New York State Regents Examination in U.S. History and Government

2010 Field Test Analysis, Equating Procedure, and Scaling of Operational Test Forms

Technical Report

Prepared for the New York State Education Department
by Pearson

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Section I: Introduction

Purpose

The purpose of this report is to document the psychometric work on the New York State Regents Examination in U.S. History and Government in 2010. Specifically, contained within this report are procedures for and results of field test analysis, equating, and scaling of operational test forms. Because of a change in vendor mid-year, the field test equating was conducted by Pearson while the scaling was conducted by the previous vendor. Information on test development can be found in the test design and development report for the New York State Regents Examination in U.S. History and Government.

Section II: Field Test Analysis

In May 2010, field testing was conducted for the New York State Regents Examination in U.S. History and Government to better understand the psychometric quality of the items. The results of this testing are used to help determine which items will be selected for use on operational tests.

Target student samples for participation in this testing were selected such that each would represent the student population expected to take the operational test. The Need/Resource Capacity Categories were used as variables in the sampling plan. See Table 1 for the seven Need/Resource Capacity Categories and their definitions.

Table 1. Need/Resource Capacity Category Definitions

Need/Resource Capacity (N/RC) Category	Definition
High N/RC Districts: New York City	New York City
Large Cities	Buffalo, Rochester, Syracuse, Yonkers
Urban-Suburban	Districts at or above 70th percentile on the index with at least 100 students per square mile or enrollment greater than 2500
Rural	All districts at or above the 70th percentile with fewer than 50 students per square mile or enrollment of less than 2500
Average N/RC Districts	All districts between the 20th and 70th percentiles on the index
Low N/RC Districts	All districts below the 20th percentile on the index
Charter Schools	Each charter school is a district

The data collected from field testing were scored by two entities. The multiple-choice items were scored by the New York State Education Department and the scaffold questions and essay items were scored by Measurement Incorporated. Therefore, it was necessary to combine data files for data analysis. Both classical and item response theory analyses were conducted using the data to evaluate the quality of the test items.

File Merging and Data Clean-up

Field test forms 742–750 contained multiple-choice, scaffold questions, and essay item types. Response data were contained in two separate files. The multiple-choice data file contained 13,291 student records and the scaffold questions and essay data file contained 11,549 student records. To combine the two files, the multiple-choice file served as the base file and scaffold questions and essay records were merged to the multiple-choice records using unique test booklet numbers. For multiple-choice records that did not have corresponding scaffold questions and essay records, scaffold questions and essay items were treated as non-attempted and scored as 0. After the exclusion rules were applied, the resulting field test data file contained 12,983 records.

Field test forms 731–741 only contained multiple-choice questions. Therefore, no matching of data was necessary and the data file contained 12,337 records.

Multiple-choice response data were then compared to the answer key. All item responses not matching the answer key were assigned scores of 0. The responses matching the answer key were assigned scores of 1. With respect to the scaffold questions and essay items, scores from 0 to the maximum point value available for each tested item were kept while out of range values were assigned scores of 0. For IRT calibrations, blanks (i.e., missing data) were assigned scores of 0 to be consistent with how operational test items are scored.

The final data file contained both the scored and unscored student responses. Unscored data were used to calculate the percentage of students who selected the various answer choices for the multiple-choice items or the percentage of students who received the range of possible raw score points for the scaffold questions and essay items. Thus, the frequency of students leaving items blank can be calculated. The scored data were used for all other analyses.

Classical Analysis

Classical Test Theory is based on the assumption that an observed test score x is composed of both true score t and error score e. This assumption is expressed as follows:

$$x = t + e$$

In other words, error is associated with measuring a student's true score. For example, the choice of test items or the administration conditions may influence student responses, making a student's observed score higher or lower than the student's true score. The error is considered random. After repeated administrations, the mean of the error scores is virtually zero. Thus, a student's observed score is expected to equal his or her true score. This expectation is expressed as follows:

$$E(x) = t$$

Using a Classical Test Theory framework, field test data can be analyzed to provide information about the quality of test items. Item difficulties, point-biserial correlations, reliability estimates, and various statistics related to rater agreement have been calculated and are summarized in the following section.

Item Difficulty

Item difficulty is an indication of student performance on a specific item. Because this examination contains polytomous items, item means are not appropriate for comparing difficulty across items. Instead, weighted item means were calculated by dividing an item's mean by the maximum points possible for that item.

For multiple-choice items, the item difficulty is the proportion of students who answer an item correctly. If 90% of the student responses to a multiple-choice item are correct, then this item is considered easier than a multiple-choice item with correct responses by 30% of the students.

Point-Biserial Correlation

The point-biserial correlation is another classical statistic that can be used to evaluate items. For multiple-choice items, it is the correlation between students' performance on a given item (correct or incorrect) and overall performance scores. This statistic is used to evaluate how well an item identifies students who understand the concept being measured and can be generalized for scaffold questions and essay items. The possible range for the point-biserial correlation is -1 to 1, with higher values being more desirable.

Table 2 presents a summary of the classical item analysis for each of the field test forms. The first three columns identify the form number, the number of students who took each form, and the number of items on each field test form. The remaining columns are divided into two sections (i.e., item difficulty and point-biserial correlations). Recall that for scaffold questions and essay items, item means were divided by the maximum number of points possible in order to place them in the same metric as the multiple-choice items. For all items, item difficulties were below

0.90. With respect to the point-biserial correlations, most of these correlations were greater than 0.25.

Table 2. Classical Item Analysis

			Item Difficulty			Point-Biserial		
Form	N-Count	No. of Items	<0.50	0.50 to 0.90	>0.90	<0.25	0.25 to 0.50	>0.50
731	1,163	30	4	26	0	0	12	18
732	1,179	32	10	22	0	0	21	11
733	1,171	32	7	25	0	1	21	10
734	1,175	32	8	24	0	2	17	13
735	1,171	32	6	26	0	1	21	10
736	1,193	32	14	18	0	2	24	6
737	1,194	32	7	25	0	2	18	12
738	1,186	32	6	26	0	0	19	13
739	1,189	32	6	26	0	1	21	10
740	1,174	32	9	23	0	1	18	13
741	1,188	32	5	27	0	1	19	12
742	1,373	1	1	0	0	0	0	1
743	1,384	1	1	0	0	0	0	1
744	1,368	1	1	0	0	0	0	1
745	1,353	1	1	0	0	0	1	0
746	1,377	13	6	7	0	0	3	10
747	1,392	11	2	9	0	0	2	9
748	1,374	10	3	7	0	0	3	7
749	1,361	11	2	9	0	0	1	10
750	1,355	12	3	9	0	0	3	9

In addition to the summary information provided in Table 2, all of the classical item statistics are provided in Appendix A. ‘Max’ is the maximum number of possible points. ‘N-Count’ refers to the number of student records in the analysis. ‘Alpha’ contains the internal consistency statistics discussed below. For multiple-choice items, ‘B’ represents the proportion of students who left the item blank and ‘M1’ through ‘M4’ are the proportions of students who selected each of the four answer choices. For scaffold questions and essay items, ‘B’ represents the proportion of students who left the item blank and ‘M0’ through ‘M5’ are the proportions of students who received scores 0 through 5. ‘Mean’ is the average of the scores received by the students. The final column contains the point-biserial correlation for each item. There are some instances of items missing statistics; this occurs when an item was not scored.

Test Reliability

Classical analysis can also be used to measure the reliability of the test. Reliability is the consistency of the results obtained from a measurement with respect to time or among items or subjects that constitute a test. As such, test reliability can be estimated in a variety of ways. Internal consistency indices are a measure of how consistently examinees respond to items within a test. Two factors influence estimates of internal consistency: test length and homogeneity of items. In general, the more items on the examination the higher the reliability, and the more similar the items are the higher the reliability.

Cronbach's α (alpha) (Cronbach, 1951) has an important use as a measure of the internal consistency of a test. This formula is the extension of an earlier version, the Kuder-Richardson Formula 20 (KR-20), which is the equivalent for dichotomous items.

Table 3 contains the internal consistency statistics for all of the field test forms. These statistics ranged from 0.86 to 0.91 and are based solely on the items in the individual field test forms. It is expected that these statistics associated with the operational tests would be greater because there are more items on the operational test forms.

Table 3. Test and Scoring Reliability

Form Number	Test Reliability	Scoring Reliability
731	0.89	n/a
732	0.88	n/a
733	0.88	n/a
734	0.88	n/a
735	0.87	n/a
736	0.86	n/a
737	0.87	n/a
738	0.89	n/a
739	0.88	n/a
740	0.88	n/a
741	0.88	n/a
742	0.88	0.74
743	0.88	0.77
744	0.88	0.72
745	0.87	0.62
746	0.91	0.76
747	0.91	0.79
748	0.90	0.65
749	0.91	0.79
750	0.91	0.73

Scoring Reliability

One concern with scaffold questions and essay items is the reliability of the scoring process (i.e., consistency of the score assignment). Scaffold questions and essay items must be read by scorers who assign scores based on a comparison between the rubric and students' responses. Consistency in the way scores are assigned is a critical part of the reliability of the assessment. To measure this consistency, 10% of the test booklets are scored a second time (i.e., second read scores) and compared to the original set of scores (i.e., first read scores).

As an overall measure of scoring reliability, the Pearson Correlation Coefficient between the first and second scores for each of the scaffold questions and essay items was computed. This statistic is often used as an overall indicator of scoring reliability and generally ranges from 0 to near 1. Table 3 contains the results from these analyses in the column headed Scoring Reliability. The correlations ranged from 0.62 to 0.79, indicating high scoring reliability.

Inter-rater Agreement

For each scaffold questions and essay item, the difference between the first and second reads was computed. When examining inter-rater agreement statistics, it should be kept in mind that the maximum number of points per item varies as shown in the 'Score Points' column of the following tables.

Table 4 contains the proportion of occurrence of these differences for each item. There were no instances of the first read and second read differing by more than 2.

Table 4. Point Differences Between First and Second Reads

			Difference (First Read minus Second Read)						
Form	Item	Score Points	-3	-2	-1	0	1	2	3
742	THM	5	0.00	0.02	0.22	0.61	0.14	0.01	0.00
743	THM	5	0.00	0.01	0.17	0.66	0.16	0.00	0.00
744	THM	5	0.00	0.01	0.13	0.66	0.19	0.01	0.00
745	THM	5	0.00	0.02	0.14	0.63	0.19	0.02	0.00
746	01	2	0.00	0.03	0.19	0.62	0.13	0.03	0.00
746	02	1	0.00	0.00	0.05	0.87	0.08	0.00	0.00
746	3a	1	0.00	0.00	0.11	0.76	0.13	0.00	0.00
746	3b	1	0.00	0.00	0.05	0.86	0.09	0.00	0.00
746	04	1	0.00	0.00	0.07	0.84	0.09	0.00	0.00
746	5a	1	0.00	0.00	0.04	0.91	0.05	0.00	0.00
746	5b	1	0.00	0.00	0.03	0.93	0.04	0.00	0.00
746	06	2	0.00	0.01	0.09	0.82	0.07	0.01	0.00
746	07	1	0.00	0.00	0.08	0.83	0.09	0.00	0.00
746	8a	1	0.00	0.00	0.05	0.90	0.06	0.00	0.00
746	8b	1	0.00	0.00	0.06	0.88	0.06	0.00	0.00
746	09	1	0.00	0.00	0.10	0.83	0.07	0.00	0.00
746	DBQ	5	0.00	0.00	0.08	0.77	0.14	0.00	0.00
747	01	1	0.00	0.00	0.09	0.80	0.11	0.00	0.00
747	02	2	0.00	0.01	0.10	0.79	0.09	0.01	0.00
747	3a	1	0.00	0.00	0.05	0.92	0.03	0.00	0.00
747	3b	1	0.00	0.00	0.06	0.84	0.10	0.00	0.00
747	04	1	0.00	0.00	0.02	0.96	0.02	0.00	0.00
747	05	2	0.00	0.01	0.10	0.79	0.11	0.00	0.00
747	06	1	0.00	0.00	0.06	0.89	0.05	0.00	0.00
747	07	1	0.00	0.00	0.05	0.93	0.02	0.00	0.00
747	08	2	0.00	0.00	0.11	0.79	0.10	0.00	0.00
747	09	1	0.00	0.00	0.12	0.79	0.10	0.00	0.00
747	DBQ	5	0.00	0.01	0.06	0.79	0.13	0.01	0.00
748	01	2	0.00	0.03	0.10	0.67	0.16	0.03	0.00
748	02	1	0.00	0.00	0.09	0.82	0.09	0.00	0.00
748	03	2	0.00	0.01	0.15	0.65	0.16	0.03	0.00

Table 4. Point Differences Between First and Second Reads *(continued)*

			Difference (First Read minus Second Read)						
Form	**Item**	**Score Points**	**-3**	**-2**	**-1**	**0**	**1**	**2**	**3**
748	04	2	0.00	0.02	0.18	0.57	0.19	0.05	0.00
748	05	1	0.00	0.00	0.10	0.79	0.11	0.00	0.00
748	6a	1	0.00	0.00	0.22	0.60	0.18	0.00	0.00
748	6b	1	0.00	0.00	0.01	0.98	0.01	0.00	0.00
748	07	1	0.00	0.00	0.03	0.93	0.04	0.00	0.00
748	08	2	0.00	0.02	0.18	0.65	0.15	0.01	0.00
748	DBQ	5	0.00	0.00	0.14	0.70	0.16	0.01	0.00
749	1a	1	0.00	0.00	0.03	0.92	0.06	0.00	0.00
749	1b	1	0.00	0.00	0.09	0.80	0.11	0.00	0.00
749	02	2	0.00	0.01	0.15	0.61	0.22	0.01	0.00
749	03	1	0.00	0.00	0.06	0.90	0.04	0.00	0.00
749	04	2	0.00	0.00	0.10	0.83	0.07	0.00	0.00
749	05	2	0.00	0.02	0.16	0.66	0.12	0.02	0.00
749	06	2	0.00	0.00	0.08	0.79	0.11	0.02	0.00
749	07	2	0.00	0.00	0.08	0.86	0.06	0.01	0.00
749	08	1	0.00	0.00	0.03	0.96	0.01	0.00	0.00
749	09	1	0.00	0.00	0.02	0.91	0.07	0.00	0.00
749	DBQ	5	0.00	0.01	0.12	0.72	0.15	0.00	0.00
750	01	1	0.00	0.00	0.11	0.77	0.11	0.00	0.00
750	02	1	0.00	0.00	0.03	0.90	0.07	0.00	0.00
750	3a	1	0.00	0.00	0.15	0.72	0.13	0.00	0.00
750	3b	1	0.00	0.00	0.11	0.83	0.06	0.00	0.00
750	04	1	0.00	0.00	0.04	0.92	0.04	0.00	0.00
750	5a	1	0.00	0.00	0.03	0.89	0.08	0.00	0.00
750	5b	1	0.00	0.00	0.07	0.84	0.09	0.00	0.00
750	06	2	0.00	0.01	0.08	0.79	0.11	0.02	0.00
750	07	1	0.00	0.00	0.08	0.87	0.05	0.00	0.00
750	08	1	0.00	0.00	0.05	0.91	0.03	0.00	0.00
750	09	2	0.00	0.01	0.15	0.66	0.16	0.02	0.00
750	DBQ	5	0.00	0.00	0.13	0.71	0.16	0.00	0.00

Table 5 contains additional summary information regarding the first and second reads. In the fourth column the percent of exact matches between the first and second scores is provided. 'Adj.' is the percentage of differences with a magnitude of one. 'Total' is the sum of the two prior columns and contains values between 93.2% and 100%. These values indicate a high degree of agreement.

Table 5. First and Second Read Descriptive Description and Agreement

				Agreement (%)			Raw Score Mean		Raw Score Standard Deviation			
Form	Item	Score Points	Total N-Count	Exact	Adj.	Total	First Read	Second Read	First Read	Second Read	Intra-Class Corre-lation	Wt Kappa
742	THM	5	176	61.4	35.8	97.2	1.6	1.7	0.96	0.92	0.74	0.60
743	THM	5	170	65.9	33.5	99.4	1.1	1.2	0.86	0.89	0.77	0.63
744	THM	5	179	65.9	32.4	98.3	1.0	0.9	0.84	0.83	0.72	0.60
745	THM	5	174	63.2	33.3	96.6	1.6	1.5	0.75	0.82	0.62	0.51
746	01	2	178	62.4	32.0	94.4	1.1	1.2	0.78	0.75	0.54	0.47
746	02	1	184	87.0	13.0	100.0	0.6	0.6	0.48	0.49	0.72	0.72
746	3a	1	174	76.4	23.6	100.0	0.7	0.7	0.46	0.47	0.45	0.45
746	3b	1	170	85.9	14.1	100.0	0.7	0.6	0.47	0.48	0.69	0.68
746	04	1	173	83.8	16.2	100.0	0.8	0.7	0.42	0.44	0.56	0.56
746	5a	1	172	91.3	8.7	100.0	0.8	0.8	0.40	0.41	0.73	0.73
746	5b	1	168	92.9	7.1	100.0	0.6	0.5	0.50	0.50	0.86	0.86
746	06	2	153	81.7	15.7	97.4	1.4	1.4	0.70	0.71	0.73	0.71
746	07	1	159	83.0	17.0	100.0	0.7	0.6	0.48	0.48	0.63	0.63
746	8a	1	155	89.7	10.3	100.0	0.8	0.8	0.36	0.37	0.62	0.62
746	8b	1	153	88.2	11.8	100.0	0.7	0.7	0.47	0.47	0.73	0.73
746	09	1	135	83.0	17.0	100.0	0.7	0.7	0.45	0.44	0.58	0.58
746	DBQ	5	180	77.2	22.8	100.0	1.1	1.1	1.07	1.01	0.90	0.80
747	01	1	192	80.2	19.8	100.0	0.8	0.7	0.43	0.45	0.49	0.49
747	02	2	190	79.5	18.9	98.4	1.7	1.8	0.53	0.50	0.52	0.46
747	3a	1	191	91.6	8.4	100.0	0.9	0.9	0.33	0.30	0.58	0.57
747	3b	1	189	84.1	15.9	100.0	0.9	0.9	0.32	0.35	0.29	0.29
747	04	1	192	96.4	3.6	100.0	1.0	1.0	0.19	0.20	0.52	0.51
747	05	2	179	78.8	20.7	99.4	1.7	1.7	0.56	0.52	0.60	0.53
747	06	1	175	89.1	10.9	100.0	0.9	0.9	0.35	0.33	0.53	0.53

Table 5. First and Second Read Descriptive Description and Agreement *(continued)*

				Agreement (%)			Raw Score Mean		Raw Score Standard Deviation			
Form	Item	Score Points	Total N-Count	Exact	Adj.	Total	First Read	Second Read	First Read	Second Read	Intra-Class Corre-lation	Wt Kappa
747	07	1	181	92.8	7.2	100.0	0.8	0.9	0.37	0.35	0.73	0.72
747	08	2	165	78.8	21.2	100.0	1.7	1.7	0.52	0.50	0.59	0.51
747	09	1	164	78.7	21.3	100.0	0.6	0.6	0.49	0.48	0.55	0.55
747	DBQ	5	187	78.6	19.8	98.4	1.1	1.0	0.97	0.92	0.86	0.78
748	01	2	172	67.4	26.2	93.6	1.4	1.3	0.72	0.73	0.51	0.48
748	02	1	174	81.6	18.4	100.0	0.7	0.7	0.48	0.48	0.59	0.59
748	03	2	178	65.2	31.5	96.6	1.4	1.4	0.64	0.69	0.49	0.44
748	04	2	176	56.8	36.4	93.2	1.0	0.9	0.81	0.80	0.51	0.43
748	05	1	177	79.1	20.9	100.0	0.8	0.8	0.41	0.42	0.39	0.39
748	6a	1	164	60.4	39.6	100.0	0.6	0.6	0.50	0.49	0.19	0.19
748	6b	1	166	98.2	1.8	100.0	1.0	1.0	0.17	0.15	0.66	0.66
748	07	1	165	92.7	7.3	100.0	0.9	0.9	0.33	0.34	0.67	0.67
748	08	2	164	64.6	32.9	97.6	1.3	1.3	0.73	0.72	0.59	0.50
748	DBQ	5	184	70.1	29.3	99.5	1.0	0.9	0.97	0.96	0.83	0.71
749	1a	1	178	91.6	8.4	100.0	0.9	0.9	0.30	0.34	0.59	0.59
749	1b	1	183	79.8	20.2	100.0	0.4	0.3	0.48	0.48	0.56	0.56
749	02	2	181	60.8	37.6	98.3	1.5	1.4	0.64	0.63	0.45	0.37
749	03	1	181	89.5	10.5	100.0	0.8	0.9	0.37	0.35	0.59	0.59
749	04	2	175	83.4	16.6	100.0	1.9	1.9	0.37	0.30	0.26	0.17
749	05	2	164	66.5	28.7	95.1	1.6	1.6	0.64	0.61	0.38	0.33
749	06	2	170	78.8	18.8	97.6	1.5	1.4	0.70	0.77	0.75	0.68
749	07	2	166	85.5	13.9	99.4	1.7	1.7	0.57	0.56	0.74	0.68
749	08	1	158	96.2	3.8	100.0	0.8	0.8	0.42	0.41	0.89	0.89
749	09	1	152	91.4	8.6	100.0	0.9	0.8	0.34	0.38	0.68	0.67
749	DBQ	5	188	72.3	27.1	99.5	0.9	0.9	0.94	0.95	0.84	0.72
750	01	1	183	77.0	23.0	100.0	0.7	0.7	0.45	0.45	0.43	0.43
750	02	1	183	89.6	10.4	100.0	0.7	0.7	0.44	0.46	0.75	0.75
750	3a	1	173	72.3	27.7	100.0	0.5	0.5	0.50	0.50	0.45	0.45
750	3b	1	177	83.1	16.9	100.0	0.7	0.7	0.48	0.45	0.61	0.61
750	04	1	183	91.8	8.2	100.0	0.9	0.9	0.30	0.29	0.53	0.53

Table 5. First and Second Read Descriptive Description and Agreement *(continued)*

				Agreement (%)			Raw Score Mean		Raw Score Standard Deviation			
Form	Item	Score Points	Total N-Count	Exact	Adj.	Total	First Read	Second Read	First Read	Second Read	Intra-Class Corre-lation	Wt Kappa
750	5a	1	185	89.2	10.8	100.0	0.9	0.8	0.32	0.37	0.57	0.56
750	5b	1	176	83.5	16.5	100.0	0.8	0.8	0.42	0.43	0.55	0.55
750	06	2	169	79.3	18.3	97.6	1.2	1.1	0.73	0.76	0.75	0.71
750	07	1	170	87.1	12.9	100.0	0.7	0.8	0.44	0.42	0.65	0.65
750	08	1	175	91.4	8.6	100.0	0.9	0.9	0.33	0.30	0.57	0.57
750	09	2	161	66.5	31.1	97.5	1.3	1.3	0.73	0.74	0.62	0.53
750	DBQ	5	180	71.1	28.9	100.0	1.2	1.2	1.01	1.00	0.86	0.74

* Adj. = difference of one

Scaffold Questions and Essay Item Means and Standard Deviations

The average score for each scaffold question and essay item was computed based on the first and second reads. In addition, the standard deviation of the scores was computed.

Table 5 contains the means and standard deviations for the first and second read scores. The largest difference between the item means for the first and second scores was 0.1, while there were minimal differences among standard deviation statistics.

Intra-class Correlation

The intra-class correlation was computed for each item. This correlation is an estimate of the reliability of scoring based on an average of the first and second reads. Correlations greater than 0.60 are considered very strong because they explain more than one-third of the variance in scores. Roughly half of the items had intra-class correlations greater than 0.60 (See Table 5).

Weighted Kappa

Weighted Kappa (Cohen, 1968) was calculated for each item based on the first and second reads. This statistic produces an estimate of the reliability of the score classifications relative to what would be expected to occur by chance.

Weighted Kappa is an estimate of the reliability of the score classifications. That is, the Kappa statistic is a measure of reproducibility for categorical data. Guidelines for the evaluation of this statistic are:

- $k > 0.75$ denotes excellent reproducibility
- $0.4 < k \leq 0.75$ denotes good reproducibility
- $0 < k \leq 0.4$ denotes marginal reproducibility

The results found in Table 5 show a high degree of consistency between the first and second reads. The Weighted Kappa statistics ranged from 0.17 to 0.89, which in all but six cases indicates good to excellent reproducibility.

Based on the scoring reliability analyses, there is strong evidence that the scoring of the scaffold questions and essay items was performed in a highly reliable manner.

Item Response Theory (IRT) Statistics

As discussed above, the item mean is a statistic used to evaluate item difficulty. However, many different test forms are used during field testing and different samples of students are responding to these items. The average ability of the different samples of students varies and a direct comparison of item means across test forms may lead to inaccurate interpretations. Therefore, Item Response Theory (IRT) was also used to evaluate item difficulty.

Specifically, the Rasch Partial Credit Model (PCM) (Masters, 1982) was used. With use of this model, the difficulty of items and the ability of examinees are placed on the same metric. Thus, the difficulty of an item and the ability of a person can be meaningfully compared across field test forms. Also, the use of this model provides greater flexibility in situations where different samples or test forms are used because the parameters generated are generally not considered to be sample dependent or test dependent. A description of this model, results of item calibration, and item fit evaluation are below.

The PCM provides an overall difficulty estimate for each item. Specifically for scaffold questions and essay items when there are several points possible, individual estimates of difficulty for each of the possible score points are also calculated (i.e., step values). Each step value represents the difficulty of a student receiving a particular score point given that they have already received the prior score point. For example, if a 3-point item had step values of -1.0, 1.0, and 0.0, one could say that it is relatively easy to obtain a score of 1. However, it is much more difficult to obtain a 2 given the student has the ability to score a 1 because the difference in difficulty between a 1 and a 2 is much greater than the difference between a 0 and a 1. Also, the difference between a 2 and a 3 is not as great as the difference between a 1 and a 2. Thus, with this example, a small step is needed to

go from a 0 to a 1, a large step is needed to move from a 1 to a 2, and a moderate step is needed to proceed from a 2 to a 3.

Item Calibration

As discussed above, the use of Rasch item difficulty statistics provides an advantage over the use of classical item means because they can be compared across test forms. Different samples of students responded to the various test forms. Although the samples were selected to be similar with respect to student ability, there are differences. By equating the test forms (See the Equating Procedure section below), the Rasch item difficulties account for those differences and these statistics can be compared across test forms.

Rasch item difficulty values generally range from -3.00 to +3.00. An item with a Rasch difficulty greater than +2.0 is considered very difficult and should be examined carefully. If the item is measuring an important concept that students are having difficulty with, then the item can be useful. However, if the item is measuring a trivial concept or is written in a confusing manner, then it may not be appropriate to use on an operational test form. Likewise, any item with a Rasch difficulty less than -2.0 is considered very easy and usually provides little information regarding student achievement. The vast majority of test items should range between -2.0 and +2.0. This range represents approximately two standard deviations around the average difficulty of 0. Thus, one would expect that, based on chance, roughly 5% of the items will fall outside of that range and therefore, these are items that should be closely examined for content.

Item Fit Evaluation

The INFIT statistic is used to determine whether items are functioning in a way that is congruent with the assumptions of the Rasch model. Under these assumptions, how a student will respond to an item depends on the proficiency of the student and the difficulty of the item, both of which are on the same measurement scale. If an item is as difficult as a student is able, the student will have a 50% chance of getting the item correct. If a student is more able than an item is difficult, under the assumptions of the Rasch model, that student has a greater than 50% chance of correctly answering the item. On the other hand, if the item is more difficult than the student is able, he or she has a less than 50% chance of correctly responding to the item. Rasch fit statistics estimate the extent to which an item is functioning in this predicted manner. Items showing a poor fit with the Rasch model typically have values outside the range of 0.7 to 1.3.

Table 6 contains a summary of the Partial Credit Model item analysis for each of the field test forms. The first column lists the form numbers. The next two columns list the number of students who participated and the number of items on each field test form. The remaining columns are divided into two sections. The first section

pertains to the Rasch item difficulties while the second pertains to the INFIT statistics. Most of the items fell within the moderate -2.0 to +2.0 difficulty range and only four items had an INFIT statistic outside the typical range.

Table 6. Partial Credit Model Item Analysis

			Rasch			INFIT		
Form	N-Count	No. of Items	<-2.0	-2.0 to 2.0	>2.0	<-0.70	-0.70 to 1.30	>1.30
731	1,163	30	0	29	1	0	29	1
732	1,179	32	0	32	0	0	32	0
733	1,171	32	0	32	0	0	32	0
734	1,175	32	0	31	1	0	32	0
735	1,171	32	0	31	1	0	32	0
736	1,193	32	0	31	1	0	32	0
737	1,194	32	0	32	0	0	32	0
738	1,186	32	0	32	0	0	32	0
739	1,189	32	0	32	0	0	31	1
740	1,174	32	0	31	1	0	32	0
741	1,188	32	0	32	0	0	32	0
742	1,373	1	0	0	1	0	0	1
743	1,384	1	0	0	1	0	1	0
744	1,368	1	0	0	1	0	1	0
745	1,353	1	0	1	0	0	0	1
746	1,377	13	0	12	1	0	13	0
747	1,392	11	0	10	1	0	11	0
748	1,374	10	0	9	1	0	10	0
749	1,361	11	0	10	1	0	11	0
750	1,355	12	0	11	1	0	12	0

All of the individual IRT item statistics are provided in Appendix B. The column titled RID contains the Rasch item difficulty statistics. S1–S6 contain the step values for the scaffold questions and essay items. Finally, INFIT contains the INFIT statistic for each item.

Differential Item Functioning (DIF) Statistics

Statistical procedures are employed to observe whether, on the basis of data, there exists the possibility of unfair treatment of different populations. DIF statistics are used to identify items for which members of a focal group have a different probability of getting the items correct than members of a reference group after the groups have been matched on ability level on the test.

For the multiple-choice items, the Mantel-Haenszel Delta (MHD) DIF statistics were computed (Dorans & Holland, 1992) to classify test items in three levels of DIF for each comparison: negligible DIF (A), moderate DIF (B), and large DIF (C). An item was flagged if it exhibited a B or C category of DIF using the following rules derived from National Assessment of Educational Progress (NAEP) guidelines (Allen, Carlson, & Zalanak, 1999):

- MHD not significantly different from 0 (based on alpha = 0.05) **or** |MHD| < 1.0 are classified as A.

- MHD significantly different from 0 and {|MHD| ≥ 1.0 and < 1.5} **or**
  MHD not significantly different from 0 and |MHD| ≥ 1.0 are classified as B.

- |MHD| ≥ 1.5 and significantly different from 0 are classified as C.

For the scaffold questions and essay items, the effect size of the standardized mean difference (SMD) was used to flag DIF. The SMD reflects the size of the differences in performance on scaffold questions and essay items between student groups matched on the total score. It is the difference between the unweighted item mean of the focal group and the weighted item mean of the reference group. The weights applied to the reference group are applied so that the weighted number of reference group students is the same as in the focal group (within the same ability group). The SMD is divided by the total group item standard deviation to get a measure of the effect size (ES) for the SMD. The SMD effect size groups each item into one of three categories: negligible DIF (AA), moderate DIF (BB), and large DIF (CC). Only categories BB and CC were flagged in the results.

- Probability is > 0.05 **or** if |ES| is ≤ 0.17, classified as AA.

- Probability is > 0.05 and if 0.17 < |ES| ≤ 0.25, classified as BB.

- Probability is > 0.05 and if |ES| is > 0.25, classified as CC.

Although DIF statistics are typically conducted by gender and ethnicity, the low n-counts for ethnic subgroups did not allow for these statistics to be meaningful. The n-counts for gender allowed for comparisons to be made but were still somewhat low, so resulting statistics should be interpreted with caution.

The DIF statistics for gender are shown in Appendix C. Flagging of items appears in the 'DIF Category' column and if an item is flagged, the 'Favored Group' column indicates which gender is favored.

Section III: Equating Procedure

The 2010 field test administration for the New York State Regents Examination in U.S. History and Government consisted of 19 field test forms numbered 732–750 and one anchor form labeled 731. The field test forms can be grouped into three sets. Forms 731–741 consisted of multiple-choice items only. Forms 742–745 contained the multiple-choice anchor items (form 731) and a thematic essay. Forms 746-750 contained the multiple-choice anchor items, scaffold questions, and a DBQ essay. All students participating in the field test were administered one of the 19 test forms. The test forms 731–739 were spiraled within the classroom so that the groups of students taking each form were equivalent. A complete listing of these field test forms is provided in Appendix A, containing the number of items, item type (e.g., multiple-choice, scaffold question, essay), and the maximum points for each item are displayed.

The field test forms were equated using two different equating designs. Forms 732–741 were equated to the anchor form 731 using the equivalent-groups design. Forms 731 and 742–750 were equated using the common-items design.

Equivalent-Group Equating Design

The anchor form (form 731) was equated to the item bank using a common-item equating design. The anchor item difficulty parameters were fixed to their 2009 item bank values. This places the item difficulty estimates and the ability estimates of the students taking the anchor form onto the item bank scale. After the anchor form was placed onto the bank scale, the average mean ability estimates was computed using ability estimates of non-extreme students. This value was then used to equate field test forms 732–741 as well as updating the item parameters for the anchor forms.

As part of the anchor item equating, an item-stability check was performed. After fixing all of the items to their 2009 bank values, any item with a displacement value with a magnitude greater than 0.30 was no longer fixed and the test form was reanalyzed. If more than one item had a displacement value with a magnitude greater than 0.30, then the item with the largest displacement was freed and the test form was reanalyzed. In a stepwise fashion, this procedure was repeated until all remaining fixed anchor items had displacements with magnitudes less than or equal to 0.30.

Applying the anchor item-stability check to the anchor form resulted in only one item having a displacement value with a magnitude greater than 0.30. This indicates a strong level of stability in the items used on the anchor forms.

The equated mean ability estimate for form 731 was 0.88. This value was used as the target mean ability for the remainder of the equating process.

After the anchor form was equated and the target mean was computed, the field test forms 732–741 were equated using the equivalent- groups design. The first step was to calibrate each form separately where all the item parameters were free to estimate (without constraint). From those initial calibrations, the mean ability estimates for each field test form were obtained. The second step was to determine the equating constant for each form by subtracting the mean ability for a given field test form from the target mean ability calculated from the anchor form (i.e., form 731). The respective equating constant was then added to each of the item parameters on a given form. If the resulting mean of the ability estimates for those students did not equal that of the target mean, then the procedure was repeated until the mean abilities for each of the field test forms equaled the target mean ability. Table 7 shows the mean abilities and constants used for the equating.

Table 7. Initial Mean Abilities and Equating Constants

Form Number	Mean Ability	Constant
732	0.46	0.41
733	0.61	0.26
734	0.54	0.33
735	0.63	0.24
736	0.22	0.64
737	0.72	0.15
738	0.59	0.28
739	0.73	0.15
740	0.50	0.37
741	0.58	0.29

Common-Item Equating Design

The remaining field test forms (742–750) were equated to the item bank using a common-item equating design. Each field test form was administered with the anchor form. The field test data were arranged in an incomplete data matrix so that the anchor items were in each data line along with the unique items for each field test form. Items not appearing on the field test form are left blank and treated as not administered when item parameters are calibrated. The entire data set was then calibrated using WINSTEPS and applying the Partial Credit Model. In this

calibration, the anchor items were fixed to their 2009 bank values. This places all of the item parameters on the bank scale.

Table 8 illustrates the matrix equating design for forms 742–744, where 'X' represents the presence of data and '—' represents the absence of data.

Table 8. Incomplete Data Matrix Structure

Anchor	Form 742	Form 743	Form 744
X	X	—	—
X	—	X	—
X	—	—	X

As part of the anchor item equating, an item-stability check was performed by examining the displacement values. The displacement values indicate the difference between the bank values for the anchor items and the difficulty values for those items as if they were not fixed to the bank values. After fixing all of the items to their 2009 bank values, any item with a displacement value with a magnitude greater than 0.30 was no longer fixed and the test form was reanalyzed. If more than one item had a displacement value with a magnitude greater than 0.30, then the item with the largest displacement was freed and the test form was reanalyzed. In a stepwise fashion, this procedure was repeated until all remaining fixed anchor items had displacements with magnitudes less than or equal to 0.30.

Table 9 lists the number of anchor items by form that did not meet the stability criteria. The forms range from zero items to a maximum of two items out of thirty anchor items. This shows a high level of anchor item stability.

Table 9. Number of Anchor Items Not Meeting Stability Criteria

Form	Number of Items
742	2
743	1
744	2
745	1
746	1
747	0
748	0
749	0
750	1

The equated item parameters for the field test items can now be compared across test forms since the equating process places all items on the same scale. In addition, when items are combined to form unique operational test forms, raw score to scale score tables can be generated based on these parameters. The following

section contains a description of the development of the operational test forms and scoring tables.

Section IV: Scaling of Operational Test Forms

Operational test items are selected based on content coverage, content accuracy, and statistical quality. The sets of items on each operational test conform to the coverage suggested by content experts. These expert judgments are based on the learning standards established by the New York State Education Department. With respect to statistical quality, classical and Rasch statistics are examined to determine how well items function. Also, items are selected such that they range in difficulty in order to measure students across ability levels. Appendix D contains the 2010 operational test maps with content information regarding each item included on the January 2010, June 2010, and August 2010 operational test forms.

In order to limit wide fluctuations of raw scores that correspond to scale scores of 65 and 85 across administrations, the average Rasch item difficulty for the operational test is considered. For this examination, an average Rasch difficulty of approximately 0.835 is used as a target for each administration. In most cases, meeting this target will provide raw scores of similar magnitude to other forms. However, differences with these scores also occur due to the distribution of the Rasch item difficulty parameters.

Scoring tables display the relationship between raw scores on the operational test and assigned scale scores. Appendix E contains the scoring tables used for the January, June, and August 2010 operational test forms. Four steps are taken in order to produce these tables and resulting conversion charts.

The first step is to develop a raw score (i.e., number of points on the test form) to theta (i.e., student ability) to scale score relationship for the baseline operational test form. This relationship is determined when standards are set and then used for every administration moving forward until the standards are revisited. The baseline target was determined by the New York State Education Department to be January 2005. The raw score to theta relationship from that examination was used and then scale scores are calculated based on the raw score cuts according to the following formula:

$$p(x) = m_3x^3 + m_2x^2 + m_1x + m_0$$

The raw score of zero was assigned a scale score of zero and the maximum raw score was assigned a scale score of 100. The raw scores corresponding to the scale scores of 65 and 85 were also fixed. The polynomial relationship shown above was then used to assign all scale scores to the remaining raw scores. The resulting values for m_1 – m_3 are the transformation constants used to produce the final raw score to scale score table.

The second step is to develop a raw score to theta relationship for the new operational test form using the field test equated PCM item parameters. This is accomplished by doing a calibration where all items are anchored to their field test parameters. One modification that is made is that for 5-point items, a constant based on existing bank values is used in place of the field test parameters. The number of points on the test form (i.e., raw score) expected across student ability levels is based on the difficulty of the items on the form. Thus, given a particular student ability level (i.e., theta), if the points are more difficult to earn on the new test than the points on the January 2005 test, the number of points expected of this student on the new test will be less than the number of points expected of this student on the baseline form.

The third step is to use linear interpolation to determine the raw score to theta to scale score relationship for the new test. The theta values associated with scale scores of 65 and 85 on the baseline form are used along with the raw score to theta relationship developed in the previous step. In other words, the baseline 65 and 85 theta values are used as reference points and linear interpolation assigns the other scale scores.

Finally, a conversion chart is created based on the scoring table generated in the third step. Scale scores are rounded to the nearest whole number in all cases except for 0, 65, 85, and 100. A raw score of zero is assigned a scale score of zero. The maximum raw score is assigned a scale score of 100. With respect to 65 and 85 scale scores, the raw scores with scale scores of 65 or 85 after rounding are assigned those values.

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Appendix A: Classical Item Analysis

Table 10. Classical Item Analysis

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	731	MC	01	1	1,163	0.89	0.00		0.78	0.08	0.09	0.05			0.78	0.45
2010_USHG_FT	731	MC	02	1	1,163	0.89	0.00		0.05	0.77	0.07	0.11			0.77	0.47
2010_USHG_FT	731	MC	03	1	1,163	0.89	0.00		0.58	0.23	0.15	0.04			0.58	0.49
2010_USHG_FT	731	MC	04	1	1,163	0.89	0.00		0.08	0.84	0.03	0.05			0.84	0.37
2010_USHG_FT	731	MC	05	1	1,163	0.89	0.00		0.08	0.30	0.36	0.26			0.30	0.28
2010_USHG_FT	731	MC	06	1	1,163	0.89	0.00		0.06	0.75	0.11	0.07			0.75	0.48
2010_USHG_FT	731	MC	07	1	1,163	0.89	0.00		0.58	0.09	0.30	0.04			0.58	0.50
2010_USHG_FT	731	MC	08	1	1,163	0.89	0.00		0.05	0.65	0.03	0.28			0.65	0.59
2010_USHG_FT	731	MC	09	1	1,163	0.89	0.01		0.18	0.14	0.12	0.55			0.55	0.52
2010_USHG_FT	731	MC	10	1	1,163	0.89	0.00		0.13	0.05	0.77	0.05			0.77	0.51
2010_USHG_FT	731	MC	11	1	1,163	0.89	0.01		0.79	0.13	0.04	0.04			0.79	0.54
2010_USHG_FT	731	MC	12	1	1,163	0.89	0.01		0.10	0.08	0.14	0.67			0.67	0.52
2010_USHG_FT	731	MC	13	1	1,163	0.89	0.01		0.60	0.08	0.25	0.06			0.60	0.39
2010_USHG_FT	731	MC	14	1	1,163	0.89	0.01		0.06	0.11	0.77	0.06			0.77	0.53
2010_USHG_FT	731	MC	15	1	1,163	0.89	0.01		0.09	0.08	0.19	0.62			0.62	0.57
2010_USHG_FT	731	MC	16	1	1,163	0.89	0.01		0.15	0.09	0.70	0.06			0.70	0.56
2010_USHG_FT	731	MC	17	1	1,163	0.89	0.01		0.10	0.12	0.04	0.73			0.73	0.62
2010_USHG_FT	731	MC	18	1	1,163	0.89	0.02		0.05	0.06	0.08	0.80			0.80	0.55
2010_USHG_FT	731	MC	19	1	1,163	0.89	0.01		0.11	0.14	0.70	0.04			0.70	0.54
2010_USHG_FT	731	MC	20	1	1,163	0.89	0.02		0.08	0.19	0.16	0.55			0.55	0.54
2010_USHG_FT	731	MC	21	1	1,163	0.89	0.02		0.80	0.09	0.05	0.05			0.80	0.51
2010_USHG_FT	731	MC	22	1	1,163	0.89	0.02		0.11	0.46	0.27	0.14			0.46	0.35

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	731	MC	23	1	1,163	0.89	0.02		0.07	0.78	0.06	0.06			0.78	0.57
2010_USHG_FT	731	MC	24	1	1,163	0.89	0.02		0.42	0.06	0.09	0.40			0.42	0.40
2010_USHG_FT	731	MC	25	1	1,163	0.89	0.03		0.09	0.46	0.24	0.18			0.46	0.40
2010_USHG_FT	731	MC	26	1	1,163	0.89	0.02		0.53	0.13	0.21	0.11			0.53	0.42
2010_USHG_FT	731	MC	27	1	1,163	0.89	0.03		0.12	0.55	0.23	0.07			0.55	0.55
2010_USHG_FT	731	MC	28	1	1,163	0.89	0.03		0.13	0.16	0.59	0.09			0.59	0.54
2010_USHG_FT	731	MC	29	1	1,163	0.89	0.03		0.08	0.66	0.12	0.10			0.66	0.60
2010_USHG_FT	731	MC	30	1	1,163	0.89	0.03		0.09	0.07	0.07	0.74			0.74	0.59
2010_USHG_FT	732	MC	01	1	1,179	0.88	0.00		0.70	0.08	0.10	0.12			0.70	0.51
2010_USHG_FT	732	MC	02	1	1,179	0.88	0.00		0.57	0.04	0.16	0.22			0.57	0.34
2010_USHG_FT	732	MC	03	1	1,179	0.88	0.00		0.02	0.08	0.78	0.11			0.78	0.32
2010_USHG_FT	732	MC	04	1	1,179	0.88	0.00		0.67	0.07	0.23	0.03			0.67	0.40
2010_USHG_FT	732	MC	05	1	1,179	0.88	0.01		0.09	0.44	0.25	0.21			0.44	0.40
2010_USHG_FT	732	MC	06	1	1,179	0.88	0.00		0.72	0.07	0.07	0.13			0.72	0.25
2010_USHG_FT	732	MC	07	1	1,179	0.88	0.00		0.29	0.37	0.12	0.22			0.37	0.39
2010_USHG_FT	732	MC	08	1	1,179	0.88	0.00		0.07	0.07	0.06	0.80			0.80	0.51
2010_USHG_FT	732	MC	09	1	1,179	0.88	0.00		0.05	0.21	0.62	0.11			0.62	0.53
2010_USHG_FT	732	MC	10	1	1,179	0.88	0.01		0.10	0.11	0.12	0.66			0.66	0.53
2010_USHG_FT	732	MC	11	1	1,179	0.88	0.00		0.10	0.73	0.12	0.04			0.73	0.50
2010_USHG_FT	732	MC	12	1	1,179	0.88	0.00		0.06	0.15	0.70	0.09			0.70	0.41
2010_USHG_FT	732	MC	13	1	1,179	0.88	0.01		0.31	0.23	0.42	0.03			0.42	0.37
2010_USHG_FT	732	MC	14	1	1,179	0.88	0.01		0.34	0.09	0.19	0.37			0.37	0.51

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	732	MC	15	1	1,179	0.88	0.01		0.64	0.11	0.10	0.14			0.64	0.49
2010_USHG_FT	732	MC	16	1	1,179	0.88	0.01		0.06	0.18	0.32	0.43			0.43	0.49
2010_USHG_FT	732	MC	17	1	1,179	0.88	0.01		0.17	0.20	0.55	0.07			0.55	0.47
2010_USHG_FT	732	MC	18	1	1,179	0.88	0.01		0.10	0.61	0.16	0.12			0.61	0.52
2010_USHG_FT	732	MC	19	1	1,179	0.88	0.01		0.57	0.15	0.17	0.09			0.57	0.54
2010_USHG_FT	732	MC	20	1	1,179	0.88	0.02		0.12	0.48	0.26	0.12			0.48	0.48
2010_USHG_FT	732	MC	21	1	1,179	0.88	0.02		0.09	0.43	0.11	0.36			0.43	0.42
2010_USHG_FT	732	MC	22	1	1,179	0.88	0.02		0.05	0.07	0.73	0.13			0.73	0.47
2010_USHG_FT	732	MC	23	1	1,179	0.88	0.02		0.10	0.09	0.10	0.69			0.69	0.48
2010_USHG_FT	732	MC	24	1	1,179	0.88	0.02		0.31	0.11	0.50	0.06			0.50	0.51
2010_USHG_FT	732	MC	25	1	1,179	0.88	0.03		0.11	0.49	0.21	0.17			0.49	0.38
2010_USHG_FT	732	MC	26	1	1,179	0.88	0.03		0.11	0.11	0.23	0.52			0.52	0.46
2010_USHG_FT	732	MC	27	1	1,179	0.88	0.03		0.24	0.46	0.17	0.10			0.46	0.47
2010_USHG_FT	732	MC	28	1	1,179	0.88	0.03		0.06	0.22	0.07	0.63			0.63	0.58
2010_USHG_FT	732	MC	29	1	1,179	0.88	0.03		0.68	0.07	0.15	0.06			0.68	0.52
2010_USHG_FT	732	MC	30	1	1,179	0.88	0.04		0.27	0.17	0.13	0.39			0.39	0.39
2010_USHG_FT	732	MC	31	1	1,179	0.88	0.04		0.09	0.66	0.12	0.08			0.66	0.57
2010_USHG_FT	732	MC	32	1	1,179	0.88	0.09		0.15	0.06	0.64	0.05			0.64	0.48
2010_USHG_FT	733	MC	01	1	1,171	0.88	0.00		0.78	0.06	0.06	0.10			0.78	0.38
2010_USHG_FT	733	MC	02	1	1,171	0.88	0.00		0.08	0.80	0.07	0.04			0.80	0.42
2010_USHG_FT	733	MC	03	1	1,171	0.88	0.00		0.04	0.06	0.29	0.61			0.61	0.41
2010_USHG_FT	733	MC	04	1	1,171	0.88	0.01		0.06	0.08	0.50	0.35			0.50	0.49

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	733	MC	05	1	1,171	0.88	0.01		0.12	0.64	0.18	0.05			0.64	0.47
2010_USHG_FT	733	MC	06	1	1,171	0.88	0.01		0.06	0.14	0.64	0.15			0.64	0.43
2010_USHG_FT	733	MC	07	1	1,171	0.88	0.01		0.18	0.25	0.44	0.12			0.44	0.30
2010_USHG_FT	733	MC	08	1	1,171	0.88	0.01		0.66	0.10	0.08	0.14			0.66	0.50
2010_USHG_FT	733	MC	09	1	1,171	0.88	0.01		0.03	0.11	0.05	0.81			0.81	0.53
2010_USHG_FT	733	MC	10	1	1,171	0.88	0.01		0.16	0.73	0.06	0.04			0.73	0.45
2010_USHG_FT	733	MC	11	1	1,171	0.88	0.00		0.18	0.64	0.10	0.08			0.64	0.44
2010_USHG_FT	733	MC	12	1	1,171	0.88	0.00		0.71	0.12	0.10	0.06			0.71	0.40
2010_USHG_FT	733	MC	13	1	1,171	0.88	0.01		0.14	0.66	0.10	0.09			0.66	0.60
2010_USHG_FT	733	MC	14	1	1,171	0.88	0.01		0.11	0.07	0.77	0.04			0.77	0.54
2010_USHG_FT	733	MC	15	1	1,171	0.88	0.01		0.05	0.11	0.20	0.63			0.63	0.52
2010_USHG_FT	733	MC	16	1	1,171	0.88	0.01		0.28	0.10	0.10	0.51			0.51	0.41
2010_USHG_FT	733	MC	17	1	1,171	0.88	0.02		0.12	0.55	0.15	0.16			0.55	0.46
2010_USHG_FT	733	MC	18	1	1,171	0.88	0.02		0.09	0.12	0.10	0.68			0.68	0.54
2010_USHG_FT	733	MC	19	1	1,171	0.88	0.02		0.61	0.11	0.20	0.06			0.61	0.31
2010_USHG_FT	733	MC	20	1	1,171	0.88	0.02		0.13	0.15	0.48	0.22			0.48	0.43
2010_USHG_FT	733	MC	21	1	1,171	0.88	0.03		0.30	0.20	0.27	0.20			0.30	0.24
2010_USHG_FT	733	MC	22	1	1,171	0.88	0.03		0.09	0.27	0.15	0.46			0.46	0.39
2010_USHG_FT	733	MC	23	1	1,171	0.88	0.03		0.64	0.10	0.09	0.14			0.64	0.52
2010_USHG_FT	733	MC	24	1	1,171	0.88	0.04		0.16	0.48	0.13	0.19			0.48	0.41
2010_USHG_FT	733	MC	25	1	1,171	0.88	0.04		0.11	0.08	0.72	0.06			0.72	0.50
2010_USHG_FT	733	MC	26	1	1,171	0.88	0.04		0.14	0.65	0.08	0.08			0.65	0.49
2010_USHG_FT	733	MC	27	1	1,171	0.88	0.05		0.65	0.11	0.10	0.08			0.65	0.57

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	733	MC	28	1	1,171	0.88	0.05		0.11	0.13	0.62	0.10			0.62	0.54
2010_USHG_FT	733	MC	29	1	1,171	0.88	0.05		0.64	0.12	0.11	0.07			0.64	0.54
2010_USHG_FT	733	MC	30	1	1,171	0.88	0.06		0.25	0.08	0.12	0.49			0.49	0.36
2010_USHG_FT	733	MC	31	1	1,171	0.88	0.07		0.09	0.06	0.14	0.64			0.64	0.66
2010_USHG_FT	733	MC	32	1	1,171	0.88	0.07		0.49	0.13	0.11	0.20			0.49	0.49
2010_USHG_FT	734	MC	01	1	1,175	0.88	0.00		0.74	0.11	0.04	0.11			0.74	0.31
2010_USHG_FT	734	MC	02	1	1,175	0.88	0.00		0.05	0.04	0.65	0.26			0.65	0.44
2010_USHG_FT	734	MC	03	1	1,175	0.88	0.00		0.14	0.68	0.10	0.07			0.68	0.39
2010_USHG_FT	734	MC	04	1	1,175	0.88	0.01		0.04	0.04	0.08	0.83			0.83	0.52
2010_USHG_FT	734	MC	05	1	1,175	0.88	0.01		0.12	0.63	0.10	0.14			0.63	0.59
2010_USHG_FT	734	MC	06	1	1,175	0.88	0.00		0.13	0.03	0.75	0.09			0.75	0.48
2010_USHG_FT	734	MC	07	1	1,175	0.88	0.01		0.07	0.75	0.06	0.12			0.75	0.42
2010_USHG_FT	734	MC	08	1	1,175	0.88	0.01		0.19	0.09	0.60	0.11			0.60	0.50
2010_USHG_FT	734	MC	09	1	1,175	0.88	0.01		0.27	0.41	0.11	0.21			0.27	0.20
2010_USHG_FT	734	MC	10	1	1,175	0.88	0.01		0.60	0.06	0.29	0.04			0.60	0.54
2010_USHG_FT	734	MC	11	1	1,175	0.88	0.00		0.12	0.51	0.20	0.17			0.51	0.39
2010_USHG_FT	734	MC	12	1	1,175	0.88	0.01		0.24	0.15	0.47	0.14			0.47	0.40
2010_USHG_FT	734	MC	13	1	1,175	0.88	0.01		0.08	0.33	0.13	0.45			0.45	0.38
2010_USHG_FT	734	MC	14	1	1,175	0.88	0.01		0.12	0.22	0.11	0.54			0.54	0.46
2010_USHG_FT	734	MC	15	1	1,175	0.88	0.02		0.43	0.14	0.16	0.26			0.43	0.39
2010_USHG_FT	734	MC	16	1	1,175	0.88	0.01		0.12	0.08	0.53	0.26			0.53	0.51
2010_USHG_FT	734	MC	17	1	1,175	0.88	0.01		0.13	0.15	0.07	0.64			0.64	0.58

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	734	MC	18	1	1,175	0.88	0.02		0.79	0.08	0.05	0.07			0.79	0.60
2010_USHG_FT	734	MC	19	1	1,175	0.88	0.02		0.51	0.33	0.09	0.05			0.33	0.23
2010_USHG_FT	734	MC	20	1	1,175	0.88	0.02		0.16	0.14	0.08	0.60			0.60	0.51
2010_USHG_FT	734	MC	21	1	1,175	0.88	0.03		0.09	0.08	0.06	0.73			0.73	0.52
2010_USHG_FT	734	MC	22	1	1,175	0.88	0.03		0.49	0.22	0.11	0.15			0.49	0.39
2010_USHG_FT	734	MC	23	1	1,175	0.88	0.03		0.60	0.13	0.15	0.09			0.60	0.43
2010_USHG_FT	734	MC	24	1	1,175	0.88	0.04		0.05	0.77	0.06	0.07			0.77	0.54
2010_USHG_FT	734	MC	25	1	1,175	0.88	0.04		0.11	0.15	0.65	0.06			0.65	0.42
2010_USHG_FT	734	MC	26	1	1,175	0.88	0.04		0.07	0.75	0.06	0.08			0.75	0.58
2010_USHG_FT	734	MC	27	1	1,175	0.88	0.04		0.47	0.21	0.19	0.08			0.47	0.40
2010_USHG_FT	734	MC	28	1	1,175	0.88	0.04		0.21	0.54	0.12	0.10			0.54	0.46
2010_USHG_FT	734	MC	29	1	1,175	0.88	0.05		0.18	0.22	0.12	0.44			0.44	0.43
2010_USHG_FT	734	MC	30	1	1,175	0.88	0.05		0.11	0.57	0.20	0.07			0.57	0.56
2010_USHG_FT	734	MC	31	1	1,175	0.88	0.05		0.10	0.14	0.09	0.61			0.61	0.63
2010_USHG_FT	734	MC	32	1	1,175	0.88	0.10		0.10	0.05	0.69	0.06			0.69	0.53
2010_USHG_FT	735	MC	01	1	1,171	0.87	0.00		0.69	0.06	0.05	0.20			0.69	0.52
2010_USHG_FT	735	MC	02	1	1,171	0.87	0.01		0.13	0.72	0.09	0.04			0.72	0.53
2010_USHG_FT	735	MC	03	1	1,171	0.87	0.00		0.08	0.08	0.29	0.55			0.55	0.32
2010_USHG_FT	735	MC	04	1	1,171	0.87	0.00		0.03	0.13	0.05	0.79			0.79	0.46
2010_USHG_FT	735	MC	05	1	1,171	0.87	0.00		0.04	0.09	0.83	0.04			0.83	0.44
2010_USHG_FT	735	MC	06	1	1,171	0.87	0.01		0.08	0.22	0.63	0.06			0.63	0.41
2010_USHG_FT	735	MC	07	1	1,171	0.87	0.01		0.22	0.49	0.11	0.17			0.49	0.35

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	735	MC	08	1	1,171	0.87	0.01		0.14	0.07	0.09	0.69			0.69	0.50
2010_USHG_FT	735	MC	09	1	1,171	0.87	0.01		0.05	0.80	0.03	0.12			0.80	0.43
2010_USHG_FT	735	MC	10	1	1,171	0.87	0.01		0.10	0.57	0.07	0.24			0.57	0.56
2010_USHG_FT	735	MC	11	1	1,171	0.87	0.01		0.04	0.08	0.84	0.03			0.84	0.43
2010_USHG_FT	735	MC	12	1	1,171	0.87	0.01		0.65	0.06	0.17	0.11			0.65	0.55
2010_USHG_FT	735	MC	13	1	1,171	0.87	0.01		0.73	0.05	0.11	0.09			0.73	0.44
2010_USHG_FT	735	MC	14	1	1,171	0.87	0.01		0.06	0.05	0.79	0.09			0.79	0.41
2010_USHG_FT	735	MC	15	1	1,171	0.87	0.01		0.18	0.08	0.58	0.15			0.58	0.47
2010_USHG_FT	735	MC	16	1	1,171	0.87	0.02		0.16	0.63	0.10	0.08			0.63	0.41
2010_USHG_FT	735	MC	17	1	1,171	0.87	0.02		0.12	0.17	0.12	0.57			0.57	0.47
2010_USHG_FT	735	MC	18	1	1,171	0.87	0.02		0.17	0.18	0.35	0.28			0.35	0.38
2010_USHG_FT	735	MC	19	1	1,171	0.87	0.02		0.53	0.10	0.29	0.06			0.53	0.48
2010_USHG_FT	735	MC	20	1	1,171	0.87	0.02		0.41	0.13	0.10	0.33			0.41	0.39
2010_USHG_FT	735	MC	21	1	1,171	0.87	0.03		0.39	0.29	0.13	0.15			0.29	0.23
2010_USHG_FT	735	MC	22	1	1,171	0.87	0.03		0.51	0.08	0.12	0.26			0.51	0.53
2010_USHG_FT	735	MC	23	1	1,171	0.87	0.03		0.08	0.04	0.75	0.11			0.75	0.52
2010_USHG_FT	735	MC	24	1	1,171	0.87	0.03		0.09	0.04	0.08	0.76			0.76	0.52
2010_USHG_FT	735	MC	25	1	1,171	0.87	0.04		0.05	0.05	0.07	0.79			0.79	0.55
2010_USHG_FT	735	MC	26	1	1,171	0.87	0.04		0.50	0.21	0.13	0.13			0.50	0.40
2010_USHG_FT	735	MC	27	1	1,171	0.87	0.04		0.15	0.10	0.62	0.09			0.62	0.56
2010_USHG_FT	735	MC	28	1	1,171	0.87	0.05		0.22	0.45	0.10	0.18			0.45	0.37
2010_USHG_FT	735	MC	29	1	1,171	0.87	0.05		0.08	0.62	0.14	0.11			0.62	0.48
2010_USHG_FT	735	MC	30	1	1,171	0.87	0.05		0.29	0.22	0.17	0.28			0.28	0.26

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	735	MC	31	1	1,171	0.87	0.05		0.52	0.18	0.15	0.10			0.52	0.47
2010_USHG_FT	735	MC	32	1	1,171	0.87	0.08		0.08	0.08	0.68	0.08			0.68	0.54
2010_USHG_FT	736	MC	01	1	1,193	0.86	0.01		0.26	0.16	0.42	0.15			0.16	0.21
2010_USHG_FT	736	MC	02	1	1,193	0.86	0.01		0.46	0.22	0.17	0.14			0.46	0.37
2010_USHG_FT	736	MC	03	1	1,193	0.86	0.01		0.11	0.21	0.03	0.64			0.64	0.58
2010_USHG_FT	736	MC	04	1	1,193	0.86	0.01		0.30	0.23	0.38	0.07			0.38	0.43
2010_USHG_FT	736	MC	05	1	1,193	0.86	0.01		0.05	0.58	0.12	0.24			0.58	0.46
2010_USHG_FT	736	MC	06	1	1,193	0.86	0.01		0.34	0.11	0.10	0.43			0.43	0.38
2010_USHG_FT	736	MC	07	1	1,193	0.86	0.01		0.12	0.21	0.53	0.12			0.53	0.43
2010_USHG_FT	736	MC	08	1	1,193	0.86	0.01		0.07	0.05	0.08	0.80			0.80	0.47
2010_USHG_FT	736	MC	09	1	1,193	0.86	0.01		0.64	0.13	0.09	0.13			0.64	0.30
2010_USHG_FT	736	MC	10	1	1,193	0.86	0.01		0.36	0.33	0.07	0.24			0.36	0.22
2010_USHG_FT	736	MC	11	1	1,193	0.86	0.01		0.11	0.24	0.48	0.16			0.48	0.38
2010_USHG_FT	736	MC	12	1	1,193	0.86	0.01		0.04	0.23	0.13	0.59			0.59	0.46
2010_USHG_FT	736	MC	13	1	1,193	0.86	0.01		0.19	0.22	0.45	0.13			0.45	0.42
2010_USHG_FT	736	MC	14	1	1,193	0.86	0.01		0.75	0.12	0.06	0.06			0.75	0.50
2010_USHG_FT	736	MC	15	1	1,193	0.86	0.01		0.17	0.09	0.04	0.69			0.69	0.36
2010_USHG_FT	736	MC	16	1	1,193	0.86	0.02		0.18	0.56	0.15	0.09			0.56	0.50
2010_USHG_FT	736	MC	17	1	1,193	0.86	0.02		0.11	0.69	0.10	0.08			0.69	0.53
2010_USHG_FT	736	MC	18	1	1,193	0.86	0.02		0.17	0.29	0.48	0.04			0.48	0.55
2010_USHG_FT	736	MC	19	1	1,193	0.86	0.02		0.49	0.17	0.20	0.12			0.49	0.47
2010_USHG_FT	736	MC	20	1	1,193	0.86	0.03		0.23	0.22	0.38	0.14			0.38	0.42

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	736	MC	21	1	1,193	0.86	0.02		0.41	0.24	0.24	0.09			0.41	0.26
2010_USHG_FT	736	MC	22	1	1,193	0.86	0.03		0.21	0.07	0.15	0.55			0.55	0.50
2010_USHG_FT	736	MC	23	1	1,193	0.86	0.03		0.59	0.24	0.08	0.06			0.59	0.41
2010_USHG_FT	736	MC	24	1	1,193	0.86	0.03		0.10	0.17	0.63	0.08			0.63	0.48
2010_USHG_FT	736	MC	25	1	1,193	0.86	0.03		0.04	0.08	0.04	0.82			0.82	0.53
2010_USHG_FT	736	MC	26	1	1,193	0.86	0.03		0.15	0.21	0.50	0.10			0.50	0.57
2010_USHG_FT	736	MC	27	1	1,193	0.86	0.04		0.38	0.25	0.22	0.11			0.38	0.45
2010_USHG_FT	736	MC	28	1	1,193	0.86	0.04		0.10	0.63	0.15	0.09			0.63	0.49
2010_USHG_FT	736	MC	29	1	1,193	0.86	0.04		0.15	0.21	0.14	0.47			0.47	0.33
2010_USHG_FT	736	MC	30	1	1,193	0.86	0.04		0.10	0.66	0.11	0.09			0.66	0.57
2010_USHG_FT	736	MC	31	1	1,193	0.86	0.04		0.46	0.12	0.19	0.19			0.46	0.36
2010_USHG_FT	736	MC	32	1	1,193	0.86	0.05		0.07	0.07	0.62	0.20			0.62	0.47
2010_USHG_FT	737	MC	01	1	1,194	0.87	0.01		0.71	0.16	0.10	0.02			0.71	0.41
2010_USHG_FT	737	MC	02	1	1,194	0.87	0.01		0.08	0.58	0.15	0.19			0.58	0.49
2010_USHG_FT	737	MC	03	1	1,194	0.87	0.01		0.81	0.10	0.05	0.04			0.81	0.37
2010_USHG_FT	737	MC	04	1	1,194	0.87	0.00		0.08	0.16	0.24	0.51			0.51	0.34
2010_USHG_FT	737	MC	05	1	1,194	0.87	0.00		0.37	0.39	0.11	0.13			0.39	0.22
2010_USHG_FT	737	MC	06	1	1,194	0.87	0.00		0.04	0.17	0.04	0.75			0.75	0.45
2010_USHG_FT	737	MC	07	1	1,194	0.87	0.00		0.20	0.20	0.49	0.11			0.49	0.44
2010_USHG_FT	737	MC	08	1	1,194	0.87	0.01		0.06	0.14	0.16	0.63			0.63	0.46
2010_USHG_FT	737	MC	09	1	1,194	0.87	0.01		0.84	0.05	0.07	0.03			0.84	0.46
2010_USHG_FT	737	MC	10	1	1,194	0.87	0.00		0.10	0.79	0.05	0.06			0.79	0.52

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	737	MC	11	1	1,194	0.87	0.00		0.06	0.07	0.03	0.84			0.84	0.52
2010_USHG_FT	737	MC	12	1	1,194	0.87	0.01		0.05	0.09	0.78	0.08			0.78	0.44
2010_USHG_FT	737	MC	13	1	1,194	0.87	0.01		0.08	0.08	0.78	0.04			0.78	0.53
2010_USHG_FT	737	MC	14	1	1,194	0.87	0.01		0.13	0.68	0.12	0.05			0.68	0.48
2010_USHG_FT	737	MC	15	1	1,194	0.87	0.01		0.47	0.30	0.15	0.06			0.30	0.30
2010_USHG_FT	737	MC	16	1	1,194	0.87	0.02		0.15	0.12	0.13	0.58			0.58	0.57
2010_USHG_FT	737	MC	17	1	1,194	0.87	0.02		0.60	0.07	0.14	0.18			0.60	0.49
2010_USHG_FT	737	MC	18	1	1,194	0.87	0.01		0.09	0.70	0.15	0.06			0.70	0.54
2010_USHG_FT	737	MC	19	1	1,194	0.87	0.02		0.13	0.18	0.56	0.11			0.56	0.51
2010_USHG_FT	737	MC	20	1	1,194	0.87	0.02		0.04	0.05	0.04	0.85			0.85	0.53
2010_USHG_FT	737	MC	21	1	1,194	0.87	0.02		0.11	0.23	0.46	0.18			0.46	0.44
2010_USHG_FT	737	MC	22	1	1,194	0.87	0.03		0.35	0.13	0.26	0.22			0.35	0.31
2010_USHG_FT	737	MC	23	1	1,194	0.87	0.03		0.06	0.82	0.06	0.04			0.82	0.56
2010_USHG_FT	737	MC	24	1	1,194	0.87	0.03		0.14	0.71	0.07	0.05			0.71	0.49
2010_USHG_FT	737	MC	25	1	1,194	0.87	0.03		0.19	0.21	0.38	0.20			0.38	0.22
2010_USHG_FT	737	MC	26	1	1,194	0.87	0.03		0.72	0.08	0.12	0.05			0.72	0.53
2010_USHG_FT	737	MC	27	1	1,194	0.87	0.04		0.07	0.75	0.07	0.07			0.75	0.53
2010_USHG_FT	737	MC	28	1	1,194	0.87	0.05		0.10	0.14	0.12	0.60			0.60	0.57
2010_USHG_FT	737	MC	29	1	1,194	0.87	0.05		0.27	0.53	0.11	0.04			0.53	0.40
2010_USHG_FT	737	MC	30	1	1,194	0.87	0.05		0.15	0.11	0.54	0.15			0.54	0.50
2010_USHG_FT	737	MC	31	1	1,194	0.87	0.06		0.45	0.27	0.16	0.06			0.45	0.29
2010_USHG_FT	737	MC	32	1	1,194	0.87	0.06		0.12	0.11	0.15	0.56			0.56	0.56

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	738	MC	01	1	1,186	0.89	0.00		0.28	0.15	0.11	0.46			0.46	0.49
2010_USHG_FT	738	MC	02	1	1,186	0.89	0.00		0.10	0.07	0.76	0.07			0.76	0.49
2010_USHG_FT	738	MC	03	1	1,186	0.89	0.00		0.25	0.53	0.08	0.14			0.53	0.43
2010_USHG_FT	738	MC	04	1	1,186	0.89	0.00		0.23	0.15	0.56	0.06			0.56	0.45
2010_USHG_FT	738	MC	05	1	1,186	0.89	0.00		0.76	0.07	0.11	0.06			0.76	0.54
2010_USHG_FT	738	MC	06	1	1,186	0.89	0.00		0.11	0.13	0.06	0.70			0.70	0.56
2010_USHG_FT	738	MC	07	1	1,186	0.89	0.00		0.66	0.11	0.07	0.15			0.66	0.48
2010_USHG_FT	738	MC	08	1	1,186	0.89	0.01		0.25	0.06	0.61	0.08			0.61	0.41
2010_USHG_FT	738	MC	09	1	1,186	0.89	0.01		0.31	0.11	0.11	0.47			0.31	0.26
2010_USHG_FT	738	MC	10	1	1,186	0.89	0.01		0.10	0.70	0.07	0.12			0.70	0.46
2010_USHG_FT	738	MC	11	1	1,186	0.89	0.01		0.07	0.06	0.16	0.69			0.69	0.51
2010_USHG_FT	738	MC	12	1	1,186	0.89	0.01		0.15	0.64	0.16	0.04			0.64	0.49
2010_USHG_FT	738	MC	13	1	1,186	0.89	0.02		0.27	0.15	0.45	0.11			0.45	0.43
2010_USHG_FT	738	MC	14	1	1,186	0.89	0.01		0.07	0.77	0.09	0.06			0.77	0.52
2010_USHG_FT	738	MC	15	1	1,186	0.89	0.01		0.17	0.16	0.62	0.05			0.62	0.47
2010_USHG_FT	738	MC	16	1	1,186	0.89	0.01		0.38	0.24	0.17	0.20			0.38	0.30
2010_USHG_FT	738	MC	17	1	1,186	0.89	0.01		0.04	0.76	0.12	0.06			0.76	0.45
2010_USHG_FT	738	MC	18	1	1,186	0.89	0.01		0.07	0.08	0.06	0.77			0.77	0.57
2010_USHG_FT	738	MC	19	1	1,186	0.89	0.02		0.39	0.30	0.13	0.16			0.39	0.50
2010_USHG_FT	738	MC	20	1	1,186	0.89	0.02		0.09	0.62	0.13	0.14			0.62	0.50
2010_USHG_FT	738	MC	21	1	1,186	0.89	0.01		0.16	0.22	0.07	0.53			0.53	0.57
2010_USHG_FT	738	MC	22	1	1,186	0.89	0.02		0.16	0.08	0.68	0.06			0.68	0.38
2010_USHG_FT	738	MC	23	1	1,186	0.89	0.02		0.14	0.08	0.64	0.12			0.64	0.55

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	738	MC	24	1	1,186	0.89	0.02		0.10	0.09	0.09	0.70			0.70	0.58
2010_USHG_FT	738	MC	25	1	1,186	0.89	0.02		0.09	0.11	0.70	0.09			0.70	0.44
2010_USHG_FT	738	MC	26	1	1,186	0.89	0.03		0.11	0.61	0.12	0.13			0.61	0.51
2010_USHG_FT	738	MC	27	1	1,186	0.89	0.03		0.50	0.24	0.10	0.14			0.50	0.40
2010_USHG_FT	738	MC	28	1	1,186	0.89	0.03		0.82	0.05	0.04	0.05			0.82	0.57
2010_USHG_FT	738	MC	29	1	1,186	0.89	0.03		0.16	0.09	0.18	0.53			0.53	0.54
2010_USHG_FT	738	MC	30	1	1,186	0.89	0.03		0.38	0.20	0.11	0.27			0.38	0.33
2010_USHG_FT	738	MC	31	1	1,186	0.89	0.04		0.61	0.10	0.14	0.12			0.61	0.52
2010_USHG_FT	738	MC	32	1	1,186	0.89	0.04		0.09	0.56	0.07	0.24			0.56	0.58
2010_USHG_FT	739	MC	01	1	1,189	0.88	0.02		0.13	0.32	0.47	0.06			0.47	0.41
2010_USHG_FT	739	MC	02	1	1,189	0.88	0.00		0.06	0.11	0.13	0.70			0.70	0.39
2010_USHG_FT	739	MC	03	1	1,189	0.88	0.00		0.12	0.17	0.54	0.16			0.54	0.19
2010_USHG_FT	739	MC	04	1	1,189	0.88	0.00		0.07	0.69	0.13	0.10			0.69	0.59
2010_USHG_FT	739	MC	05	1	1,189	0.88	0.01		0.05	0.06	0.80	0.08			0.80	0.40
2010_USHG_FT	739	MC	06	1	1,189	0.88	0.01		0.03	0.07	0.05	0.85			0.85	0.49
2010_USHG_FT	739	MC	07	1	1,189	0.88	0.01		0.73	0.11	0.07	0.08			0.73	0.43
2010_USHG_FT	739	MC	08	1	1,189	0.88	0.01		0.63	0.20	0.15	0.03			0.63	0.33
2010_USHG_FT	739	MC	09	1	1,189	0.88	0.01		0.08	0.37	0.12	0.42			0.42	0.38
2010_USHG_FT	739	MC	10	1	1,189	0.88	0.01		0.07	0.75	0.11	0.06			0.75	0.54
2010_USHG_FT	739	MC	11	1	1,189	0.88	0.01		0.05	0.17	0.59	0.17			0.59	0.41
2010_USHG_FT	739	MC	12	1	1,189	0.88	0.02		0.14	0.24	0.19	0.42			0.42	0.35
2010_USHG_FT	739	MC	13	1	1,189	0.88	0.01		0.85	0.05	0.05	0.03			0.85	0.51

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	739	MC	14	1	1,189	0.88	0.02		0.67	0.12	0.10	0.09			0.67	0.49
2010_USHG_FT	739	MC	15	1	1,189	0.88	0.02		0.03	0.76	0.12	0.08			0.76	0.44
2010_USHG_FT	739	MC	16	1	1,189	0.88	0.02		0.08	0.14	0.72	0.03			0.72	0.53
2010_USHG_FT	739	MC	17	1	1,189	0.88	0.02		0.68	0.13	0.13	0.04			0.68	0.45
2010_USHG_FT	739	MC	18	1	1,189	0.88	0.03		0.15	0.15	0.59	0.08			0.59	0.44
2010_USHG_FT	739	MC	19	1	1,189	0.88	0.03		0.15	0.13	0.14	0.55			0.55	0.38
2010_USHG_FT	739	MC	20	1	1,189	0.88	0.03		0.68	0.11	0.06	0.11			0.68	0.42
2010_USHG_FT	739	MC	21	1	1,189	0.88	0.03		0.16	0.07	0.65	0.09			0.65	0.55
2010_USHG_FT	739	MC	22	1	1,189	0.88	0.04		0.18	0.58	0.14	0.06			0.58	0.44
2010_USHG_FT	739	MC	23	1	1,189	0.88	0.03		0.06	0.10	0.07	0.72			0.72	0.63
2010_USHG_FT	739	MC	24	1	1,189	0.88	0.03		0.05	0.08	0.74	0.09			0.74	0.54
2010_USHG_FT	739	MC	25	1	1,189	0.88	0.04		0.08	0.07	0.68	0.13			0.68	0.54
2010_USHG_FT	739	MC	26	1	1,189	0.88	0.04		0.04	0.07	0.05	0.81			0.81	0.64
2010_USHG_FT	739	MC	27	1	1,189	0.88	0.04		0.20	0.10	0.21	0.44			0.44	0.49
2010_USHG_FT	739	MC	28	1	1,189	0.88	0.04		0.26	0.52	0.10	0.08			0.52	0.50
2010_USHG_FT	739	MC	29	1	1,189	0.88	0.05		0.09	0.62	0.18	0.06			0.62	0.48
2010_USHG_FT	739	MC	30	1	1,189	0.88	0.06		0.42	0.27	0.19	0.06			0.42	0.43
2010_USHG_FT	739	MC	31	1	1,189	0.88	0.06		0.13	0.10	0.13	0.58			0.58	0.57
2010_USHG_FT	739	MC	32	1	1,189	0.88	0.07		0.28	0.40	0.17	0.08			0.40	0.32
2010_USHG_FT	740	MC	01	1	1,174	0.88	0.00		0.30	0.62	0.03	0.04			0.62	0.30
2010_USHG_FT	740	MC	02	1	1,174	0.88	0.00		0.22	0.60	0.10	0.08			0.60	0.36
2010_USHG_FT	740	MC	03	1	1,174	0.88	0.00		0.07	0.09	0.52	0.32			0.52	0.53

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	740	MC	04	1	1,174	0.88	0.00		0.07	0.05	0.06	0.81			0.81	0.45
2010_USHG_FT	740	MC	05	1	1,174	0.88	0.01		0.47	0.31	0.16	0.05			0.47	0.27
2010_USHG_FT	740	MC	06	1	1,174	0.88	0.01		0.21	0.41	0.29	0.07			0.29	0.17
2010_USHG_FT	740	MC	07	1	1,174	0.88	0.01		0.13	0.19	0.56	0.11			0.56	0.57
2010_USHG_FT	740	MC	08	1	1,174	0.88	0.01		0.05	0.05	0.13	0.76			0.76	0.51
2010_USHG_FT	740	MC	09	1	1,174	0.88	0.02		0.48	0.38	0.10	0.03			0.48	0.34
2010_USHG_FT	740	MC	10	1	1,174	0.88	0.01		0.14	0.11	0.07	0.67			0.67	0.56
2010_USHG_FT	740	MC	11	1	1,174	0.88	0.01		0.07	0.71	0.12	0.08			0.71	0.47
2010_USHG_FT	740	MC	12	1	1,174	0.88	0.01		0.63	0.05	0.20	0.11			0.63	0.41
2010_USHG_FT	740	MC	13	1	1,174	0.88	0.01		0.09	0.24	0.63	0.03			0.63	0.47
2010_USHG_FT	740	MC	14	1	1,174	0.88	0.02		0.15	0.50	0.28	0.05			0.50	0.35
2010_USHG_FT	740	MC	15	1	1,174	0.88	0.02		0.14	0.32	0.12	0.40			0.40	0.41
2010_USHG_FT	740	MC	16	1	1,174	0.88	0.02		0.13	0.46	0.22	0.17			0.46	0.38
2010_USHG_FT	740	MC	17	1	1,174	0.88	0.02		0.07	0.82	0.04	0.04			0.82	0.56
2010_USHG_FT	740	MC	18	1	1,174	0.88	0.03		0.12	0.21	0.22	0.42			0.42	0.39
2010_USHG_FT	740	MC	19	1	1,174	0.88	0.02		0.22	0.63	0.08	0.04			0.63	0.45
2010_USHG_FT	740	MC	20	1	1,174	0.88	0.02		0.14	0.65	0.10	0.10			0.65	0.56
2010_USHG_FT	740	MC	21	1	1,174	0.88	0.03		0.13	0.16	0.65	0.03			0.65	0.50
2010_USHG_FT	740	MC	22	1	1,174	0.88	0.03		0.12	0.04	0.05	0.76			0.76	0.57
2010_USHG_FT	740	MC	23	1	1,174	0.88	0.03		0.47	0.16	0.13	0.21			0.21	0.25
2010_USHG_FT	740	MC	24	1	1,174	0.88	0.03		0.12	0.07	0.70	0.07			0.70	0.52
2010_USHG_FT	740	MC	25	1	1,174	0.88	0.03		0.71	0.08	0.11	0.06			0.71	0.62

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	740	MC	26	1	1,174	0.88	0.04		0.23	0.11	0.19	0.44			0.44	0.47
2010_USHG_FT	740	MC	27	1	1,174	0.88	0.04		0.82	0.05	0.04	0.05			0.82	0.53
2010_USHG_FT	740	MC	28	1	1,174	0.88	0.04		0.04	0.60	0.10	0.21			0.60	0.57
2010_USHG_FT	740	MC	29	1	1,174	0.88	0.05		0.10	0.11	0.67	0.08			0.67	0.54
2010_USHG_FT	740	MC	30	1	1,174	0.88	0.04		0.07	0.34	0.14	0.40			0.40	0.48
2010_USHG_FT	740	MC	31	1	1,174	0.88	0.04		0.14	0.13	0.57	0.11			0.57	0.58
2010_USHG_FT	740	MC	32	1	1,174	0.88	0.05		0.07	0.11	0.05	0.72			0.72	0.50
2010_USHG_FT	741	MC	01	1	1,188	0.88	0.01		0.10	0.08	0.14	0.68			0.68	0.49
2010_USHG_FT	741	MC	02	1	1,188	0.88	0.01		0.11	0.72	0.14	0.03			0.72	0.40
2010_USHG_FT	741	MC	03	1	1,188	0.88	0.00		0.79	0.05	0.06	0.10			0.79	0.47
2010_USHG_FT	741	MC	04	1	1,188	0.88	0.00		0.14	0.72	0.08	0.06			0.72	0.18
2010_USHG_FT	741	MC	05	1	1,188	0.88	0.01		0.19	0.07	0.06	0.67			0.67	0.36
2010_USHG_FT	741	MC	06	1	1,188	0.88	0.01		0.19	0.11	0.51	0.18			0.51	0.51
2010_USHG_FT	741	MC	07	1	1,188	0.88	0.01		0.24	0.61	0.12	0.02			0.61	0.45
2010_USHG_FT	741	MC	08	1	1,188	0.88	0.01		0.08	0.22	0.18	0.52			0.52	0.48
2010_USHG_FT	741	MC	09	1	1,188	0.88	0.01		0.26	0.47	0.06	0.20			0.47	0.34
2010_USHG_FT	741	MC	10	1	1,188	0.88	0.01		0.12	0.53	0.28	0.06			0.53	0.52
2010_USHG_FT	741	MC	11	1	1,188	0.88	0.01		0.17	0.17	0.50	0.15			0.50	0.34
2010_USHG_FT	741	MC	12	1	1,188	0.88	0.01		0.18	0.15	0.61	0.05			0.61	0.49
2010_USHG_FT	741	MC	13	1	1,188	0.88	0.01		0.72	0.08	0.12	0.07			0.72	0.56
2010_USHG_FT	741	MC	14	1	1,188	0.88	0.01		0.06	0.72	0.13	0.08			0.72	0.45
2010_USHG_FT	741	MC	15	1	1,188	0.88	0.01		0.72	0.06	0.11	0.11			0.72	0.46

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	741	MC	16	1	1,188	0.88	0.02		0.46	0.12	0.16	0.24			0.46	0.42
2010_USHG_FT	741	MC	17	1	1,188	0.88	0.01		0.32	0.08	0.12	0.47			0.47	0.59
2010_USHG_FT	741	MC	18	1	1,188	0.88	0.01		0.07	0.12	0.78	0.03			0.78	0.57
2010_USHG_FT	741	MC	19	1	1,188	0.88	0.01		0.11	0.16	0.13	0.58			0.58	0.54
2010_USHG_FT	741	MC	20	1	1,188	0.88	0.01		0.11	0.12	0.60	0.16			0.60	0.58
2010_USHG_FT	741	MC	21	1	1,188	0.88	0.01		0.29	0.06	0.20	0.43			0.43	0.31
2010_USHG_FT	741	MC	22	1	1,188	0.88	0.01		0.06	0.06	0.09	0.77			0.77	0.57
2010_USHG_FT	741	MC	23	1	1,188	0.88	0.02		0.75	0.08	0.06	0.09			0.75	0.59
2010_USHG_FT	741	MC	24	1	1,188	0.88	0.02		0.11	0.14	0.16	0.57			0.57	0.57
2010_USHG_FT	741	MC	25	1	1,188	0.88	0.02		0.21	0.51	0.19	0.07			0.51	0.33
2010_USHG_FT	741	MC	26	1	1,188	0.88	0.02		0.17	0.14	0.53	0.13			0.53	0.49
2010_USHG_FT	741	MC	27	1	1,188	0.88	0.02		0.73	0.18	0.04	0.03			0.73	0.39
2010_USHG_FT	741	MC	28	1	1,188	0.88	0.02		0.27	0.13	0.34	0.23			0.34	0.31
2010_USHG_FT	741	MC	29	1	1,188	0.88	0.03		0.55	0.10	0.14	0.18			0.55	0.56
2010_USHG_FT	741	MC	30	1	1,188	0.88	0.03		0.13	0.08	0.17	0.58			0.58	0.50
2010_USHG_FT	741	MC	31	1	1,188	0.88	0.05		0.56	0.09	0.13	0.17			0.56	0.50
2010_USHG_FT	741	MC	32	1	1,188	0.88	0.05		0.20	0.08	0.07	0.59			0.59	0.59
2010_USHG_FT	742	CR	THM	5	1,373	0.88	0.15	0.13	0.28	0.25	0.19	0.00	0.00		1.35	0.56
2010_USHG_FT	743	CR	THM	5	1,384	0.88	0.17	0.23	0.30	0.24	0.06	0.00	0.00		0.96	0.53
2010_USHG_FT	744	CR	THM	5	1,368	0.88	0.17	0.32	0.34	0.14	0.03	0.00	0.00		0.72	0.53
2010_USHG_FT	745	CR	THM	5	1,353	0.87	0.14	0.07	0.31	0.37	0.11	0.00	0.00		1.39	0.47
2010_USHG_FT	746	CR	01	2	1,377	0.91	0.18	0.19	0.32	0.31					0.94	0.56

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	746	CR	02	1	1,377	0.91	0.15	0.29	0.55						0.55	0.55
2010_USHG_FT	746	CR	3a	1	1,377	0.91	0.18	0.26	0.56						0.56	0.48
2010_USHG_FT	746	CR	3b	1	1,377	0.91	0.19	0.27	0.54						0.54	0.54
2010_USHG_FT	746	CR	04	1	1,377	0.91	0.19	0.22	0.59						0.59	0.50
2010_USHG_FT	746	CR	5a	1	1,377	0.91	0.21	0.15	0.64						0.64	0.55
2010_USHG_FT	746	CR	5b	1	1,377	0.91	0.24	0.34	0.42						0.42	0.57
2010_USHG_FT	746	CR	06	2	1,377	0.91	0.27	0.11	0.28	0.34					0.96	0.64
2010_USHG_FT	746	CR	07	1	1,377	0.91	0.27	0.23	0.50						0.50	0.49
2010_USHG_FT	746	CR	8a	1	1,377	0.91	0.29	0.12	0.59						0.59	0.60
2010_USHG_FT	746	CR	8b	1	1,377	0.91	0.30	0.21	0.48						0.48	0.55
2010_USHG_FT	746	CR	09	1	1,377	0.91	0.31	0.23	0.47						0.47	0.61
2010_USHG_FT	746	CR	DBQ	5	1,377	0.91	0.15	0.31	0.20	0.26	0.08	0.00	0.00		0.97	0.62
2010_USHG_FT	747	CR	01	1	1,392	0.91	0.13	0.23	0.64						0.64	0.48
2010_USHG_FT	747	CR	02	2	1,392	0.91	0.13	0.03	0.14	0.71					1.55	0.61
2010_USHG_FT	747	CR	3a	1	1,392	0.91	0.15	0.08	0.78						0.78	0.60
2010_USHG_FT	747	CR	3b	1	1,392	0.91	0.15	0.12	0.73						0.73	0.59
2010_USHG_FT	747	CR	04	1	1,392	0.91	0.15	0.04	0.81						0.81	0.61
2010_USHG_FT	747	CR	05	2	1,392	0.91	0.16	0.04	0.17	0.63					1.43	0.65
2010_USHG_FT	747	CR	06	1	1,392	0.91	0.20	0.16	0.64						0.64	0.58
2010_USHG_FT	747	CR	07	1	1,392	0.91	0.20	0.15	0.65						0.65	0.60
2010_USHG_FT	747	CR	08	2	1,392	0.91	0.23	0.04	0.16	0.58					1.31	0.64
2010_USHG_FT	747	CR	09	1	1,392	0.91	0.25	0.28	0.47						0.47	0.45

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	747	CR	DBQ	5	1,392	0.91	0.12	0.30	0.24	0.27	0.06	0.00	0.00		0.97	0.58
2010_USHG_FT	748	CR	01	2	1,374	0.90	0.17	0.13	0.28	0.42					1.12	0.47
2010_USHG_FT	748	CR	02	1	1,374	0.90	0.16	0.29	0.55						0.55	0.54
2010_USHG_FT	748	CR	03	2	1,374	0.90	0.16	0.09	0.33	0.43					1.18	0.53
2010_USHG_FT	748	CR	04	2	1,374	0.90	0.16	0.29	0.33	0.22					0.78	0.56
2010_USHG_FT	748	CR	05	1	1,374	0.90	0.18	0.23	0.59						0.59	0.46
2010_USHG_FT	748	CR	6a	1	1,374	0.90	0.20	0.35	0.44						0.44	0.39
2010_USHG_FT	748	CR	6b	1	1,374	0.90	0.20	0.02	0.78						0.78	0.57
2010_USHG_FT	748	CR	07	1	1,374	0.90	0.22	0.08	0.70						0.70	0.57
2010_USHG_FT	748	CR	08	2	1,374	0.90	0.23	0.10	0.28	0.39					1.07	0.62
2010_USHG_FT	748	CR	DBQ	5	1,374	0.90	0.13	0.39	0.23	0.20	0.04	0.00	0.00		0.75	0.55
2010_USHG_FT	749	CR	1a	1	1,361	0.91	0.13	0.08	0.79						0.79	0.56
2010_USHG_FT	749	CR	1b	1	1,361	0.91	0.12	0.57	0.31						0.31	0.40
2010_USHG_FT	749	CR	02	2	1,361	0.91	0.13	0.06	0.38	0.43					1.24	0.60
2010_USHG_FT	749	CR	03	1	1,361	0.91	0.14	0.12	0.74						0.74	0.51
2010_USHG_FT	749	CR	04	2	1,361	0.91	0.14	0.01	0.10	0.75					1.59	0.63
2010_USHG_FT	749	CR	05	2	1,361	0.91	0.18	0.06	0.17	0.59					1.35	0.64
2010_USHG_FT	749	CR	06	2	1,361	0.91	0.19	0.10	0.26	0.45					1.16	0.60
2010_USHG_FT	749	CR	07	2	1,361	0.91	0.23	0.03	0.18	0.57					1.31	0.67
2010_USHG_FT	749	CR	08	1	1,361	0.91	0.25	0.14	0.61						0.61	0.57
2010_USHG_FT	749	CR	09	1	1,361	0.91	0.25	0.07	0.68						0.68	0.61
2010_USHG_FT	749	CR	DBQ	5	1,361	0.91	0.12	0.37	0.27	0.19	0.05	0.00	0.00		0.81	0.60

Table 10. Classical Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	Alpha	B	M0	M1	M2	M3	M4	M5	M6	Mean	Point-Biserial
2010_USHG_FT	750	CR	01	1	1,355	0.91	0.13	0.26	0.61						0.61	0.50
2010_USHG_FT	750	CR	02	1	1,355	0.91	0.12	0.26	0.62						0.62	0.41
2010_USHG_FT	750	CR	3a	1	1,355	0.91	0.14	0.44	0.42						0.42	0.39
2010_USHG_FT	750	CR	3b	1	1,355	0.91	0.14	0.31	0.55						0.55	0.60
2010_USHG_FT	750	CR	04	1	1,355	0.91	0.13	0.08	0.79						0.79	0.53
2010_USHG_FT	750	CR	5a	1	1,355	0.91	0.15	0.08	0.77						0.77	0.51
2010_USHG_FT	750	CR	5b	1	1,355	0.91	0.16	0.22	0.61						0.61	0.53
2010_USHG_FT	750	CR	06	2	1,355	0.91	0.18	0.19	0.32	0.31					0.94	0.64
2010_USHG_FT	750	CR	07	1	1,355	0.91	0.19	0.17	0.65						0.65	0.53
2010_USHG_FT	750	CR	08	1	1,355	0.91	0.20	0.09	0.71						0.71	0.58
2010_USHG_FT	750	CR	09	2	1,355	0.91	0.24	0.13	0.25	0.37					1.00	0.64
2010_USHG_FT	750	CR	DBQ	5	1,355	0.91	0.12	0.32	0.23	0.24	0.09	0.00	0.00		1.00	0.64

Appendix B: Partial Credit Model Item Analysis

Table 11. Partial Credit Model Item Analysis

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	731	MC	01	1	1,163	-0.8000							1.03
2010_USHG_FT	731	MC	02	1	1,163	-0.7200							1.01
2010_USHG_FT	731	MC	03	1	1,163	0.2900							1.08
2010_USHG_FT	731	MC	04	1	1,163	-1.3000							1.07
2010_USHG_FT	731	MC	05	1	1,163	2.1500							1.32
2010_USHG_FT	731	MC	06	1	1,163	-0.6000							1.01
2010_USHG_FT	731	MC	07	1	1,163	0.5300							1.03
2010_USHG_FT	731	MC	08	1	1,163	0.3200							0.87
2010_USHG_FT	731	MC	09	1	1,163	0.5700							1.01
2010_USHG_FT	731	MC	10	1	1,163	-0.5200							0.90
2010_USHG_FT	731	MC	11	1	1,163	-1.0100							0.97
2010_USHG_FT	731	MC	12	1	1,163	0.0000							0.97
2010_USHG_FT	731	MC	13	1	1,163	0.2300							1.21
2010_USHG_FT	731	MC	14	1	1,163	-0.7100							0.93
2010_USHG_FT	731	MC	15	1	1,163	0.4100							0.92
2010_USHG_FT	731	MC	16	1	1,163	-0.0600							0.89
2010_USHG_FT	731	MC	17	1	1,163	-0.2800							0.79
2010_USHG_FT	731	MC	18	1	1,163	-0.9100							0.87
2010_USHG_FT	731	MC	19	1	1,163	-0.2700							0.96
2010_USHG_FT	731	MC	20	1	1,163	0.4000							1.00
2010_USHG_FT	731	MC	21	1	1,163	-0.8900							0.92

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	731	MC	22	1	1,163	1.0300							1.27
2010_USHG_FT	731	MC	23	1	1,163	-0.6700							0.82
2010_USHG_FT	731	MC	24	1	1,163	1.1000							1.16
2010_USHG_FT	731	MC	25	1	1,163	1.2600							1.19
2010_USHG_FT	731	MC	26	1	1,163	0.6200							1.15
2010_USHG_FT	731	MC	27	1	1,163	0.6270							0.97
2010_USHG_FT	731	MC	28	1	1,163	0.5900							0.97
2010_USHG_FT	731	MC	29	1	1,163	0.0400							0.86
2010_USHG_FT	731	MC	30	1	1,163	-0.6200							0.89
2010_USHG_FT	732	MC	01	1	1,179	-0.1745							0.92
2010_USHG_FT	732	MC	02	1	1,179	0.4840							1.16
2010_USHG_FT	732	MC	03	1	1,179	-0.7076							1.06
2010_USHG_FT	732	MC	04	1	1,179	-0.0373							1.06
2010_USHG_FT	732	MC	05	1	1,179	1.1793							1.11
2010_USHG_FT	732	MC	06	1	1,179	-0.3370							1.18
2010_USHG_FT	732	MC	07	1	1,179	1.5188							1.09
2010_USHG_FT	732	MC	08	1	1,179	-0.8443							0.85
2010_USHG_FT	732	MC	09	1	1,179	0.2171							0.92
2010_USHG_FT	732	MC	10	1	1,179	-0.0002							0.91
2010_USHG_FT	732	MC	11	1	1,179	-0.3827							0.91
2010_USHG_FT	732	MC	12	1	1,179	-0.1842							1.02
2010_USHG_FT	732	MC	13	1	1,179	1.2770							1.15
2010_USHG_FT	732	MC	14	1	1,179	1.5188							0.94

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	732	MC	15	1	1,179	0.1140							0.95
2010_USHG_FT	732	MC	16	1	1,179	1.1881							0.99
2010_USHG_FT	732	MC	17	1	1,179	0.5788							1.01
2010_USHG_FT	732	MC	18	1	1,179	0.2922							0.93
2010_USHG_FT	732	MC	19	1	1,179	0.4797							0.92
2010_USHG_FT	732	MC	20	1	1,179	0.9396							1.00
2010_USHG_FT	732	MC	21	1	1,179	1.2236							1.07
2010_USHG_FT	732	MC	22	1	1,179	-0.3878							0.94
2010_USHG_FT	732	MC	23	1	1,179	-0.1125							0.94
2010_USHG_FT	732	MC	24	1	1,179	0.8707							0.96
2010_USHG_FT	732	MC	25	1	1,179	0.9224							1.14
2010_USHG_FT	732	MC	26	1	1,179	0.7462							1.03
2010_USHG_FT	732	MC	27	1	1,179	1.0349							1.01
2010_USHG_FT	732	MC	28	1	1,179	0.2082							0.85
2010_USHG_FT	732	MC	29	1	1,179	-0.0794							0.90
2010_USHG_FT	732	MC	30	1	1,179	1.4080							1.12
2010_USHG_FT	732	MC	31	1	1,179	0.0090							0.86
2010_USHG_FT	732	MC	32	1	1,179	0.1185							0.96
2010_USHG_FT	733	MC	01	1	1,171	-0.6571							1.07
2010_USHG_FT	733	MC	02	1	1,171	-0.8512							0.99
2010_USHG_FT	733	MC	03	1	1,171	0.3144							1.07
2010_USHG_FT	733	MC	04	1	1,171	0.8794							0.97
2010_USHG_FT	733	MC	05	1	1,171	0.1286							0.99

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	733	MC	06	1	1,171	0.1286							1.05
2010_USHG_FT	733	MC	07	1	1,171	1.1858							1.20
2010_USHG_FT	733	MC	08	1	1,171	0.0402							0.96
2010_USHG_FT	733	MC	09	1	1,171	-0.8894							0.85
2010_USHG_FT	733	MC	10	1	1,171	-0.3912							0.98
2010_USHG_FT	733	MC	11	1	1,171	0.1607							1.03
2010_USHG_FT	733	MC	12	1	1,171	-0.2719							1.05
2010_USHG_FT	733	MC	13	1	1,171	0.0355							0.83
2010_USHG_FT	733	MC	14	1	1,171	-0.6166							0.87
2010_USHG_FT	733	MC	15	1	1,171	0.1927							0.94
2010_USHG_FT	733	MC	16	1	1,171	0.8108							1.08
2010_USHG_FT	733	MC	17	1	1,171	0.6084							1.02
2010_USHG_FT	733	MC	18	1	1,171	-0.0499							0.90
2010_USHG_FT	733	MC	19	1	1,171	0.2920							1.19
2010_USHG_FT	733	MC	20	1	1,171	0.9868							1.05
2010_USHG_FT	733	MC	21	1	1,171	1.9341							1.24
2010_USHG_FT	733	MC	22	1	1,171	1.0947							1.10
2010_USHG_FT	733	MC	23	1	1,171	0.1744							0.94
2010_USHG_FT	733	MC	24	1	1,171	0.9696							1.07
2010_USHG_FT	733	MC	25	1	1,171	-0.3077							0.93
2010_USHG_FT	733	MC	26	1	1,171	0.1055							0.97
2010_USHG_FT	733	MC	27	1	1,171	0.0683							0.88
2010_USHG_FT	733	MC	28	1	1,171	0.2561							0.91

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	733	MC	29	1	1,171	0.1653							0.91
2010_USHG_FT	733	MC	30	1	1,171	0.9138							1.15
2010_USHG_FT	733	MC	31	1	1,171	0.1561							0.77
2010_USHG_FT	733	MC	32	1	1,171	0.9052							0.97
2010_USHG_FT	734	MC	01	1	1,175	-0.4475							1.13
2010_USHG_FT	734	MC	02	1	1,175	0.0941							1.03
2010_USHG_FT	734	MC	03	1	1,175	-0.0989							1.09
2010_USHG_FT	734	MC	04	1	1,175	-1.0528							0.85
2010_USHG_FT	734	MC	05	1	1,175	0.1674							0.85
2010_USHG_FT	734	MC	06	1	1,175	-0.4959							0.94
2010_USHG_FT	734	MC	07	1	1,175	-0.4905							0.99
2010_USHG_FT	734	MC	08	1	1,175	0.3600							0.97
2010_USHG_FT	734	MC	09	1	1,175	2.1180							1.25
2010_USHG_FT	734	MC	10	1	1,175	0.3290							0.92
2010_USHG_FT	734	MC	11	1	1,175	0.8025							1.11
2010_USHG_FT	734	MC	12	1	1,175	1.0306							1.08
2010_USHG_FT	734	MC	13	1	1,175	1.1216							1.12
2010_USHG_FT	734	MC	14	1	1,175	0.6606							1.03
2010_USHG_FT	734	MC	15	1	1,175	1.2177							1.10
2010_USHG_FT	734	MC	16	1	1,175	0.7123							0.95
2010_USHG_FT	734	MC	17	1	1,175	0.1308							0.86
2010_USHG_FT	734	MC	18	1	1,175	-0.7820							0.78
2010_USHG_FT	734	MC	19	1	1,175	1.7428							1.26

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	734	MC	20	1	1,175	0.3600							0.96
2010_USHG_FT	734	MC	21	1	1,175	-0.3999							0.90
2010_USHG_FT	734	MC	22	1	1,175	0.9100							1.11
2010_USHG_FT	734	MC	23	1	1,175	0.3246							1.06
2010_USHG_FT	734	MC	24	1	1,175	-0.6637							0.85
2010_USHG_FT	734	MC	25	1	1,175	0.0895							1.05
2010_USHG_FT	734	MC	26	1	1,175	-0.5122							0.83
2010_USHG_FT	734	MC	27	1	1,175	1.0004							1.10
2010_USHG_FT	734	MC	28	1	1,175	0.6735							1.02
2010_USHG_FT	734	MC	29	1	1,175	1.1827							1.04
2010_USHG_FT	734	MC	30	1	1,175	0.4829							0.89
2010_USHG_FT	734	MC	31	1	1,175	0.2890							0.80
2010_USHG_FT	734	MC	32	1	1,175	-0.1474							0.90
2010_USHG_FT	735	MC	01	1	1,171	-0.1323							0.93
2010_USHG_FT	735	MC	02	1	1,171	-0.3219							0.90
2010_USHG_FT	735	MC	03	1	1,171	0.5911							1.19
2010_USHG_FT	735	MC	04	1	1,171	-0.7535							0.96
2010_USHG_FT	735	MC	05	1	1,171	-1.0635							0.96
2010_USHG_FT	735	MC	06	1	1,171	0.1814							1.07
2010_USHG_FT	735	MC	07	1	1,171	0.9258							1.14
2010_USHG_FT	735	MC	08	1	1,171	-0.1178							0.95
2010_USHG_FT	735	MC	09	1	1,171	-0.8145							0.96
2010_USHG_FT	735	MC	10	1	1,171	0.4784							0.90

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	735	MC	11	1	1,171	-1.1273							0.93
2010_USHG_FT	735	MC	12	1	1,171	0.0668							0.89
2010_USHG_FT	735	MC	13	1	1,171	-0.3736							0.98
2010_USHG_FT	735	MC	14	1	1,171	-0.7595							0.98
2010_USHG_FT	735	MC	15	1	1,171	0.4697							1.00
2010_USHG_FT	735	MC	16	1	1,171	0.1814							1.07
2010_USHG_FT	735	MC	17	1	1,171	0.5088							1.00
2010_USHG_FT	735	MC	18	1	1,171	1.6306							1.06
2010_USHG_FT	735	MC	19	1	1,171	0.6986							0.98
2010_USHG_FT	735	MC	20	1	1,171	1.3168							1.06
2010_USHG_FT	735	MC	21	1	1,171	1.9475							1.21
2010_USHG_FT	735	MC	22	1	1,171	0.7844							0.92
2010_USHG_FT	735	MC	23	1	1,171	-0.4799							0.90
2010_USHG_FT	735	MC	24	1	1,171	-0.5623							0.87
2010_USHG_FT	735	MC	25	1	1,171	-0.7960							0.83
2010_USHG_FT	735	MC	26	1	1,171	0.8786							1.09
2010_USHG_FT	735	MC	27	1	1,171	0.2445							0.88
2010_USHG_FT	735	MC	28	1	1,171	1.1154							1.12
2010_USHG_FT	735	MC	29	1	1,171	0.2220							0.97
2010_USHG_FT	735	MC	30	1	1,171	2.0616							1.25
2010_USHG_FT	735	MC	31	1	1,171	0.7415							1.01
2010_USHG_FT	735	MC	32	1	1,171	-0.0792							0.89
2010_USHG_FT	736	MC	01	1	1,193	2.8277							1.12

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	736	MC	02	1	1,193	1.0424							1.10
2010_USHG_FT	736	MC	03	1	1,193	0.1492							0.84
2010_USHG_FT	736	MC	04	1	1,193	1.4154							1.00
2010_USHG_FT	736	MC	05	1	1,193	0.4245							0.98
2010_USHG_FT	736	MC	06	1	1,193	1.1621							1.07
2010_USHG_FT	736	MC	07	1	1,193	0.6671							1.02
2010_USHG_FT	736	MC	08	1	1,193	-0.8011							0.90
2010_USHG_FT	736	MC	09	1	1,193	0.1319							1.13
2010_USHG_FT	736	MC	10	1	1,193	1.5506							1.25
2010_USHG_FT	736	MC	11	1	1,193	0.9400							1.08
2010_USHG_FT	736	MC	12	1	1,193	0.3954							0.98
2010_USHG_FT	736	MC	13	1	1,193	1.0918							1.03
2010_USHG_FT	736	MC	14	1	1,193	-0.4898							0.89
2010_USHG_FT	736	MC	15	1	1,193	-0.1417							1.05
2010_USHG_FT	736	MC	16	1	1,193	0.5278							0.93
2010_USHG_FT	736	MC	17	1	1,193	-0.1324							0.88
2010_USHG_FT	736	MC	18	1	1,193	0.9196							0.88
2010_USHG_FT	736	MC	19	1	1,193	0.8952							0.97
2010_USHG_FT	736	MC	20	1	1,193	1.4326							1.01
2010_USHG_FT	736	MC	21	1	1,193	1.3002							1.20
2010_USHG_FT	736	MC	22	1	1,193	0.5976							0.93
2010_USHG_FT	736	MC	23	1	1,193	0.3870							1.03
2010_USHG_FT	736	MC	24	1	1,193	0.2181							0.95

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	736	MC	25	1	1,193	-0.9238							0.82
2010_USHG_FT	736	MC	26	1	1,193	0.8219							0.85
2010_USHG_FT	736	MC	27	1	1,193	1.4499							0.99
2010_USHG_FT	736	MC	28	1	1,193	0.2053							0.94
2010_USHG_FT	736	MC	29	1	1,193	1.0014							1.14
2010_USHG_FT	736	MC	30	1	1,193	0.0618							0.85
2010_USHG_FT	736	MC	31	1	1,193	1.0506							1.09
2010_USHG_FT	736	MC	32	1	1,193	0.2565							0.96
2010_USHG_FT	737	MC	01	1	1,194	-0.2402							1.06
2010_USHG_FT	737	MC	02	1	1,194	0.4573							0.97
2010_USHG_FT	737	MC	03	1	1,194	-0.8987							1.05
2010_USHG_FT	737	MC	04	1	1,194	0.7927							1.16
2010_USHG_FT	737	MC	05	1	1,194	1.4461							1.28
2010_USHG_FT	737	MC	06	1	1,194	-0.4709							0.99
2010_USHG_FT	737	MC	07	1	1,194	0.9274							1.03
2010_USHG_FT	737	MC	08	1	1,194	0.2126							1.01
2010_USHG_FT	737	MC	09	1	1,194	-1.1403							0.92
2010_USHG_FT	737	MC	10	1	1,194	-0.7635							0.88
2010_USHG_FT	737	MC	11	1	1,194	-1.1618							0.86
2010_USHG_FT	737	MC	12	1	1,194	-0.6871							0.98
2010_USHG_FT	737	MC	13	1	1,194	-0.7220							0.88
2010_USHG_FT	737	MC	14	1	1,194	-0.0949							0.97
2010_USHG_FT	737	MC	15	1	1,194	1.8940							1.12

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	737	MC	16	1	1,194	0.4616							0.88
2010_USHG_FT	737	MC	17	1	1,194	0.3622							0.98
2010_USHG_FT	737	MC	18	1	1,194	-0.1620							0.90
2010_USHG_FT	737	MC	19	1	1,194	0.5642							0.95
2010_USHG_FT	737	MC	20	1	1,194	-1.2656							0.82
2010_USHG_FT	737	MC	21	1	1,194	1.0880							1.02
2010_USHG_FT	737	MC	22	1	1,194	1.6164							1.13
2010_USHG_FT	737	MC	23	1	1,194	-0.9564							0.81
2010_USHG_FT	737	MC	24	1	1,194	-0.2501							0.95
2010_USHG_FT	737	MC	25	1	1,194	1.4904							1.30
2010_USHG_FT	737	MC	26	1	1,194	-0.2850							0.90
2010_USHG_FT	737	MC	27	1	1,194	-0.5084							0.88
2010_USHG_FT	737	MC	28	1	1,194	0.3316							0.88
2010_USHG_FT	737	MC	29	1	1,194	0.7210							1.10
2010_USHG_FT	737	MC	30	1	1,194	0.6449							0.97
2010_USHG_FT	737	MC	31	1	1,194	1.1177							1.24
2010_USHG_FT	737	MC	32	1	1,194	0.5600							0.89
2010_USHG_FT	738	MC	01	1	1,186	1.0850							1.00
2010_USHG_FT	738	MC	02	1	1,186	-0.6009							0.95
2010_USHG_FT	738	MC	03	1	1,186	0.7161							1.08
2010_USHG_FT	738	MC	04	1	1,186	0.5537							1.06
2010_USHG_FT	738	MC	05	1	1,186	-0.5730							0.88
2010_USHG_FT	738	MC	06	1	1,186	-0.2370							0.89

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	738	MC	07	1	1,186	-0.0039							1.00
2010_USHG_FT	738	MC	08	1	1,186	0.2731							1.10
2010_USHG_FT	738	MC	09	1	1,186	1.9114							1.27
2010_USHG_FT	738	MC	10	1	1,186	-0.2022							1.01
2010_USHG_FT	738	MC	11	1	1,186	-0.1775							0.94
2010_USHG_FT	738	MC	12	1	1,186	0.1039							0.99
2010_USHG_FT	738	MC	13	1	1,186	1.1427							1.08
2010_USHG_FT	738	MC	14	1	1,186	-0.6518							0.88
2010_USHG_FT	738	MC	15	1	1,186	0.2460							1.03
2010_USHG_FT	738	MC	16	1	1,186	1.5207							1.24
2010_USHG_FT	738	MC	17	1	1,186	-0.5786							0.97
2010_USHG_FT	738	MC	18	1	1,186	-0.6404							0.83
2010_USHG_FT	738	MC	19	1	1,186	1.4185							0.95
2010_USHG_FT	738	MC	20	1	1,186	0.2460							0.99
2010_USHG_FT	738	MC	21	1	1,186	0.6811							0.90
2010_USHG_FT	738	MC	22	1	1,186	-0.0898							1.11
2010_USHG_FT	738	MC	23	1	1,186	0.1408							0.91
2010_USHG_FT	738	MC	24	1	1,186	-0.2320							0.85
2010_USHG_FT	738	MC	25	1	1,186	-0.1923							1.03
2010_USHG_FT	738	MC	26	1	1,186	0.2867							0.98
2010_USHG_FT	738	MC	27	1	1,186	0.8518							1.15
2010_USHG_FT	738	MC	28	1	1,186	-1.0548							0.79
2010_USHG_FT	738	MC	29	1	1,186	0.6811							0.94

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	738	MC	30	1	1,186	1.4740							1.21
2010_USHG_FT	738	MC	31	1	1,186	0.3002							0.96
2010_USHG_FT	738	MC	32	1	1,186	0.5713							0.88
2010_USHG_FT	739	MC	01	1	1,189	1.0150							1.06
2010_USHG_FT	739	MC	02	1	1,189	-0.1857							1.08
2010_USHG_FT	739	MC	03	1	1,189	0.6896							1.35
2010_USHG_FT	739	MC	04	1	1,189	-0.1367							0.85
2010_USHG_FT	739	MC	05	1	1,189	-0.8413							1.00
2010_USHG_FT	739	MC	06	1	1,189	-1.2591							0.88
2010_USHG_FT	739	MC	07	1	1,189	-0.3682							1.03
2010_USHG_FT	739	MC	08	1	1,189	0.2393							1.17
2010_USHG_FT	739	MC	09	1	1,189	1.2840							1.08
2010_USHG_FT	739	MC	10	1	1,189	-0.4745							0.89
2010_USHG_FT	739	MC	11	1	1,189	0.4240							1.08
2010_USHG_FT	739	MC	12	1	1,189	1.3099							1.14
2010_USHG_FT	739	MC	13	1	1,189	-1.2513							0.85
2010_USHG_FT	739	MC	14	1	1,189	0.0017							0.97
2010_USHG_FT	739	MC	15	1	1,189	-0.5127							0.99
2010_USHG_FT	739	MC	16	1	1,189	-0.3164							0.91
2010_USHG_FT	739	MC	17	1	1,189	-0.0645							1.01
2010_USHG_FT	739	MC	18	1	1,189	0.4457							1.04
2010_USHG_FT	739	MC	19	1	1,189	0.6472							1.12
2010_USHG_FT	739	MC	20	1	1,189	-0.0836							1.04

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	739	MC	21	1	1,189	0.1265							0.90
2010_USHG_FT	739	MC	22	1	1,189	0.4760							1.04
2010_USHG_FT	739	MC	23	1	1,189	-0.3113							0.79
2010_USHG_FT	739	MC	24	1	1,189	-0.4422							0.88
2010_USHG_FT	739	MC	25	1	1,189	-0.0788							0.90
2010_USHG_FT	739	MC	26	1	1,189	-0.8858							0.74
2010_USHG_FT	739	MC	27	1	1,189	1.1637							0.95
2010_USHG_FT	739	MC	28	1	1,189	0.7996							0.96
2010_USHG_FT	739	MC	29	1	1,189	0.2616							0.99
2010_USHG_FT	739	MC	30	1	1,189	1.2926							1.02
2010_USHG_FT	739	MC	31	1	1,189	0.4673							0.87
2010_USHG_FT	739	MC	32	1	1,189	1.3928							1.18
2010_USHG_FT	740	MC	01	1	1,174	0.2378							1.21
2010_USHG_FT	740	MC	02	1	1,174	0.3629							1.14
2010_USHG_FT	740	MC	03	1	1,174	0.7796							0.92
2010_USHG_FT	740	MC	04	1	1,174	-0.9160							0.95
2010_USHG_FT	740	MC	05	1	1,174	1.0113							1.24
2010_USHG_FT	740	MC	06	1	1,174	1.9510							1.29
2010_USHG_FT	740	MC	07	1	1,174	0.5643							0.87
2010_USHG_FT	740	MC	08	1	1,174	-0.5964							0.90
2010_USHG_FT	740	MC	09	1	1,174	0.9683							1.15
2010_USHG_FT	740	MC	10	1	1,174	-0.0351							0.88
2010_USHG_FT	740	MC	11	1	1,174	-0.2303							0.99

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	740	MC	12	1	1,174	0.1789							1.07
2010_USHG_FT	740	MC	13	1	1,174	0.1789							1.01
2010_USHG_FT	740	MC	14	1	1,174	0.8439							1.16
2010_USHG_FT	740	MC	15	1	1,174	1.3731							1.05
2010_USHG_FT	740	MC	16	1	1,174	1.0500							1.12
2010_USHG_FT	740	MC	17	1	1,174	-1.0086							0.80
2010_USHG_FT	740	MC	18	1	1,174	1.2671							1.10
2010_USHG_FT	740	MC	19	1	1,174	0.1835							1.02
2010_USHG_FT	740	MC	20	1	1,174	0.1055							0.88
2010_USHG_FT	740	MC	21	1	1,174	0.0684							0.95
2010_USHG_FT	740	MC	22	1	1,174	-0.5851							0.82
2010_USHG_FT	740	MC	23	1	1,174	2.5241							1.11
2010_USHG_FT	740	MC	24	1	1,174	-0.2004							0.91
2010_USHG_FT	740	MC	25	1	1,174	-0.2353							0.80
2010_USHG_FT	740	MC	26	1	1,174	1.1668							0.98
2010_USHG_FT	740	MC	27	1	1,174	-0.9884							0.83
2010_USHG_FT	740	MC	28	1	1,174	0.3496							0.88
2010_USHG_FT	740	MC	29	1	1,174	-0.0208							0.90
2010_USHG_FT	740	MC	30	1	1,174	1.3642							0.96
2010_USHG_FT	740	MC	31	1	1,174	0.4903							0.87
2010_USHG_FT	740	MC	32	1	1,174	-0.3217							0.93
2010_USHG_FT	741	MC	01	1	1,188	-0.1026							0.96
2010_USHG_FT	741	MC	02	1	1,188	-0.3213							1.05

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	741	MC	03	1	1,188	-0.7683							0.92
2010_USHG_FT	741	MC	04	1	1,188	-0.3465							1.27
2010_USHG_FT	741	MC	05	1	1,188	-0.0602							1.12
2010_USHG_FT	741	MC	06	1	1,188	0.7928							0.96
2010_USHG_FT	741	MC	07	1	1,188	0.2539							1.03
2010_USHG_FT	741	MC	08	1	1,188	0.7368							1.00
2010_USHG_FT	741	MC	09	1	1,188	0.9916							1.17
2010_USHG_FT	741	MC	10	1	1,188	0.6808							0.95
2010_USHG_FT	741	MC	11	1	1,188	0.8273							1.19
2010_USHG_FT	741	MC	12	1	1,188	0.2760							0.98
2010_USHG_FT	741	MC	13	1	1,188	-0.3263							0.85
2010_USHG_FT	741	MC	14	1	1,188	-0.3566							0.98
2010_USHG_FT	741	MC	15	1	1,188	-0.3163							0.97
2010_USHG_FT	741	MC	16	1	1,188	1.0526							1.09
2010_USHG_FT	741	MC	17	1	1,188	0.9873							0.86
2010_USHG_FT	741	MC	18	1	1,188	-0.6820							0.82
2010_USHG_FT	741	MC	19	1	1,188	0.4210							0.93
2010_USHG_FT	741	MC	20	1	1,188	0.3466							0.87
2010_USHG_FT	741	MC	21	1	1,188	1.2019							1.27
2010_USHG_FT	741	MC	22	1	1,188	-0.6763							0.82
2010_USHG_FT	741	MC	23	1	1,188	-0.5280							0.81
2010_USHG_FT	741	MC	24	1	1,188	0.4690							0.88
2010_USHG_FT	741	MC	25	1	1,188	0.8144							1.22

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	741	MC	26	1	1,188	0.6765							1.00
2010_USHG_FT	741	MC	27	1	1,188	-0.3922							1.03
2010_USHG_FT	741	MC	28	1	1,188	1.7227							1.19
2010_USHG_FT	741	MC	29	1	1,188	0.5903							0.90
2010_USHG_FT	741	MC	30	1	1,188	0.4167							0.98
2010_USHG_FT	741	MC	31	1	1,188	0.5340							0.99
2010_USHG_FT	741	MC	32	1	1,188	0.3773							0.87
2010_USHG_FT	742	CR	THM	5	1,373	2.7008	-2.5661	-1.6477	-0.6653	4.8791			1.40
2010_USHG_FT	743	CR	THM	5	1,384	3.6507	-2.9844	-2.1301	-0.0895	45.2040	-40.000		1.28
2010_USHG_FT	744	CR	THM	5	1,368	2.5725	-1.4919	-0.0718	1.5637				1.10
2010_USHG_FT	745	CR	THM	5	1,353	1.1913	-1.4390	-0.4264	1.8654				1.43
2010_USHG_FT	746	CR	01	2	1,377	0.8930	-0.3949	0.3949					1.13
2010_USHG_FT	746	CR	02	1	1,377	0.4867							0.90
2010_USHG_FT	746	CR	3a	1	1,377	0.4462							0.99
2010_USHG_FT	746	CR	3b	1	1,377	0.5307							0.91
2010_USHG_FT	746	CR	04	1	1,377	0.2715							0.96
2010_USHG_FT	746	CR	5a	1	1,377	0.0383							0.90
2010_USHG_FT	746	CR	5b	1	1,377	1.1487							0.86
2010_USHG_FT	746	CR	06	2	1,377	0.8337	-0.1506	0.1506					0.97
2010_USHG_FT	746	CR	07	1	1,377	0.7277							0.98
2010_USHG_FT	746	CR	8a	1	1,377	0.2940							0.84
2010_USHG_FT	746	CR	8b	1	1,377	0.8369							0.90

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	746	CR	09	1	1,377	0.9025							0.82
2010_USHG_FT	746	CR	DBQ	5	1,377	3.1172	-1.9158	-2.2523	-0.1641	4.1094	0.2227		1.11
2010_USHG_FT	747	CR	01	1	1,392	0.0991							0.98
2010_USHG_FT	747	CR	02	2	1,392	-0.4365	0.4332	-0.4332					0.96
2010_USHG_FT	747	CR	3a	1	1,392	-0.7297							0.80
2010_USHG_FT	747	CR	3b	1	1,392	-0.4028							0.84
2010_USHG_FT	747	CR	04	1	1,392	-0.9858							0.78
2010_USHG_FT	747	CR	05	2	1,392	-0.1252	0.2954	-0.2954					0.93
2010_USHG_FT	747	CR	06	1	1,392	0.0913							0.86
2010_USHG_FT	747	CR	07	1	1,392	0.0560							0.85
2010_USHG_FT	747	CR	08	2	1,392	0.1833	0.5009	-0.5009					1.00
2010_USHG_FT	747	CR	09	1	1,392	0.9832							1.03
2010_USHG_FT	747	CR	DBQ	5	1,392	3.1785	-2.1908	-2.0654	0.1971	4.0590			1.15
2010_USHG_FT	748	CR	01	2	1,374	0.5104	-0.1730	0.1730					1.26
2010_USHG_FT	748	CR	02	1	1,374	0.5005							0.90
2010_USHG_FT	748	CR	03	2	1,374	0.3456	-0.4110	0.4110					1.12
2010_USHG_FT	748	CR	04	2	1,374	1.2848	-0.4625	0.4625					1.03
2010_USHG_FT	748	CR	05	1	1,374	0.3301							0.99
2010_USHG_FT	748	CR	6a	1	1,374	1.0353							1.07
2010_USHG_FT	748	CR	6b	1	1,374	-0.7521							0.81
2010_USHG_FT	748	CR	07	1	1,374	-0.2528							0.84
2010_USHG_FT	748	CR	08	2	1,374	0.6228	-0.1394	0.1394					0.98
2010_USHG_FT	748	CR	DBQ	5	1,374	3.3203	-1.9697	-1.8913	0.2431	3.2813	0.3367		1.11

Table 11. Partial Credit Model Item Analysis *(continued)*

Test	Form	Type	Item	Max	N-Count	RID	S1	S2	S3	S4	S5	S6	INFIT
2010_USHG_FT	749	CR	1a	1	1,361	-0.8415							0.85
2010_USHG_FT	749	CR	1b	1	1,361	1.7643							1.02
2010_USHG_FT	749	CR	02	2	1,361	0.1647	-0.7362	0.7362					1.00
2010_USHG_FT	749	CR	03	1	1,361	-0.4874							0.91
2010_USHG_FT	749	CR	04	2	1,361	-0.5229	0.7957	-0.7957					0.91
2010_USHG_FT	749	CR	05	2	1,361	0.0640	0.3512	-0.3512					0.96
2010_USHG_FT	749	CR	06	2	1,361	0.4530	-0.0848	0.0848					1.06
2010_USHG_FT	749	CR	07	2	1,361	0.1534	0.3520	-0.3520					0.91
2010_USHG_FT	749	CR	08	1	1,361	0.2556							0.88
2010_USHG_FT	749	CR	09	1	1,361	-0.1229							0.82
2010_USHG_FT	749	CR	DBQ	5	1,361	2.9474	-1.8259	-1.3208	0.4018	2.7449			1.00
2010_USHG_FT	750	CR	01	1	1,355	0.2012							0.97
2010_USHG_FT	750	CR	02	1	1,355	0.1738							1.07
2010_USHG_FT	750	CR	3a	1	1,355	1.2093							1.10
2010_USHG_FT	750	CR	3b	1	1,355	0.4965							0.85
2010_USHG_FT	750	CR	04	1	1,355	-0.8908							0.86
2010_USHG_FT	750	CR	5a	1	1,355	-0.7202							0.89
2010_USHG_FT	750	CR	5b	1	1,355	0.1895							0.93
2010_USHG_FT	750	CR	06	2	1,355	0.9106	-0.3945	0.3945					0.97
2010_USHG_FT	750	CR	07	1	1,355	0.0149							0.92
2010_USHG_FT	750	CR	08	1	1,355	-0.3684							0.84
2010_USHG_FT	750	CR	09	2	1,355	0.7778	-0.0618	0.0618					1.02
2010_USHG_FT	750	CR	DBQ	5	1,355	2.8151	-1.8448	-1.7069	0.1102	3.4415			1.09

Appendix C: DIF Statistics

Table 12. DIF Statistics

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
731	1	MC	0.81	4.28	0.11		
731	2	MC	-0.02	0.00	0.00		
731	3	MC	-0.08	0.05	-0.02		
731	4	MC	-0.09	0.05	-0.02		
731	5	MC	-0.52	2.53	-0.07		
731	6	MC	-0.48	1.66	-0.07		
731	7	MC	-0.49	2.27	-0.08		
731	8	MC	-0.41	1.32	-0.06		
731	9	MC	0.31	0.88	0.06		
731	10	MC	-0.02	0.00	0.00		
731	11	MC	-0.06	0.02	-0.01		
731	12	MC	0.23	0.42	0.05		
731	13	MC	0.47	2.33	0.07		
731	14	MC	0.57	2.09	0.08		
731	15	MC	0.33	0.87	0.05		
731	16	MC	-0.08	0.05	-0.01		
731	17	MC	-0.39	0.92	-0.05		
731	18	MC	0.90	4.50	0.12		
731	19	MC	0.57	2.37	0.07		
731	20	MC	-1.38	16.64	-0.20	B	M
731	21	MC	0.57	1.88	0.07		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
731	22	MC	0.33	1.15	0.05		
731	23	MC	0.01	0.00	0.00		
731	24	MC	-0.24	0.57	-0.05		
731	25	MC	-0.55	3.07	-0.10		
731	26	MC	-0.12	0.15	-0.02		
731	27	MC	0.27	0.62	0.05		
731	28	MC	0.77	5.13	0.10		
731	29	MC	0.21	0.31	0.03		
731	30	MC	-0.93	5.27	-0.11		
732	1	MC	-1.71	23.63	-0.26	C	M
732	2	MC	-0.12	0.17	-0.03		
732	3	MC	0.39	1.17	0.06		
732	4	MC	0.07	0.05	0.01		
732	5	MC	-0.30	0.97	-0.05		
732	6	MC	-0.22	0.48	-0.05		
732	7	MC	-0.13	0.17	-0.03		
732	8	MC	0.07	0.03	0.01		
732	9	MC	-0.41	1.52	-0.06		
732	10	MC	0.26	0.55	0.04		
732	11	MC	-0.55	2.24	-0.09		
732	12	MC	0.39	1.36	0.06		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
732	13	MC	-0.22	0.52	-0.05		
732	14	MC	0.37	1.13	0.05		
732	15	MC	-0.35	1.07	-0.07		
732	16	MC	-0.25	0.58	-0.05		
732	17	MC	-0.07	0.05	0.00		
732	18	MC	-0.46	1.89	-0.06		
732	19	MC	-1.26	14.18	-0.19	B	M
732	20	MC	0.78	6.05	0.12		
732	21	MC	-0.11	0.14	-0.02		
732	22	MC	-0.35	0.92	-0.05		
732	23	MC	1.02	8.53	0.17	B	F
732	24	MC	0.01	0.00	0.01		
732	25	MC	0.71	5.43	0.13		
732	26	MC	0.96	9.02	0.16		
732	27	MC	0.18	0.33	0.04		
732	28	MC	0.30	0.72	0.04		
732	29	MC	0.44	1.58	0.06		
732	30	MC	-0.67	4.80	-0.11		
732	31	MC	0.73	3.98	0.11		
732	32	MC	0.55	2.68	0.09		
733	1	MC	-0.61	2.70	-0.10		
733	2	MC	-1.34	11.16	-0.18	B	M

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
733	3	MC	-0.09	0.08	-0.02		
733	4	MC	-0.33	1.05	-0.06		
733	5	MC	-0.04	0.01	0.00		
733	6	MC	0.99	9.05	0.16		
733	7	MC	-0.03	0.01	-0.02		
733	8	MC	-0.32	0.90	-0.06		
733	9	MC	0.13	0.10	0.00		
733	10	MC	-0.35	0.95	-0.05		
733	11	MC	-0.09	0.08	-0.01		
733	12	MC	-1.08	10.41	-0.18	B	M
733	13	MC	0.61	2.69	0.08		
733	14	MC	-0.99	6.13	-0.13		
733	15	MC	-0.67	3.97	-0.10		
733	16	MC	0.39	1.60	0.07		
733	17	MC	-0.25	0.61	-0.04		
733	18	MC	-0.54	2.21	-0.08		
733	19	MC	0.70	5.29	0.15		
733	20	MC	0.30	0.93	0.06		
733	21	MC	0.22	0.46	0.05		
733	22	MC	-0.04	0.02	-0.01		
733	23	MC	-0.74	4.74	-0.13		
733	24	MC	0.29	0.88	0.06		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
733	25	MC	-0.18	0.24	-0.02		
733	26	MC	0.60	3.11	0.08		
733	27	MC	0.41	1.32	0.05		
733	28	MC	0.50	2.14	0.09		
733	29	MC	1.23	12.53	0.20	B	F
733	30	MC	0.10	0.12	0.01		
733	31	MC	0.99	6.25	0.12		
733	32	MC	-0.43	1.78	-0.07		
734	1	MC	-0.34	1.00	-0.06		
734	2	MC	-0.95	8.50	-0.16		
734	3	MC	-1.46	19.62	-0.25	B	M
734	4	MC	-0.62	1.87	-0.07		
734	5	MC	-1.71	20.91	-0.22	C	M
734	6	MC	0.29	0.65	0.03		
734	7	MC	-0.33	0.84	-0.05		
734	8	MC	-0.06	0.04	-0.02		
734	9	MC	-0.25	0.57	-0.04		
734	10	MC	0.00	0.00	-0.01		
734	11	MC	-0.01	0.00	0.01		
734	12	MC	-0.74	5.70	-0.13		
734	13	MC	1.11	13.12	0.20	B	F
734	14	MC	0.02	0.00	0.01		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
734	15	MC	0.16	0.27	0.03		
734	16	MC	-0.53	2.62	-0.08		
734	17	MC	0.08	0.05	0.01		
734	18	MC	0.24	0.28	0.02		
734	19	MC	-0.03	0.01	-0.01		
734	20	MC	0.28	0.70	0.05		
734	21	MC	1.43	14.31	0.20	B	F
734	22	MC	0.23	0.57	0.03		
734	23	MC	-0.47	2.21	-0.07		
734	24	MC	1.01	5.94	0.13	B	F
734	25	MC	0.12	0.14	0.03		
734	26	MC	0.27	0.42	0.04		
734	27	MC	0.69	5.08	0.12		
734	28	MC	0.16	0.26	0.03		
734	29	MC	0.27	0.75	0.05		
734	30	MC	0.65	3.60	0.09		
734	31	MC	0.45	1.43	0.06		
734	32	MC	0.32	0.79	0.04		
735	1	MC	0.38	1.14	0.05		
735	2	MC	1.12	9.07	0.15	B	F
735	3	MC	-0.60	4.03	-0.12		
735	4	MC	-0.51	1.74	-0.07		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
735	5	MC	-0.76	3.11	-0.10		
735	6	MC	-0.24	0.58	-0.04		
735	7	MC	0.03	0.01	0.00		
735	8	MC	-0.43	1.49	-0.07		
735	9	MC	0.09	0.06	0.02		
735	10	MC	-0.06	0.03	-0.01		
735	11	MC	0.30	0.52	0.05		
735	12	MC	-1.34	14.11	-0.20	B	M
735	13	MC	0.63	3.14	0.10		
735	14	MC	-0.21	0.30	-0.03		
735	15	MC	-0.10	0.10	0.00		
735	16	MC	0.01	0.00	-0.01		
735	17	MC	0.75	5.45	0.13		
735	18	MC	0.07	0.05	0.00		
735	19	MC	-0.43	1.77	-0.07		
735	20	MC	-0.84	6.79	-0.14		
735	21	MC	0.14	0.18	0.03		
735	22	MC	-0.44	1.69	-0.07		
735	23	MC	0.57	2.18	0.07		
735	24	MC	0.18	0.21	0.02		
735	25	MC	1.51	12.29	0.18	C	F
735	26	MC	0.27	0.75	0.05		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
735	27	MC	0.39	1.24	0.06		
735	28	MC	-0.06	0.03	-0.01		
735	29	MC	-0.53	2.51	-0.08		
735	30	MC	0.90	7.41	0.15		
735	31	MC	0.03	0.01	0.00		
735	32	MC	-0.10	0.08	-0.02		
736	1	MC	-0.29	0.54	-0.03		
736	2	MC	-1.50	25.93	-0.28	B	M
736	3	MC	-1.81	24.38	-0.24	C	M
736	4	MC	-0.65	4.22	-0.11		
736	5	MC	-0.65	4.27	-0.11		
736	6	MC	0.41	1.80	0.08		
736	7	MC	-0.09	0.08	-0.02		
736	8	MC	-0.01	0.00	-0.01		
736	9	MC	0.44	2.07	0.09		
736	10	MC	0.55	3.34	0.11		
736	11	MC	0.12	0.17	0.01		
736	12	MC	-0.23	0.56	-0.04		
736	13	MC	-0.35	1.29	-0.06		
736	14	MC	0.55	2.16	0.08		
736	15	MC	0.41	1.67	0.06		
736	16	MC	-0.36	1.25	-0.06		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
736	17	MC	-0.91	6.38	-0.13		
736	18	MC	-0.30	0.83	-0.04		
736	19	MC	0.06	0.04	0.00		
736	20	MC	-0.57	3.33	-0.10		
736	21	MC	0.60	4.08	0.11		
736	22	MC	0.07	0.04	0.01		
736	23	MC	1.11	12.73	0.19	B	F
736	24	MC	0.00	0.00	0.00		
736	25	MC	1.45	10.54	0.17	B	F
736	26	MC	-0.27	0.64	-0.04		
736	27	MC	-0.44	1.94	-0.07		
736	28	MC	0.20	0.35	0.03		
736	29	MC	0.29	0.97	0.06		
736	30	MC	1.01	8.07	0.14	B	F
736	31	MC	0.70	5.39	0.12		
736	32	MC	0.65	3.92	0.11		
737	1	MC	0.04	0.01	-0.01		
737	2	MC	-0.53	2.59	-0.08		
737	3	MC	-0.76	4.07	-0.11		
737	4	MC	-0.51	2.93	-0.10		
737	5	MC	-0.21	0.48	-0.04		
737	6	MC	-1.03	8.28	-0.15	B	M

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
737	7	MC	0.41	1.72	0.05		
737	8	MC	0.06	0.03	0.01		
737	9	MC	0.34	0.65	0.04		
737	10	MC	-0.02	0.00	0.00		
737	11	MC	0.10	0.04	0.01		
737	12	MC	-0.37	0.94	-0.06		
737	13	MC	1.15	8.30	0.15	B	F
737	14	MC	-0.24	0.51	-0.03		
737	15	MC	-0.41	1.58	-0.07		
737	16	MC	-0.10	0.08	-0.01		
737	17	MC	-0.78	5.99	-0.13		
737	18	MC	0.16	0.20	0.02		
737	19	MC	-0.32	0.95	-0.06		
737	20	MC	1.16	5.70	0.12	B	F
737	21	MC	0.09	0.08	0.01		
737	22	MC	-0.18	0.33	-0.03		
737	23	MC	0.43	0.93	0.05		
737	24	MC	-0.69	3.80	-0.10		
737	25	MC	0.00	0.00	0.01		
737	26	MC	0.64	3.04	0.10		
737	27	MC	1.32	11.97	0.18	B	F
737	28	MC	0.80	5.06	0.11		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
737	29	MC	0.53	3.04	0.09		
737	30	MC	-0.09	0.08	-0.01		
737	31	MC	0.43	2.22	0.08		
737	32	MC	-0.01	0.00	-0.01		
738	1	MC	-1.67	25.12	-0.28	C	M
738	2	MC	-0.94	6.11	-0.12		
738	3	MC	-0.15	0.21	-0.02		
738	4	MC	-0.06	0.03	-0.02		
738	5	MC	-0.53	1.77	-0.08		
738	6	MC	0.41	1.19	0.07		
738	7	MC	0.25	0.56	0.04		
738	8	MC	0.22	0.49	0.04		
738	9	MC	-0.03	0.01	-0.02		
738	10	MC	0.11	0.11	0.00		
738	11	MC	-0.18	0.24	-0.04		
738	12	MC	-0.61	3.38	-0.12		
738	13	MC	-0.10	0.11	-0.02		
738	14	MC	-0.56	1.84	-0.09		
738	15	MC	-0.33	1.03	-0.05		
738	16	MC	0.07	0.06	0.02		
738	17	MC	0.20	0.28	0.02		
738	18	MC	0.90	4.71	0.11		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
738	19	MC	-0.78	5.10	-0.13		
738	20	MC	0.28	0.72	0.04		
738	21	MC	-0.01	0.00	-0.01		
738	22	MC	0.97	9.07	0.18		
738	23	MC	0.32	0.84	0.04		
738	24	MC	1.66	18.71	0.23	C	F
738	25	MC	0.08	0.06	0.01		
738	26	MC	0.83	6.16	0.15		
738	27	MC	-1.14	13.98	-0.22	B	M
738	28	MC	0.96	4.00	0.10		
738	29	MC	0.24	0.50	0.05		
738	30	MC	-0.43	1.86	-0.08		
738	31	MC	1.06	10.36	0.19	B	F
738	32	MC	-0.05	0.02	0.01		
739	1	MC	0.00	0.00	0.00		
739	2	MC	0.24	0.52	0.05		
739	3	MC	0.12	0.19	0.04		
739	4	MC	-1.10	8.28	-0.14	B	M
739	5	MC	-0.12	0.09	-0.02		
739	6	MC	-0.62	1.72	-0.08		
739	7	MC	-1.86	26.35	-0.29	C	M
739	8	MC	0.23	0.55	0.04		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
739	9	MC	-0.04	0.01	-0.01		
739	10	MC	-0.62	2.50	-0.09		
739	11	MC	-0.71	5.05	-0.13		
739	12	MC	0.05	0.03	-0.01		
739	13	MC	1.31	7.39	0.14	B	F
739	14	MC	-0.74	4.81	-0.13		
739	15	MC	-0.33	0.78	-0.06		
739	16	MC	0.20	0.29	0.03		
739	17	MC	0.07	0.04	0.01		
739	18	MC	0.05	0.02	0.02		
739	19	MC	0.18	0.35	0.04		
739	20	MC	-0.27	0.70	-0.04		
739	21	MC	-0.42	1.45	-0.06		
739	22	MC	0.29	0.85	0.05		
739	23	MC	0.98	5.75	0.12		
739	24	MC	-0.09	0.05	-0.01		
739	25	MC	0.16	0.20	0.03		
739	26	MC	1.93	16.19	0.17	C	F
739	27	MC	0.57	2.93	0.09		
739	28	MC	-0.04	0.01	-0.02		
739	29	MC	0.49	2.22	0.09		
739	30	MC	0.51	2.60	0.08		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
739	31	MC	0.44	1.62	0.07		
739	32	MC	-0.03	0.01	0.02		
740	1	MC	-0.18	0.35	-0.02		
740	2	MC	-0.51	2.81	-0.10		
740	3	MC	-0.18	0.30	-0.02		
740	4	MC	-0.21	0.26	-0.04		
740	5	MC	0.26	0.74	0.06		
740	6	MC	0.03	0.01	0.01		
740	7	MC	-0.49	1.92	-0.07		
740	8	MC	-0.40	1.04	-0.07		
740	9	MC	0.18	0.34	0.03		
740	10	MC	-0.31	0.72	-0.04		
740	11	MC	0.51	2.08	0.09		
740	12	MC	-0.33	1.10	-0.07		
740	13	MC	-0.56	2.97	-0.08		
740	14	MC	0.77	6.07	0.12		
740	15	MC	0.20	0.40	0.03		
740	16	MC	0.85	7.51	0.16		
740	17	MC	-0.22	0.23	-0.02		
740	18	MC	0.07	0.05	0.01		
740	19	MC	-0.55	2.87	-0.09		
740	20	MC	0.56	2.46	0.08		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
740	21	MC	-0.18	0.28	-0.01		
740	22	MC	0.65	2.58	0.09		
740	23	MC	1.10	8.78	0.14	B	F
740	24	MC	0.57	2.49	0.10		
740	25	MC	-0.74	3.41	-0.10		
740	26	MC	-2.50	58.71	-0.40	C	M
740	27	MC	0.90	3.93	0.09		
740	28	MC	-0.05	0.02	-0.01		
740	29	MC	0.38	1.13	0.06		
740	30	MC	-0.10	0.09	-0.03		
740	31	MC	0.04	0.02	0.02		
740	32	MC	0.97	7.19	0.15		
741	1	MC	0.23	0.46	0.03		
741	2	MC	-0.39	1.31	-0.07		
741	3	MC	-0.03	0.01	-0.01		
741	4	MC	0.69	4.68	0.14		
741	5	MC	-0.60	3.54	-0.10		
741	6	MC	-0.05	0.03	0.00		
741	7	MC	-0.55	2.88	-0.11		
741	8	MC	-0.44	1.94	-0.08		
741	9	MC	-0.75	6.29	-0.14		
741	10	MC	0.19	0.33	0.02		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
741	11	MC	0.06	0.04	0.03		
741	12	MC	0.00	0.00	0.02		
741	13	MC	0.14	0.14	0.03		
741	14	MC	0.09	0.07	0.00		
741	15	MC	0.88	6.21	0.14		
741	16	MC	-0.28	0.83	-0.05		
741	17	MC	0.71	4.33	0.09		
741	18	MC	-0.19	0.20	-0.04		
741	19	MC	0.72	4.64	0.11		
741	20	MC	-0.52	2.16	-0.07		
741	21	MC	-0.03	0.01	-0.01		
741	22	MC	-0.94	4.80	-0.10		
741	23	MC	-0.52	1.59	-0.06		
741	24	MC	0.53	2.39	0.08		
741	25	MC	0.65	4.91	0.12		
741	26	MC	-1.52	22.32	-0.24	C	M
741	27	MC	0.94	7.33	0.16		
741	28	MC	0.83	6.88	0.13		
741	29	MC	-0.88	6.77	-0.12		
741	30	MC	0.68	4.31	0.10		
741	31	MC	-0.66	4.10	-0.11		
741	32	MC	0.80	5.28	0.12		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
742	THM	OE		27.07	0.28	CC	F
743	THM	OE		21.85	0.23	BB	F
744	THM	OE		11.43	0.17	BB	F
745	THM	OE		32.43	0.29	CC	F
746	01	OE		19.27	0.22	BB	F
746	02	OE		4.89	0.12		
746	3a	OE		12.68	0.17	BB	F
746	3b	OE		8.65	0.15		
746	04	OE		3.19	0.09		
746	5a	OE		6.49	0.11		
746	5b	OE		4.12	0.10		
746	06	OE		18.37	0.20	BB	F
746	07	OE		0.59	0.03		
746	8a	OE		13.07	0.19	BB	F
746	8b	OE		1.07	-0.06		
746	09	OE		2.25	0.07		
746	DBQ	OE		21.62	0.23	BB	F
747	01	OE		0.03	-0.01		
747	02	OE		7.98	0.14		
747	3a	OE		7.24	0.14		
747	3b	OE		21.52	0.23	BB	F
747	04	OE		5.44	0.12		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
747	05	OE		14.03	0.19	BB	F
747	06	OE		10.62	0.16		
747	07	OE		0.26	0.03		
747	08	OE		31.83	0.29	CC	F
747	09	OE		10.82	0.17	BB	F
747	DBQ	OE		20.20	0.24	BB	F
748	01	OE		7.82	0.16		
748	02	OE		0.04	0.01		
748	03	OE		1.68	0.08		
748	04	OE		0.03	0.00		
748	05	OE		6.04	0.14		
748	6a	OE		5.82	0.14		
748	6b	OE		0.79	0.07		
748	07	OE		9.14	0.18	BB	F
748	08	OE		1.72	0.08		
748	DBQ	OE		13.89	0.21	BB	F
749	1a	OE		8.62	0.17		
749	1b	OE		1.97	0.08		
749	02	OE		6.16	0.14		
749	03	OE		15.38	0.21	BB	F
749	04	OE		3.34	0.10		
749	05	OE		4.79	0.12		

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
749	06	OE		2.85	0.09		
749	07	OE		10.71	0.18	BB	F
749	08	OE		3.20	0.09		
749	09	OE		16.18	0.22	BB	F
749	DBQ	OE		14.65	0.20	BB	F
750	01	OE		0.00	-0.01		
750	02	OE		3.36	0.10		
750	3a	OE		11.86	0.20	BB	F
750	3b	OE		0.03	0.00		

*DIF Category meanings: A/AA=negligible, B/BB=moderate, C/CC=large

Table 12. DIF Statistics *(continued)*

Form	Item	Item Type	MH Delta	MH Chi-Sq	Effect Size	DIF Category	Favored Group
750	04	OE		4.60	0.11		
750	5a	OE		3.65	0.11		
750	5b	OE		1.35	0.08		
750	06	OE		8.23	0.15		
750	07	OE		4.30	0.11		
750	08	OE		3.17	0.10		
750	09	OE		10.23	0.17	BB	F
750	DBQ	OE		30.45	0.25	CC	F

Appendix D: Operational Test Maps

Table 13. Operational Test Map for January 2010

Position	Item Type	Max Points	Weight	Mean	Point-Biserial	Rasch	S1	S2	S3	S4	S5
1	MC	1	1	0.54	0.51	0.52					
2	MC	1	1	0.79	0.40	-0.85					
3	MC	1	1	0.70	0.37	-0.27					
4	MC	1	1	0.61	0.46	0.18					
5	MC	1	1	0.77	0.46	-0.66					
6	MC	1	1	0.56	0.39	0.39					
7	MC	1	1	0.93	0.35	-2.06					
8	MC	1	1	0.52	0.39	0.61					
9	MC	1	1	0.77	0.49	-0.52					
10	MC	1	1	0.55	0.33	0.47					
11	MC	1	1	0.62	0.48	0.11					
12	MC	1	1	0.67	0.35	-0.13					
13	MC	1	1	0.41	0.33	1.10					
14	MC	1	1	0.71	0.46	-0.33					
15	MC	1	1	0.77	0.48	-0.67					
16	MC	1	1	0.59	0.42	0.25					
17	MC	1	1	0.71	0.53	-0.34					
18	MC	1	1	0.63	0.31	0.07					
19	MC	1	1	0.55	0.39	0.44					
20	MC	1	1	0.75	0.51	-0.56					
21	MC	1	1	0.42	0.28	1.08					

Table 13: Operational Test Map for January 2010 *(continued)*

Position	Item Type	Max Points	Weight	Mean	Point-Biserial	Rasch	S1	S2	S3	S4	S5
22	MC	1	1	0.52	0.42	0.58					
23	MC	1	1	0.61	0.42	0.17					
24	MC	1	1	0.52	0.39	0.59					
25	MC	1	1	0.56	0.41	0.40					
26	MC	1	1	0.46	0.46	0.87					
27	MC	1	1	0.74	0.47	-0.53					
28	MC	1	1	0.58	0.46	0.27					
29	MC	1	1	0.47	0.36	0.83					
30	MC	1	1	0.64	0.42	0.02					
31	MC	1	1	0.68	0.41	-0.23					
32	MC	1	1	0.57	0.37	0.33					
33	MC	1	1	0.77	0.44	-0.45					
34	MC	1	1	0.52	0.43	0.60					
35	MC	1	1	0.43	0.41	0.99					
36	MC	1	1	0.65	0.40	-0.03					
37	MC	1	1	0.47	0.34	0.83					
38	MC	1	1	0.48	0.47	0.79					
39	MC	1	1	0.69	0.27	-0.25					
40	MC	1	1	0.57	0.51	0.32					
41	MC	1	1	0.58	0.36	0.29					
42	MC	1	1	0.67	0.41	-0.15					
43	MC	1	1	0.61	0.50	0.13					

Table 13: Operational Test Map for January 2010 *(continued)*

Position	Item Type	Max Points	Weight	Mean	Point-Biserial	Rasch	S1	S2	S3	S4	S5
44	MC	1	1	0.50	0.32	0.66					
45	MC	1	1	0.47	0.38	0.83					
46	MC	1	1	0.83	0.48	-1.15					
47	MC	1	1	0.61	0.48	0.17					
48	MC	1	1	0.72	0.51	-0.41					
49	MC	1	1	0.68	0.51	-0.22					
50	MC	1	1	0.38	0.37	1.27					
	TE	5	3	1.46	0.66	3.06	-2.80	-1.97	-0.44	2.01	3.20
1	SCAF	1	1	0.84	0.34	-0.91					
2	SCAF	1	1	0.84	0.33	-0.93					
3	SCAF	1	1	0.85	0.39	-1.03					
4a	SCAF	1	1	0.84	0.40	-0.96					
4b	SCAF	1	1	0.72	0.43	-0.12					
5	SCAF	1	1	0.76	0.42	-0.37					
6	SCAF	1	1	0.77	0.46	-0.42					
7	SCAF	1	1	0.50	0.51	1.00					
8	SCAF	2	1	1.54	0.46	-0.09	1.06	-1.06			
9	SCAF	1	1	0.55	0.49	0.80					
	ES	5	3	1.24	0.56	2.97	-1.49	-2.31	-0.74	1.52	3.02

Table 14. Operational Test Map for June 2010

Position	Item Type	Max Points	Weight	Mean	Point-Biserial	Rasch	S1	S2	S3	S4	S5
1	MC	1	1	0.50	0.40	0.96					
2	MC	1	1	0.83	0.33	-1.06					
3	MC	1	1	0.78	0.40	-0.66					
4	MC	1	1	0.65	0.52	0.17					
5	MC	1	1	0.76	0.44	-0.54					
6	MC	1	1	0.70	0.36	-0.12					
7	MC	1	1	0.52	0.41	0.90					
8	MC	1	1	0.71	0.53	-0.21					
9	MC	1	1	0.54	0.33	0.78					
10	MC	1	1	0.75	0.53	-0.48					
11	MC	1	1	0.63	0.43	0.29					
12	MC	1	1	0.68	0.46	-0.01					
13	MC	1	1	0.56	0.42	0.67					
14	MC	1	1	0.69	0.50	-0.07					
15	MC	1	1	0.59	0.39	0.48					
16	MC	1	1	0.80	0.51	-0.81					
17	MC	1	1	0.80	0.46	-0.82					
18	MC	1	1	0.59	0.39	0.53					
19	MC	1	1	0.65	0.44	0.19					
20	MC	1	1	0.68	0.50	0.02					
21	MC	1	1	0.51	0.44	0.93					
22	MC	1	1	0.69	0.45	-0.11					

Table 14: Operational Test Map for June 2010 *(continued)*

Position	Item Type	Max Points	Weight	Mean	Point-Biserial	Rasch	S1	S2	S3	S4	S5
23	MC	1	1	0.60	0.50	0.35					
24	MC	1	1	0.45	0.30	1.25					
25	MC	1	1	0.82	0.42	-0.93					
26	MC	1	1	0.53	0.38	0.83					
27	MC	1	1	0.62	0.35	0.38					
28	MC	1	1	0.71	0.43	-0.13					
29	MC	1	1	0.86	0.38	-1.22					
30	MC	1	1	0.63	0.31	0.33					
31	MC	1	1	0.71	0.34	-0.13					
32	MC	1	1	0.70	0.28	-0.05					
33	MC	1	1	0.44	0.33	1.30					
34	MC	1	1	0.71	0.49	-0.14					
35	MC	1	1	0.52	0.33	0.88					
36	MC	1	1	0.60	0.47	0.43					
37	MC	1	1	0.73	0.41	-0.28					
38	MC	1	1	0.58	0.31	0.58					
39	MC	1	1	0.83	0.40	-1.01					
40	MC	1	1	0.82	0.52	-0.92					
41	MC	1	1	0.68	0.48	0.05					
42	MC	1	1	0.83	0.41	-1.00					
43	MC	1	1	0.87	0.37	-1.30					
44	MC	1	1	0.69	0.40	0.00					

Table 14: Operational Test Map for June 2010 *(continued)*

Position	Item Type	Max Points	Weight	Mean	Point-Biserial	Rasch	S1	S2	S3	S4	S5
45	MC	1	1	0.70	0.54	-0.12					
46	MC	1	1	0.76	0.49	-0.48					
47	MC	1	1	0.60	0.29	0.47					
48	MC	1	1	0.64	0.43	0.28					
49	MC	1	1	0.68	0.32	0.05					
50	MC	1	1	0.55	0.32	0.72					
TE	TE	5	3	1.55	0.51	2.87	-3.37	-2.32	-0.27	5.96	
	SCAF	2	1	1.71	0.37	-0.74	0.09	-0.09			
	SCAF	2	1	1.68	0.42	-0.63	0.00	0.00			
	SCAF	1	1	0.79	0.37	-0.49					
	SCAF	2	1	1.81	0.41	-0.96	0.80	-0.80			
	SCAF	1	1	0.74	0.25	-0.19					
	SCAF	2	1	1.36	0.42	0.13	-0.79	0.79			
	SCAF	1	1	0.79	0.35	-0.54					
	SCAF	1	1	0.78	0.44	-0.47					
	SCAF	2	1	1.22	0.41	0.61	-0.28	0.28			
ES	ES	5	3	1.07	0.50	2.77	-2.10	-1.03	0.94	2.20	

Table 15. Operational Test Map for August 2010

Position	Item Type	Max Points	Weight	Mean	Point-Biserial	Rasch	S1	S2	S3	S4	S5
1	MC	1	1	0.75	0.44	-0.40					
2	MC	1	1	0.47	0.46	1.08					
3	MC	1	1	0.56	0.40	0.61					
4	MC	1	1	0.83	0.47	-0.96					
5	MC	1	1	0.70	0.32	-0.02					
6	MC	1	1	0.48	0.54	1.01					
7	MC	1	1	0.54	0.42	0.70					
8	MC	1	1	0.64	0.28	0.20					
9	MC	1	1	0.47	0.51	1.09					
10	MC	1	1	0.45	0.39	1.18					
11	MC	1	1	0.68	0.45	-0.01					
12	MC	1	1	0.80	0.42	-0.74					
13	MC	1	1	0.58	0.37	0.54					
14	MC	1	1	0.62	0.50	0.34					
15	MC	1	1	0.53	0.51	0.79					
16	MC	1	1	0.52	0.57	0.79					
17	MC	1	1	0.62	0.44	0.32					
18	MC	1	1	0.67	0.57	0.04					
19	MC	1	1	0.82	0.47	-0.87					
20	MC	1	1	0.77	0.46	-0.55					
21	MC	1	1	0.77	0.38	-0.50					

Table 15. Operational Test Map for August 2010 *(continued)*

Position	Item Type	Max Points	Weight	Mean	Point-Biserial	Rasch	S1	S2	S3	S4	S5
22	MC	1	1	0.54	0.51	0.70					
23	MC	1	1	0.77	0.34	-0.55					
24	MC	1	1	0.62	0.49	0.32					
25	MC	1	1	0.58	0.42	0.50					
26	MC	1	1	0.71	0.46	-0.21					
27	MC	1	1	0.66	0.51	0.13					
28	MC	1	1	0.63	0.49	0.30					
29	MC	1	1	0.78	0.40	-0.64					
30	MC	1	1	0.63	0.38	0.27					
31	MC	1	1	0.80	0.35	-0.76					
32	MC	1	1	0.80	0.32	-0.74					
33	MC	1	1	0.67	0.51	0.04					
34	MC	1	1	0.73	0.26	-0.32					
35	MC	1	1	0.56	0.35	0.63					
36	MC	1	1	0.64	0.50	0.23					
37	MC	1	1	0.87	0.39	-1.34					
38	MC	1	1	0.76	0.34	-0.51					
39	MC	1	1	0.65	0.42	0.18					
40	MC	1	1	0.86	0.41	-1.24					
41	MC	1	1	0.80	0.47	-0.72					
42	MC	1	1	0.62	0.45	0.32					
43	MC	1	1	0.79	0.45	-0.70					

Table 15. Operational Test Map for August 2010 *(continued)*

Position	Item Type	Max Points	Weight	Mean	Point-Biserial	Rasch	S1	S2	S3	S4	S5
44	MC	1	1	0.75	0.46	-0.40					
45	MC	1	1	0.55	0.53	0.70					
46	MC	1	1	0.62	0.43	0.36					
47	MC	1	1	0.74	0.54	-0.34					
48	MC	1	1	0.50	0.47	0.95					
49	MC	1	1	0.55	0.42	0.69					
50	MC	1	1	0.57	0.48	0.61					
	TE	5	3	1.18	0.64	1.80	-1.75	-0.27	2.02		
1	SCF	1	1	0.77	0.40	-0.35					
2	SCF	2	1	1.70	0.40	-0.68	-0.04	0.04			
3	SCF	2	1	1.47	0.42	0.04	-0.11	0.11			
4	SCF	2	1	1.10	0.45	0.83	-1.45	1.45			
5	SCF	1	1	0.64	0.39	0.42					
6	SCF	1	1	0.74	0.38	-0.12					
7	SCF	1	1	0.58	0.49	0.73					
8	SCF	1	1	0.71	0.51	0.04					
9	SCF	1	1	0.71	0.46	0.03					
	ES	5	3	1.44	0.59	2.97	-2.11	-2.54	-0.39	5.04	

Appendix E: Scoring Tables

Table 16. Scoring Table for January 2010

Raw Score	Ability	Scale Score		Raw Score	Ability	Scale Score		Raw Score	Ability	Scale Score		Raw Score	Ability	Scale Score
0	-5.021	0.073		23	-0.646	27.005		46	0.683	61.225		69	2.395	89.927
1	-4.301	0.880		24	-0.580	28.416		47	0.739	62.625		70	2.511	90.969
2	-3.581	1.815		25	-0.516	29.852		48	0.797	64.067		71	2.632	92.003
3	-3.151	2.687		26	-0.452	31.382		49	0.855	65.491		72	2.760	93.002
4	-2.838	3.705		27	-0.391	32.813		50	0.914	66.922		73	2.895	93.972
5	-2.590	4.664		28	-0.330	34.258		51	0.973	68.285		74	3.035	94.955
6	-2.384	5.694		29	-0.270	35.797		52	1.034	69.651		75	3.181	95.908
7	-2.206	6.723		30	-0.211	37.228		53	1.096	71.033		76	3.331	96.838
8	-2.049	7.785		31	-0.153	38.773		54	1.159	72.357		77	3.484	97.685
9	-1.907	8.918		32	-0.095	40.300		55	1.224	73.689		78	3.638	98.204
10	-1.779	10.044		33	-0.039	41.727		56	1.290	75.011		79	3.794	98.501
11	-1.660	11.219		34	0.018	43.282		57	1.358	76.282		80	3.950	98.670
12	-1.550	12.402		35	0.074	44.811		58	1.427	77.491		81	4.108	98.912
13	-1.447	13.581		36	0.129	46.330		59	1.499	78.717		82	4.268	99.060
14	-1.350	14.864		37	0.184	47.767		60	1.573	79.941		83	4.434	99.199
15	-1.258	16.148		38	0.240	49.322		61	1.650	81.179		84	4.607	99.348
16	-1.171	17.436		39	0.295	50.850		62	1.730	82.354		85	4.794	99.479
17	-1.087	18.780		40	0.350	52.359		63	1.812	83.479		86	5.000	99.605
18	-1.007	20.121		41	0.404	53.778		64	1.899	84.633		87	5.237	99.746
19	-0.930	21.461		42	0.460	55.311		65	1.989	85.705		88	5.527	99.880
20	-0.856	22.785		43	0.515	56.761		66	2.083	86.831		89	5.918	100.035
21	-0.784	24.194		44	0.570	58.256		67	2.182	87.928		90	6.572	100.295
22	-0.714	25.645		45	0.626	59.709		68	2.286	88.925		91	7.226	100.555

Table 17. Scoring Table for June 2010

Raw Score	Ability	Scale Score		Raw Score	Ability	Scale Score		Raw Score	Ability	Scale Score		Raw Score	Ability	Scale Score
0	-5.054	0.037		24	-0.760	24.684		48	0.588	58.715		72	2.357	89.579
1	-4.345	0.825		25	-0.698	25.979		49	0.644	60.200		73	2.473	90.629
2	-3.636	1.713		26	-0.636	27.202		50	0.701	61.675		74	2.596	91.723
3	-3.215	2.491		27	-0.576	28.503		51	0.758	63.100		75	2.726	92.735
4	-2.911	3.449		28	-0.517	29.829		52	0.815	64.509		76	2.862	93.744
5	-2.672	4.303		29	-0.458	31.237		53	0.874	65.958		77	3.005	94.742
6	-2.474	5.222		30	-0.400	32.603		54	0.933	67.373		78	3.153	95.737
7	-2.304	6.139		31	-0.343	33.949		55	0.994	68.747		79	3.306	96.681
8	-2.154	7.052		32	-0.287	35.357		56	1.056	70.156		80	3.462	97.572
9	-2.020	8.008		33	-0.231	36.745		57	1.118	71.502		81	3.619	98.167
10	-1.899	8.986		34	-0.175	38.184		58	1.183	72.852		82	3.777	98.470
11	-1.787	9.970		35	-0.120	39.642		59	1.249	74.197		83	3.936	98.647
12	-1.683	10.970		36	-0.065	41.064		60	1.316	75.523		84	4.095	98.894
13	-1.586	12.017		37	-0.010	42.518		61	1.386	76.776		85	4.257	99.054
14	-1.494	13.000		38	0.044	43.991		62	1.458	78.030		86	4.424	99.189
15	-1.407	14.076		39	0.098	45.478		63	1.532	79.267		87	4.599	99.343
16	-1.325	15.217		40	0.152	46.926		64	1.608	80.516		88	4.786	99.473
17	-1.245	16.328		41	0.206	48.378		65	1.688	81.770		89	4.992	99.600
18	-1.169	17.467		42	0.260	49.878		66	1.771	82.922		90	5.230	99.742
19	-1.096	18.634		43	0.315	51.406		67	1.857	84.083		91	5.520	99.877
20	-1.025	19.813		44	0.369	52.852		68	1.948	85.239		92	5.912	100.033
21	-0.956	21.004		45	0.423	54.306		69	2.042	86.330		93	6.565	100.292
22	-0.889	22.189		46	0.478	55.778		70	2.142	87.498		94	7.218	100.552
23	-0.824	23.383		47	0.533	57.261		71	2.246	88.550				

Table 18. Scoring Table for August 2010

Raw Score	Ability	Scale Score		Raw Score	Ability	Scale Score		Raw Score	Ability	Scale Score		Raw Score	Ability	Scale Score
0	-4.980	0.119		24	-0.608	27.803		48	0.766	63.300		72	2.665	92.259
1	-4.267	0.922		25	-0.544	29.219		49	0.824	64.730		73	2.792	93.253
2	-3.554	1.864		26	-0.481	30.681		50	0.882	66.154		74	2.926	94.189
3	-3.129	2.757		27	-0.419	32.160		51	0.941	67.563		75	3.065	95.167
4	-2.822	3.763		28	-0.358	33.593		52	1.001	68.902		76	3.209	96.080
5	-2.579	4.717		29	-0.298	35.072		53	1.062	70.293		77	3.356	96.994
6	-2.377	5.733		30	-0.240	36.528		54	1.124	71.630		78	3.507	97.782
7	-2.203	6.742		31	-0.181	38.023		55	1.187	72.935		79	3.659	98.245
8	-2.049	7.785		32	-0.124	39.537		56	1.252	74.258		80	3.813	98.518
9	-1.912	8.875		33	-0.067	41.013		57	1.319	75.582		81	3.967	98.698
10	-1.786	9.979		34	-0.011	42.491		58	1.387	76.794		82	4.123	98.934
11	-1.670	11.111		35	0.045	44.018		59	1.457	78.013		83	4.282	99.069
12	-1.563	12.263		36	0.101	45.561		60	1.529	79.217		84	4.446	99.210
13	-1.462	13.396		37	0.156	47.030		61	1.604	80.451		85	4.618	99.356
14	-1.367	14.624		38	0.211	48.517		62	1.681	81.668		86	4.804	99.486
15	-1.277	15.886		39	0.266	50.044		63	1.761	82.786		87	5.009	99.610
16	-1.191	17.123		40	0.321	51.572		64	1.844	83.913		88	5.246	99.752
17	-1.109	18.423		41	0.376	53.033		65	1.931	85.045		89	5.535	99.883
18	-1.030	19.728		42	0.431	54.528		66	2.021	86.073		90	5.927	100.039
19	-0.954	21.039		43	0.486	55.985		67	2.116	87.218		91	6.581	100.299
20	-0.881	22.333		44	0.541	57.483		68	2.215	88.259		92	7.235	100.559
21	-0.810	23.667		45	0.597	58.944		69	2.319	89.230				
22	-0.741	25.081		46	0.653	60.445		70	2.429	90.233				
23	-0.673	26.473		47	0.709	61.875		71	2.544	91.263				