summary, the utility of a test is its statistical equivalence of core tests from year to year, its broad sampling of the curriculum across time, and its initial norms table.

**Table 7**  
**Norms for Student Scores on the North Carolina Test of U.S. History**

Raw Score	Percentile	Standard Score <sup>a</sup>
60	99	70.1
59	99	69.1
58	99	68.1
57	98	67.1
56	97	66.1
55	96	65.1
54	94	64.1
53	91	63.1
52	89	62.1
51	86	61.1
50	83	60.1
49	79	59.1
48	76	58.1
47	73	57.1
46	69	56.1
45	65	55.1
44	62	54.1
43	58	53.1
42	54	52.1
41	51	51.1
40	47	50.1
39	44	49.1
38	40	48.1
37	37	47.1
36	34	46.1
35	31	45.1
34	28	44.1
33	25	43.1
32	23	42.1
31	20	41.1
30	18	40.1
29	16	39.1
28	14	38.1
27	12	37.1
26	10	36.1
25	9	35.1
24	7	34.1
23	6	33.1
22	5	32.1
21	4	31.1
20	3	30.1
19	3	29.1
Less Than 19	2	

<sup>a</sup>Adjusted to a mean of 50 and a standard deviation of 10.0.

## Appendices

## Appendix A

### Test Content - Item Representation by Goal and Objective

Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic <sup>a</sup>
Goal 1	The learner will know important developments in American history from the pre Columbian period through the first years of exploration and discovery.				
1.1	Locate major pre-Columbian cultures on an appropriate map of the Western Hemisphere.	1	1	1	52.10
1.2	Identify major artistic, scientific, agricultural, and mathematical contributions of pre-Columbian cultures.	0	3	1	29.68
1.3	Describe reasons for European voyages of discovery in the 15th and 16th centuries.	2	3	2	88.50
1.4	Identify the areas of European political and economic influence in the Americas as of 1700.	1	1	0	73.23
1.5	Describe and explain differences between Native Americans and Europeans in attitudes toward land ownership.	0	2	1	62.10
1.6	Describe how geographic features both encouraged and discouraged European exploration.	1	1	1	65.38
Goal 2	The learner will know that European nations differed in their methods of colonizing the Americas.				
2.1	Describe and distinguish among Spanish, French, and British methods of colonial control.	1	3	2	68.39
2.2	Locate on an appropriate map areas controlled by the British, the Spanish, and the French in 1750.	0	2	1	79.55

<sup>a</sup>Percentage of US History Teachers reporting the objective as basic to instruction in US History.



Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic <sup>a</sup>
2.3	Analyze reasons for British, French, and Spanish conflicts in North America.	0	2	1	70.42
2.4	Compare and contrast British, Spanish, and French colonies in terms of location and major economic activity.	4	1	2	60.45
2.5	State ways in which geography either influenced, or did not influence, colonization.	0	2	0	62.38
2.6	State causes and results of the French and Indian War.	0	2	1	87.54
Goal 3	The learner will know important aspects of life in colonial America.				
3.1	Distinguish among New England, Middle, and Southern Colonies in terms of economic activities.	2	3	2	88.46
3.2	Identify major colonial figures and evaluate their contributions to colonial life.	0	2	1	66.35
3.3	Compare and contrast social life and recreational activity in New England, Middle, and Southern colonies.	2	1	2	31.63
3.4	Distinguish between indentured servitude and slavery.	1	2	1	88.22
3.5	Identify examples of British and French conflicts in North America during the colonial period.	0	2	1	65.48
3.6	Identify the various national groups that came to America during the colonial period.	1	2	1	62.30
3.7	Distinguish between the lifestyles of the various colonial groups.	1	1	1	33.01

<sup>a</sup>Percentage of US History Teachers reporting the objective as basic to instruction in US History.

Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic*
Goal 4	The learner will know cause and effect, major events, and major personalities of the Revolutionary War.				
4.1	Distinguish between immediate and long-term reasons for the American Revolution.	0	2	1	91.08
4.2	Identify major events associated with the Revolutionary War.	1	2	2	87.86
4.3	Identify and indicate the importance of major figures of the American Revolution.	4	1	2	81.41
4.4	Identify factors which were the most important in the defeat of the British in the Revolutionary War.	1	1	1	82.32
4.5	Discuss the importance of the Declaration of Independence.	0	2	1	92.06
Goal 5	The learner will know how the problems created by the Articles of Confederation led to the development of the Constitution.				
5.1	Identify the major problems of the government and economy under the Articles of Confederation.	2	1	2	88.92
5.2	Understand the process of how the Constitution was written and ratified.	1	2	2	85.76
Goal 6	The learner will know major trends, events, and problems of the "new nation."				
6.1	Identify states in the Union as of 1789, 1800, and 1815.	0	2	1	40.51

\*Percentage of US History Teachers reporting the objective as basic to instruction in US History

Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic <sup>a</sup>
6.2	Describe relationships with Britain and France during 1789-1815.	1	1	2	49.52
6.3	Identify problems facing the new nation, and describe how they were solved or left unsolved.	1	2	1	80.97
6.4	Describe the effects of the War of 1812 in terms of our relationships with other people.	1	1	1	62.46
6.5	Identify and describe important individuals and events that developed in the period from 1789-1815.	1	2	1	58.01
Goal 7	The learner will know that the period of 1815-1850 was a time of both nationalism and sectionalism.				
		3	2	1	87.54
7.1	Understand the difference between sectionalism and nationalism.	0	2	1	41.75
7.2	Identify states in the Union as of 1815 and 1850.	2	1	1	82.26
7.3	Assess the importance of the westward movement in the period 1815-1850.	0	2	1	62.13
7.4	Describe phenomena that contributed to the growth of nationalism and/or sectionalism in the period 1815-1840.	5	2	2	47.74
7.5	Identify and state the influence that individuals had on nationalism or sectionalism in the period 1815-1850.	1	2	2	55.48
7.6	Compare and contrast political events or actions in terms of their influence on nationalism and/or sectionalism.				

46

47

<sup>a</sup>Percentage of US History Teachers reporting the objective as basic to instruction in US History.

Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic <sup>a</sup>
Goal 8	The learner will know that sectionalism overcame nationalism and resulted in the Civil War.				
8.1	On a map of the United States, identify those states classified as slave states and free states in 1860.	1	2	1	88.50
8.2	Identify events or crises leading to the secession of the Confederate States of America.	3	1	2	96.15
8.3	Describe how international involvement contributed to the addition of new territories to the United States.	0	2	1	53.21
8.4	Describe the phenomenon of Manifest Destiny.	3	1	2	78.27
8.5	Describe the influence of slavery as an issue in the opening of the West.	1	2	1	74.92
8.6	Understand the importance of selected personalities and events just before the Civil War.	0	1	1	67.63
8.7	Understand economic factors that led to the Civil War.	2	1	2	88.25
Goal 9	The learner will know that the Civil War and the Reconstruction of the Union affirmed the power of the national government.				
9.1	Understand how states divided along sectional lines.	1	1	1	80.71
9.2	Understand the causes of the Civil War as immediate and long-term.	2	2	1	91.05
9.3	Recognize the significance of important political/military events related to the Civil War.	0	2	1	65.59
9.4	Distinguish similarities and differences between presidential and congressional plans for reconstructing the South.	2	2	1	74.68

<sup>a</sup>Percentage of US History Teachers reporting the objective as basic to instruction in US History.

Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic <sup>a</sup>
9.5	Describe the effects of Reconstruction on the South.	2	1	2	88.14
Goal 10	The learner will know about major late 19th-century industrial and business developments.				
10.1	Identify the types of business organizations that developed after the Civil War.	3	1	2	57.69
10.2	Identify the importance of technological advances made in the late nineteenth century.	2	2	2	73.14
10.3	Understand the impact that industrialism and immigration had on American cities from 1820-1900.	1	1	1	74.19
10.4	Identify major late nineteenth century industrial centers of the United States.	1	1	1	35.83
10.5	Understand the importance of the entrepreneur in the development of the American economy during the latter half of the nineteenth century.	2	2	1	46.43
10.6	Understand major political developments between 1865-1900.	1	1	1	61.76
10.7	Understand major economic developments between 1865-1900.	1	2	2	65.80
Goal 11	The learner will know causes and events of the settlement of the West.				
11.1	Know the importance of railroads in the settlement of the West.	1	2	2	82.48
11.2	Know conditions faced by farm families as they settled the West.	1	1	1	57.69

<sup>a</sup>Percentage of US History Teachers reporting the objective as basic to instruction in US History.

Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic*
11.3	Know the major reasons for various groups moving west.	3	1	1	65.50
11.4	Know the impact that settlement in the West had upon native American Indians.	0	2	1	83.92
11.5	Know the role of prominent women and men in the settlement of the West.	1	2	2	42.90
11.6	Understand the role of the Cattle Kingdom in reality and myth.	2	2	2	38.59
Goal 12	The learner will know that the late 19th-century was a time of great social, political, and economic change and unrest.				
12.1	Evaluate relationships between government and business in the late nineteenth century, identifying the laws or government policies which encouraged the development of large corporations.	0	2	1	59.68
12.2	Describe the important results of late nineteenth century immigration.	4	2	2	63.67
12.3	Understand the causes, events, and effects of the agrarian revolt.	1	2	1	49.35
12.4	Evaluate the importance of efforts of labor to organize into unions.	2	1	2	74.68
12.5	Evaluate the influence of the Progressive Movement.	2	2	2	71.15

\*Percentage of US History Teachers reporting the objective as basic to instruction in US History.

Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic <sup>a</sup>
Goal 13	The learner will know the major causes and events contributing to American foreign policy in the period 1865-1920.				
13.1	Describe how imperialism influenced United States foreign policy at the turn of the century.	4	3	2	84.36
13.2	Locate on a map general areas held in colonial control by the United States in 1910.	0	3	2	63.06
13.3	Evaluate United States conduct as an imperial power.	1	2	2	63.75
13.4	State reasons why the United States proposed to remain neutral during World War I.	1	2	2	89.94
13.5	Describe reasons why the United States entered World War I.	3	1	2	96.85
13.6	Evaluate the effects of World War I on the United States and Europe.	4	1	2	87.15
13.7	Assess the impact of the United States' retreat into isolation at the end of World War I.	1	2	2	71.93
13.8	Understand the military role of the United States in World War I.	2	1	3	68.90
Goal 14	The learner will know that the "time between wars" (1920-1940) was a time of isolation, disillusionment with international involvement, rapid change, and both economic prosperity and despair.				
54	14.1 State the extent to which different segments of America participated in the prosperity of the early 1920's.	2	2	2	53.46

<sup>a</sup>Percentage of US History teachers reporting the objective as basic to instruction in US History.

Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic <sup>a</sup>
14.2	Describe the isolation and disillusionment with international affairs that the United States felt following World War I.	1	2	2	61.35
14.3	Describe the factors contributing to the "Great Depression."	5	2	3	94.03
14.4	Analyze the effects that movements and fads had on 1920's lifestyles.	4	2	2	34.89
14.5	Identify important New Deal activities and government reform measures.	5	1	2	88.25
14.6	Identify New Deal legislation that addressed problems in the social and economic communities.	0	2	3	73.83
14.7	Evaluate the effects of New Deal legislation on efforts to organize workers.	2	1	2	51.58
14.8	Evaluate the long-term influence of New Deal policies on the economic, social, and political institutions in the United States.	1	2	2	59.89
Goal 15	The learner will know major causes, events, and results of World War II.				
15.1	Know how World War I and its aftermath led to World War II.	2	1	2	94.06
15.2	Describe reasons for Adolf Hitler's rise to political power.	1	2	2	78.29
15.3	Know that the 1930's was a period of expansion of totalitarian governments.	4	2	3	76.39
15.4	Discuss the acts leading to the outbreak of World War II in Europe.	1	2	2	89.55

<sup>a</sup>Percentage of US History Teachers reporting the objective as basic to instruction in US History.



Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic <sup>a</sup>
15.5	Know those areas controlled by Germany, Italy, and Japan as of 1942.	1	1	2	59.18
15.6	Describe the steps which preceded the United States' entry into World War II.	3	1	2	88.13
15.7	Describe the effects of World War II on social and economic groups in the United States.	5	2	2	44.13
15.8	Describe selected military events from World War II, and discuss the military importance of each.	3	1	2	54.17
15.9	Describe postwar Europe and the organizations established to maintain peace.	1	1	3	75.70
Goal 16	The learner will know the major events, and their causes, and effects of the foreign policy of the United States since 1945.				
16.1	Describe the expansion of communism/socialism from 1945-1960.	2	1	2	74.44
16.2	Identify the major world events from the "cold war" era and evaluate their impact on the United States.	2	1	2	74.81
16.3	Identify and explain the importance of the major political figures and events of the Korean War era.	2	2	2	63.16
16.4	Evaluate the foreign policy dilemmas faced by the United States in its thirst for oil.	1	1	2	37.17
16.5	Know the importance of the military/political alliances in the cold war period.	0	2	2	61.51
16.6	Identify the major figures of the Cold War era and assess their impact on this period.	3	2	3	56.25

<sup>a</sup>Percentage of US History Teachers reporting the objective as basic to instruction in US History.

Goal/Obj	Description	No. Items 1988	No. Items 1989	No. Items 1990	% Teachers Reporting as Basic <sup>a</sup>
16.7	Know the important persons and events during the "McCarthy Era."	3	2	2	46.88
16.8	Identify and discuss the major causes, effects, political figures, and events of the Vietnam War effort.	2	2	2	76.37
16.9	Assess the effects of the Vietnam War on American society.	6	2	4	66.73
Goal 17	The learner will know that the years since 1945 have been a time of great social, economic, and political change.				
17.1	Analyze the course of the American economy since World War II, with emphasis on cyclical periods of growth and decline, and the reasons for these economic up-swings and down-turns.	0	2	3	28.04
17.2	Describe the social changes occurring in the United States beginning with World War II.	5	2	2	47.39
17.3	Evaluate a list of the major political changes and events from 1950-1980.	2	2	2	53.47
17.4	Identify and evaluate major civil rights events and movements from the past 30 years.	2	1	2	72.90
Goal 18	The learner will know that the post World War II years have been a period of great technological change.				
18.1	Identify and assess the importance of the technological changes occurring in the post World War II years.	5	2	5	50.47

<sup>a</sup>Percentage of US History Teachers reporting the objective as basic to instruction in US History.

## Appendix B

### Goals and Objectives Added to the US History Curriculum in 1989

Goal/Obj	Description
4.6	Identify the major ideas about government expressed in the Declaration of Independence.
4.7	Know the major grievances toward the King of England enumerated in the Declaration of Independence.
5.3	Know the major arguments expressed in the writings known as the Federalists and Anti-Federalists papers.
5.4	Understand the rights of the individual outlined in the first ten amendments of the United States Constitution.
5.5	Know the major powers, duties, and limitations of the President, Congress, and the Federal Judiciary systems.
7.7	Know that issues in the debate over nullification were similar to those raised in the debate over how much power the federal government should have at the time when the United States Constitution was written and ratified.
9.6	Know the impact of the 13th, 14th, and 15th Amendments to the United States Constitution.
9.7	Understand the relationship between the struggle over plans for reconstruction and the principles of checks and balances and separation of powers found in the United States Constitution.
17.5	Evaluate the impact of recent Constitutional Amendments, rulings, and federal legislation on United States citizens.
Goal 19	The learner will know the influence of major religious faiths on the culture and history of the United States.
19.1	Understand the development of religious liberty and toleration.
19.2	Understand the role of religion in social change.
19.3	Understand the growth of religious pluralism.
19.4	Understand the role of religion in contemporary social, political, and economic events.